

COLLABORATIVE ILLICIT DISCHARGE ELIMINATION PLAN

*Saginaw Area Storm Water Authority
Saginaw County, Michigan*



Prepared on behalf of:

SAGINAW AREA STORM WATER AUTHORITY

Including the following members:

AGENCIES:

SAGINAW COUNTY- *Saginaw County Public Works Commissioner (SCPWC)*
SAGINAW COUNTY BOARD OF COMMISSIONERS
SAGINAW COUNTY ROAD COMMISSION

LOCAL MUNICIPALITIES:

BRIDGEPORT CHARTER TOWNSHIP
BUENA VISTA CHARTER TOWNSHIP
TITTABAWASSEE TOWNSHIP AND SCHOOL DISTRICT
CARROLLTON TOWNSHIP AND SCHOOL DISTRICT
CITY OF SAGINAW
THOMAS TOWNSHIP
SAGINAW CHARTER TOWNSHIP
CITY OF ZILWAUKEE

EDUCATIONAL INSTITUTIONS:

BRIDGEPORT-SPAULDING COMMUNITY SCHOOLS
SAGINAW INTERMEDIATE SCHOOL DISTRICT
SAGINAW TOWNSHIP COMMUNITY SCHOOLS
SWAN VALLEY SCHOOLS
SAGINAW VALLEY STATE UNIVERSITY

Prepared by:



INTRODUCTION

This collaborative Illicit Discharge Elimination Plan (IDEP) for the Saginaw Area Storm Water Authority (SASWA) has been prepared in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Permit Application for Discharge of Storm Water to Surface Waters of the State from a Municipal Separate Storm Sewer System (MS4). The IDEP is intended to prohibit and effectively eliminate illicit discharges, the discharge of sanitary wastewater, illicit connections and illegal dumping/spills to the separate storm water drainage system. The IDEP will focus on storm water outfalls and point source discharges within the urbanized area limits of Saginaw County, which includes the Midland and Flint urbanized area in Saginaw County, based on the most current Census Data. Illicit discharges originating outside of the SASWA's urbanized boundary are not the responsibility of the SASWA, but will be reported to the Saginaw County Public Health Department and the Saginaw County Public Works Commissioner and/or the Saginaw County Road Commission, with jurisdictional boundaries considered. All aspects of the IDEP will be documented by action and evaluation methods and recorded within the Progress Report submitted to the EGLE.

The IDEP will be implemented by the consultant's staff and will only involve county agencies and nested jurisdictions on an as needed basis.

The IDEP includes the following sections:

- Definitions
- IDEP Goals
- Legal Authority
- Non-Stormwater Discharges to an MS4
- Outfall and Discharge Points
- Illicit Discharge Identification and Investigation
 - Locating Problem Areas
 - Dry-Weather Screening and Field Observations
 - Finding The Source
- Minimizing Seepage from Septic Systems and Sanitary Sewers
- Responding to Illegal Dumping and Spills
 - Schedule for responding to a complaint
 - Schedule for field screening and source investigations
- Response to Illicit Discharges Once the Source Is Identified
- Preventive Measures
- Training
- Documentation of Metrics and Reporting
- Implementation Schedule
- Measurable Goals
- Appendix Section
 - *Appendix I-SASWA Outfall and Point of Discharge Table*
 - *Appendix II- NPDES Phase II Dry-Weather Outfall and Point of Discharge Inspection Form*
 - *Appendix III- Illicit Discharge/Connection Reporting Forms/Documents*
 - *Appendix IV- Excerpts from Pertinent Codes*

DEFINITIONS

- **Municipal separate storm sewer system:** A system (including, but not limited to, roads, catch basins, curbs, gutters, parking lots, ditches, storm sewers, conduits, pumping devices, or man-made channels) that is designed or used for collecting or conveying storm water; is not a combined sewer; and is not part of a publicly owned treatment works. The term does not include separate storm water drainage conveyances that serve an individual building or comparable discrete area. The system may convey specified non-storm water discharges as listed in Part I. A.7.a.2. The term includes enclosed drainage systems that are owned or operated by the SASWA member and discharge either to a surface water of the state or to a separate storm water drainage system operated by another public body. It may include orphan or abandoned drains within the Urbanized Area. Open drains that are considered to be surface waters of the state are not considered part of the separate storm sewer system.
- **Illicit discharge:** Any discharge (or seepage) to the separate storm water drainage system that is not composed entirely of storm water or uncontaminated groundwater.
- **Illicit connection:** A physical connection to the separate storm water drainage system that (1) primarily conveys illicit discharges into the system and/or (2) is not authorized or permitted by the local authority (where a local authority requires such authorization or permit).
- **Point of Discharge:** An outfall from a drainage system to waters of the state, or a point where a storm water drainage system discharges into a system operated by another public body. (An MS4 to an MS4 owned or operated by another public body.)
- **Outfall point:** A discharge point from a municipal separate storm sewer system directly to waters of the state.
- **Significant illicit discharge:** A discharge that shows evidence of impairing water quality in the receiving water.

IDEP GOALS

- Find, prioritize, and eliminate illicit discharges and illicit connections identified during dry weather screening activities.
- Minimize infiltration of seepage from sanitary sewers and onsite sewage disposal systems into the separate storm water drainage system.
- Reduce illicit discharges into the separate storm sewer system by educating municipal employees and the general public.
- Implement the regulatory mechanism for the municipality, or county, to eliminate illicit discharges found entering the separate storm sewer system (Saginaw County Public Health Code and Michigan Building and Plumbing Codes).
- Maintain a map of the municipal separate storm sewer system and outfall/ point of discharge sources.
- Establish a system to document and report information regarding the IDEP, including complaints, outfall screening, and illicit connections found and removed.

- Determine a method to evaluate the effectiveness of the illicit discharge elimination activities based on the watershed goals.

LEGAL AUTHORITY

The municipal members of the SASWA have adopted or have as commercial / residential building enforcement procedures the following:

- 2012 Michigan Plumbing Code, R 408.30717 Duties and powers of code official; Section 104.1 and 104.5 (code official and right of entry defined),
- 2009 Michigan Residential Code, or
- The International Property Maintenance Code of 2012. Section 104.1 and 104.3 identifies duties of code official and right of entry.

(See Appendix IV for pertinent excerpts from these codes)

These administrative procedures when adopted by a community provide the “**right of entry**” for the municipality’s inspector, code enforcement staff or their designee to enter private property if a violation of the code is witnessed, visible, or quantifiable evidence is present to suggest that a violation exists on the property. If access is denied, and evidence of violation is present, then staff will obtain a warrant for entry if necessary.

Enforcement Venues for Townships, Cities and Villages:

PA245-1999 which amended PA230-1972 (the Stille-Derossett-Hale Single State Construction Code Act) established the “Single State Construction Code” whereby the entire state of Michigan is subject to a single “family” of construction codes **without** exception. This means that every portion of the State is subject to the 2012 Michigan Plumbing Code and the 2009 Michigan Residential Code enforced either locally (as an authorized enforcing agency) or by the State Bureau of Construction Codes (BCC).

Since Code Enforcement and Property Maintenance is not a function enabled by PA230-72 and not otherwise mandated by state law, a local governmental unit would have to locally adopt the International Property Maintenance Code (IPMC) to lawfully enforce its provisions. If a municipal member has adopted, by ordinance, the IPMC the member enforces it through its Code Enforcement Program.

Additionally, if the municipality has a Code Enforcement Program a Code Enforcement Log is utilized. The Code Enforcement Log is a tracking mechanism used by communities to track violations and their outcome and will be used by that community as its tracking mechanism.

Enforcement Venues for County Agencies:

The Saginaw County Road Commission (SCRC) and the Saginaw County Public Works Commissioner (SCPWC) do not have ordinance authority; however, the SCPWC has some authority to control water pollution in county drains provided by the state Drain Code of 1956. County Agencies can also use the County’s Public Health Code and obtain enforcement through the Public Health Department to obtain compliance in issues which involve public health and safety as it is related to the Illicit Discharge Elimination program.

The following are pertinent excerpts:

The Michigan Drain Code Public Act 40 of 1956 states:

Sec. 423. (1) A person shall not continue to discharge or permit to be discharged into any county drain or inter-county drain of the state any sewage or waste matter capable of producing in the drain detrimental deposits, objectionable odor nuisance, injury to drainage conduits or structures, or capable of producing such pollution of the waters of the state receiving the flow from the drains as to injure livestock, destroy fish life, or be injurious to public health.

(10) Failure to comply with any of the provisions of this section subjects the offender to the penalties described in section 602.

Sec. 602. If any person shall willfully or maliciously remove any section or grade stake set along the line of any drain, or obstruct or injure any drain, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$100.00 and the costs of prosecution, or in default of the payment thereof, by imprisonment in the county jail not exceeding 90 days.

The SCRC has limited authority under state law to control water pollution in statutory road right-of-ways. When evidence of an illicit discharge to a Road Commission ditch or drain is found, and voluntary correction is not forthcoming, the SCRC will contact the appropriate agency, depending on the nature of the illicit discharge, and work with the Saginaw County Public Works Commissioner, County Health Department, local unit of government, local policing authority and/or the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to require elimination. The EGLE has broad authority to control pollution, either directly or indirectly, to waters of the state provided by Part 31 of Act 451 of 1994.

Additionally, the Saginaw County Health Department has an enforceable County Public Health Code, as follows:

Section 2 — Authority, jurisdiction and administration:

2.1 Authority. By virtue of the power vested in the Saginaw County Department of Public Health under Act 368, P.A. 1978, as amended, there are hereby provided regulations affecting the public health, safety, welfare and environmental quality of Saginaw County, including the provisions for violations of said regulations.

2.2 Jurisdiction. The Saginaw County Department of Public Health shall have jurisdiction throughout the County of Saginaw, including all cities, villages and townships in the administration and enforcement of these regulations and relevant State Laws including all regulations or amendments hereafter adopted unless otherwise specifically stated.

2.3 Enforcement. All premises affected by the requirements of these regulations shall be subject to the inspection by the Health Officer and the Health Officer may collect such samples for laboratory examination, make tests or take such photographs as he deems necessary for the enforcement of these regulations.

2.4 Right of Entry. No person shall refuse to permit the Health Officer, after proper identification, to inspect as deemed necessary in the enforcement of this Code, any property, public or private, located in the County of Saginaw for the purpose of obtaining information, conducting surveys or inspections, collecting samples, inspecting sewage disposal or water supply systems, or evaluating a premise to ensure compliance with any permits, standards, codes, regulations, and enforcement actions at reasonable times nor shall any person molest, interfere, or resist the Health Officer in the discharge of his duty.

2.5 Abatement of Nuisances. Nothing stated in these regulations shall be construed to limit the power of the Health Officer toward the immediate abatement of a public nuisance or menace to the public health or of a condition, which in the opinion of the Health Officer may become a menace to the health of the community.

2.6 Interference with Notices. No person shall remove, mutilate, or conceal any notice or placard posted by the Health Officer, except by written permission of the Health Officer.

2.7 Validity. If any section, subsection, clause or phrase of these regulations is for any reason adjudged unconstitutional or invalid, it is hereby provided that the remaining portions of these regulations shall not be affected.

CHAPTER II Penalties Section 1 — Penalties

1.1 Any person who shall intentionally fail to comply with the provisions of these regulations as set forth in the Code or any part thereof shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine not exceeding the sum of \$200 or by imprisonment in the County jail, not exceeding 30 days or both such fine and imprisonment at the discretion of the Court. Each day a violation is permitted to exist shall constitute a separate and distinct violation.

CHAPTER IV. – Sewage (wastewater) Disposal Regulations

Under Section 2 - Definitions:

2.10 Nuisance. “Nuisance” shall include but not be limited to any condition where effluent from any sewage disposal facilities is exposed to the surface of the ground or is permitted to drain on or to the surface of the ground, into any ditch, storm sewer, lake or stream, or when the odor, appearance or presence of this material has an obnoxious or detrimental effect on or to the senses or health of persons or when it shall obstruct the comfortable use or sale of adjacent property.

Section 6. – Individual Sewage Disposal Systems:

6.3 In the event of a failure of an existing onsite sewage disposal system, the Health Officer must be notified of the failure. Upon investigation of the cause of failure, the Health Officer may require repair specifications necessary to correct the problem and upgrade the system to be in compliance with this Code. At the discretion of the Health Officer, modifications to the required isolation distances, materials or size as stated in this Code may be applied if local conditions warrant and in cases where dimensions, site development, features or site suitability create a challenge to comply with the standards of this Code. In such event, modifications will be applied if the Health Officer finds that the public health would not be jeopardized.

Section 9 – Sewage of Unknown Origin

9.1 Whenever the Health Officer shall determine that improperly treated sewage is flowing or is being discharged from the outlet of any public or private drain into any public drainage system or surface water body so as to create a public health hazard, water pollution or nuisance, he shall notify in writing the person owning, leasing or residing on such premises from which such sewage originates to connect such sewage flow to a sewage disposal system which complies with these regulations. At the end of such reasonable time as specified in the written notice, which has been served on the owner, leasee or resident, the Health Officer shall cause the outlet of such drain carrying sewage to be plugged until such time as the source(s) of sewage have been eliminated or the sewerage system complies with the provisions of this Code.

Section 11 – Injunction

11.1 Notwithstanding the existence and pursuit of any other remedy, the Health Officer may maintain an action in the name of the County for injunction or other process against any person, firm or corporation to restrain or prevent the construction, enlargement, or alteration of a sewage disposal system without a permit therefore, or the operation or conduct of a residence of a habitable building, structure or premise contrary

to this regulation or the discharge of waste actually or potentially unsafe or hazardous to public health, life, property values or the public welfare into public stream, county drain, road ditch or upon the ground surface, creating a health hazard or nuisance.

Public Act 451 of 1994 (NREPA) – Part 31 Water Resources

324.3103 Department of environmental quality; powers and duties generally; rules; other actions.

Sec. 3103.

(1) The department shall protect and conserve the water resources of the state and shall have control of the pollution of surface or underground waters of the state and the Great Lakes, which are or may be affected by waste disposal of any person. The department may make or cause to be made surveys, studies, and investigations of the uses of waters of the state, both surface and underground, and cooperate with other governments and governmental units and agencies in making the surveys, studies, and investigations. The department shall assist in an advisory capacity a flood control district that may be authorized by the legislature. The department, in the public interest, shall appear and present evidence, reports, and other testimony during the hearings involving the creation and organization of flood control districts. The department shall advise and consult with the legislature on the obligation of the state to participate in the costs of construction and maintenance as provided for in the official plans of a flood control district or inter-county drainage district.

(2) The department shall enforce this part and may promulgate rules as it considers necessary to carry out its duties under this part. However, notwithstanding any rule-promulgation authority that is provided in this part, except for rules authorized under section 3112(6), the department shall not promulgate any additional rules under this part after December 31, 2006.

(3) The department may promulgate rules and take other actions as may be necessary to comply with the federal water pollution control act, 33 USC 1251 to 1387, and to expend funds available under such law for extension or improvement of the state or interstate program for prevention and control of water pollution. This part shall not be construed as authorizing the department to expend or to incur any obligation to expend any state funds for such purpose in excess of any amount that is appropriated by the legislature.

(4) Notwithstanding the limitations on rule promulgation under subsection (2), rules promulgated under this part before January 1, 2007 shall remain in effect unless rescinded.

History: 1994, Act 451, Eff. Mar. 30, 1995 ;-- Am. 2004, Act 91, Imd. Eff. Apr. 22, 2004 ;-- Am. 2005, Act 33, Imd. Eff. June 6, 2005

Compiler's Notes: For transfer of authority, powers, duties, functions, and responsibilities of the Environmental Assistance Division to the Director of the Michigan Department of Environment, Great Lakes, and Energy Quality, see E.R.O. No. 1995-16, compiled at MCL 324.99901 of the Michigan Compiled Laws. For transfer of authority, powers, duties, functions, and responsibilities of the Surface Water Quality Division to the Director of the Michigan Department of Environment, Great Lakes, and Energy Quality, see E.R.O. No. 1995-16, compiled MCL 324.99901 of the Michigan Compiled Laws. For transfer of authority, powers, duties, functions, and responsibilities of the Waste Management Division to the Director of the Michigan Department of Environment, Great Lakes, and Energy, see E.R.O. No. 1995-16, compiled at MCL 324.99901 of the Michigan Compiled Laws.

Popular Name: Act 451

Popular Name: NREPA

Admin Rule: R 323.1001 et seq. and R 323.2101 et seq. of the Michigan Administrative Code.

NON-STORMWATER DISCHARGES TO AN MS4

No person shall discharge or cause to be discharged into the storm water system, pollutants or waters containing any pollutants, or cause to or contribute to a violation of applicable water quality standards.

Acceptable Non-Stormwater Discharges

The following non-stormwater discharges are not authorized in this document, but do not need to be prohibited by the NPDES permittee in accordance with their NPDES MS4 Permit. Unless the municipality/permittee identifies them as a significant contributor or source of pollutants entering the MS4, under their jurisdiction these discharges may be allowed to enter the MS4 if approved by the person in charge of the stormwater per the MS4 Permit:

- a) Water line flushing and discharges from potable water sources
- b) Landscape irrigation runoff, lawn watering runoff, and irrigation waters
- c) Diverted stream flows and flows from riparian habitats and wetlands
- d) Rising groundwaters and springs
- e) Uncontaminated groundwater infiltration and seepage
- f) Uncontaminated pumped groundwater, except for groundwater cleanups specifically authorized by NPDES permits
- g) Foundation drains, water from crawl space pumps, footing drains, and basement sump pumps
- h) Air conditioning condensates
- i) Waters from non-commercial car washing
- j) Street wash waters
- k) Dechlorinated swimming pool waters from single, two, or three family residences. (A swimming pool operated by the permittee shall not be discharged to a MS4 or surface waters of the state without specific NPDES permit authorization from the EGLE.)
- l) Discharges or flows from emergency firefighting activities

OUTFALL AND DISCHARGE POINTS

The SASWA has identified their member owned outfall sources and discharge points along with the location of each and the names of all surface waters of the state that receive stormwater discharge from a municipal separate storm sewer system. This compiled list of outfall sources and discharge points includes an identification number relative to location, the type of outlet source, if applicable, the municipality ownership of the MS4, latitude and longitude coordinates, the receiving water that receives the stormwater discharge from the MS4. The Storm Sewer System Map has been updated and will continue to be updated on an as needed basis. Any additional outfall sources and/or discharge points will be included within this list and the Storm Sewer System Map will be updated as well to include the necessary changes to the outfall and/or point of discharge sources on an as needed basis. Additionally, newly discovered outfalls and discharge points will be identified in the Progress Report. A table of the Saginaw Area Storm Water Authority's outfalls and discharge points is available in Appendix I of this document.

A copy of the map with outfalls/discharge points is available from the Saginaw Area Storm Water Authority upon request.

ILLICIT DISCHARGE IDENTIFICATION AND INVESTIGATION

DRY-WEATHER SCREENING AND FIELD OBSERVATIONS

Dry weather screening in Saginaw, Flint, and Midland UA will not commence until at least forty-eight (48) hours after any rainfall event, but may commence if less than 1/10th inch of rain occurred during the previous forty-eight (48) hours. At a minimum, visual and olfactory screening of any dry weather discharge from the storm water outfall and point of discharge sources will be completed. A digital photo record of the outfall/point of discharge will be taken. The minimum data collected from the outfall and point of discharge screening will include information about the following: presence/absence of flow, odor, the structural condition, color, water clarity, deposits, stains, foam, bacterial sheens, trash, floatable materials, and vegetation around the outfall or point of discharge. A follow-up investigation of sources which do not have dry weather flow will be conducted if there is evidence of dry weather discharges or if indicators show a sign that pollution may exist. One of the following follow-up prioritization will be assigned:

- Immediate- Report to appropriate agency and have agency follow-up within one (1) week to check for dry weather flow.
- High- Notify stormwater manager; conduct visual observation within fourteen (14) days to check for dry weather flow.
- Low- Notify stormwater manager; conduct visual observation within thirty (30) days for dry weather flow.

Note: In follow-up visits, if flow is present, test for indicator parameters listed below. If the results from the test require follow-up, collect additional samples for analysis and follow the steps in "Finding the Source" section below if the source of illicit discharge is unknown. Close out the file if there is no dry weather flow present and there is no indication of pollution.

If dry weather flow is present, a visual observation will be conducted and an estimate of the flow rate will be made and recorded. Field screening tests will also be performed if flow is observed at an outfall or point of discharge and the source of an illicit discharge is not identified during the field observation. Field screening tests will be completed for indicator parameters such as dissolved oxygen, ammonia, pH, specific conductivity, surfactants, bacteria- *E.coli* only (*only if other parameters warrant for this specific testing for example visual evidence or smell*), chlorine and temperature if there appears to be a significant potential that there is an unauthorized dry weather discharge from the outfall or point of discharge. The field screening parameters will be recorded in a report format and included in the progress report. A follow-up investigation of outfalls and points of discharge with dry weather flow will be conducted based on the following follow-up prioritization (schedule):

- Immediate- Report to appropriate agency and have agency follow-up within one (1) week.
- High- Notify stormwater manager; follow-up within fourteen (14) days.
- Low- Notify stormwater manager; conduct visual observation within thirty (30) days.

Note: In follow-up visits, if flow is present test for indicator parameters listed above. If the results from the test require follow-up, collect additional samples for analysis and follow the steps in "Finding the Source" section below if the illicit discharge is unknown. Close out the file if there is no dry weather flow present and there is no indication of pollution.

A report form will document the results of outfall/point of discharge screening and testing. Upon commencement of dry weather screening, a follow-up prioritization will be assigned.

- None- No follow-up required.

- Low- If flow is present, but test results indicate that the discharge is exempt. The outfall or point of discharge will be observed within thirty (30) days to determine if conditions have changed, or if water quality testing is essential.
- High- If flow is present and the water quality indicator parameter results indicate that a follow-up is necessary, but there is no immediate concern. The stormwater manager will be notified and a follow-up investigation within fourteen (14) days is required. Test upstream of the outfall or point of discharge if flow is present until the source is located.
- Immediate- The stormwater manager, or the appropriate agency, will be contacted if immediate action to address the dry weather flow is assigned to the outfall or point of discharge. The location will need to be investigated upon within one (1) week of notification.

All aspects of the IDEP dry-weather screening investigations, including inspection forms and photographs documenting the results of outfall screening and testing, will be documented and any actions, decisions or evaluation methods made while performing field screening efforts will be discussed in the Progress Report submitted to the Michigan Department of Environment, Great Lakes, and Energy. Please refer to Appendix II for an example of the inspection form. Furthermore, the map of storm water outfalls will be updated to document the findings of any additional outfalls or discharge points during field investigations.

If untreated or partially treated sewage of human origin is found to be discharged from the drainage system, the SASWA will comply with the requirements of Section 324.3112a of Part 31 of Public Act 451 of 1994 as amended, including notification of the EGLE, local health department, and one or more daily newspapers of general circulation.

FINDING THE SOURCE

The field investigation necessary to *Finding the Source* of illicit discharges will be completed based on the results of the efforts in the *Locating Problem Areas* section of the IDEP whereas the source of an illicit discharge is not identified by field screening. The prioritization for tracing illicit discharges to their source will be based on factors such as whether the area is known to have high bacteria problems or vulnerability to bacterial contamination, significant industrial or commercial development, dense housing without sanitary sewer connections, public notification, or complaints, and the sensitivity of the receiving stream.

The procedures to determine the source of illicit discharges will include the following type of activities:

- Inspection and/or testing the discharges within the upstream separate storm water drainage system.
- Televising the storm sewers or dye testing premises in the vicinity of a suspected illicit connection. Dye testing will not be conducted without prior EGLE approval, in accordance with Rule 1097 (Rule 323.1097 of the Michigan Administrative Code).
- Investigation of point sources located upstream of outfalls with documented dry weather flow.
- Investigation of complaints, reports, or notification of suspected illicit discharges.
- Distribution of letters to residents and businesses alerting them to the problem that is under investigation and soliciting their assistance in finding the source of an illicit discharge.
- A building-by-building evaluation where a potential illicit connection has been isolated to a small area.

Source investigative procedures are investigative efforts in a waterbody where screening and/ or other monitoring results indicate a potential illicit discharge upstream. Surveys may involve reviewing storm and sanitary system maps, walking or driving open drains upstream, testing catch basins upstream for *E. coli*, surfactants, ammonia, specific conductivity and/or temperature, dye testing, televising or smoke testing. Source investigations can be very resource demanding in an enclosed system. Investigation of the age of infrastructure and land use where illicit discharges may be more likely and the location of discharge points in the area to be investigated is essential before initiating field work. Procedures vary based upon the methods used and will be determined before initiation of investigative activities. **If the discharge is a human health or safety issue the investigation will begin within forty-eight (48) hours of discovery.** Otherwise, schedules and timeframes will be determined on a case by case basis before initiation of investigation activities. When deemed necessary and/or the responsible member of the SASWA has expended all funding and available resources, the EGLE will be contacted for assistance if the illicit dumping/spill discharges to waters of the state.

MINIMIZING SEEPAGE FROM SEPTIC SYSTEMS AND SANITARY SEWERS

There are some areas in SASWA's urbanized area that are served by onsite sewage disposal systems (OSDS). The SASWA will coordinate its IDEP effort with the Saginaw County Health Department (SCHD) to assist in mitigating any problems found with these OSDS.

It should be noted that many urban areas have very few occurrences of onsite disposal systems within Saginaw Charter Township, Carrollton Township, the City of Zilwaukee and the City of Saginaw. Townships still have some areas of concern, but for the most part these are outside of the Urbanized Area. Planning is ongoing by municipalities to continue to bring developing rural areas into the existing sanitary sewer infrastructure.

An OSDS, found during the implementation of the IDEP to be infiltrating into a municipal separate storm water drainage system, will be referred to the SCHD. In the unlikely event that the SCHD finds unacceptable seepage, the SASWA will cooperate with them and report to the EGLE on the finding in the progress report. At such time that a sanitary sewer system becomes available, the property owner will be required to connect whether or not the OSDS is failing, if ordinances or codes so permit.

The potential for seepage from sanitary sewers into the storm water drainage system will be investigated in the process of *Finding the Source* of illicit discharges. Sanitary sewer overflows or cross-connections to a storm sewer will be corrected as soon as possible when discovered. SASWA will train municipal staff from its membership in identifying failing on-site disposal systems during the ongoing staff training. This will be covered in the training for illicit discharges and spill reporting for each municipal member.

RESPONDING TO ILLEGAL DUMPING AND SPILLS

The Saginaw Area Storm Water Authority (SASWA) through the Saginaw County Public Works Commissioner's Office receives messages reporting illicit discharges/connections or illegal dumping/spills to the storm sewer system in Saginaw County. The Saginaw County Public Works Commissioner refers the incident to the appropriate municipality, school district, agency or university that has jurisdictional responsibility.

Schedule for responding to a complaint (i.e. illicit discharge/connection or illegal dumping/spill)
Evaluation of an illicit discharge/connection or illegal dumping/spill complaint is very important and shall be initiated within two (2) business days of a complaint being received, if not sooner. The only exception is when the nature of the complaint includes dumping and/or a spill of a potentially

hazardous material in which case the response will be as immediate as possible (within forty-eight (48) hours of discovery).

All actions initiated as a result of a complaint shall be recorded as part of the complaint's file until it is resolved and/or closed. Additionally, a log will be kept of all calls in a database established by SASWA.

Proper incident response and disposition forms, shown in Appendix III, must be filled out and distributed to the SASWA member with jurisdiction, the Saginaw County Public Works Commissioner, and the consultant. This must be done within five (5) days of the incident in order to provide time for a response to the EGLE to cover spill incident reporting. Spill reporting must be completed within ten (10) days of the incident and submitted to the EGLE as required and directed in the permit. The only exception is when the nature of the complaint includes dumping and/or a spill of a potentially hazardous material in which case the response will be as immediate as possible (within forty-eight (48) hours of discovery).

The initial response to a complaint shall include referral to the appropriate staff for a field visit to the complaint location. As part of this initial response, staff shall record the following:

- visual observations,
- conversations with the complainer or neighbors in the vicinity of the complaint,
- pictures of the complaint location and/or characteristics, and
- follow-up actions that result.

If, after staff conduct an initial field visit, it is determined that the complaint is not worthy of further response, the reasons for closing the complaint shall be recorded, the complaint shall be closed, and this shall all remain documented in the permittee's complaint files.

Schedule for field screening and source investigations

If the initial site visit which results from a complaint warrants performing further field screening and/or source investigations, these actions shall be initiated within seven (7) days of the initial site visit. All field investigations shall be recorded as part of the complaint's file until that complaint has been solved and/or officially closed.

To immediately report any release of any polluting materials from the MS4 to the surface waters or groundwater of the state, unless a determination is made that the release is not in excess of the threshold reporting quantities in the Part 5 Rules, please contact the appropriate EGLE District office, or if the notice is provided after regular working hours, please call the EGLE's 24-Hour Pollution Emergency Alerting System at 1-800-292-4706. The IDEP Reporting Procedure can be seen in Appendix III.

RESPONSE TO ILLICIT DISCHARGES ONCE THE SOURCE IS IDENTIFIED

Once the source of an illicit discharge has been confirmed and referred to the proper municipality, school district, agency or university of the SASWA member that has jurisdictional responsibility, the SASWA representative, or the SASWA consultant, will use the following procedures to correct the illicit discharge.

The permittee shall correct and/or enforce the correction of illicit discharges within 90 (ninety) days of notification to the property owner or confirmation of source identification **to the maximum extent practicable**. (*Note- This response excludes dumping and/ or a spill of a potentially hazardous material which are high priority and response will be within forty-eight (48) hours of discovery.*) If the SASWA member(s), or the SASWA consultant, decide(s) to modify the following procedure, they will make note of the alternative procedures in their IDEP records and progress reports for their permit.

1. First Notice: Notification of Problem and Correction Needed

Once the source(s) of an illicit discharge is located, within five (5) business days of the confirmation, the SASWA member of jurisdictional responsibility, or SASWA consultant, will provide the first written notice to the owner of the illicit discharge by registered mail. The first written notice will notify the discharge owner of the illicit discharge, the regulatory authority to require correction, and the potential enforcement actions that will take place if the discharge is uncorrected in ninety (90) days. All notifications will request that the discharge owner contact the permittee regarding plans for correction within ninety (90) days. Tracking of all notifications and documentation of registered mail receipts will be retained by the permittee.

2. Second Notice: Forty-Five (45) Days Left to Respond

If forty-five (45) days has passed from the date of the 1st written notice and no response has been received by the discharge owner, the second written notice will be sent. The second written notice will remind the discharge owner of the illicit discharge, the prior notice, the regulatory authority to require correction, the potential enforcement actions that will take place if the discharge is uncorrected in forty-five (45) days, and a request for the owner to contact the permittee regarding plans for correction.

3. Final Notice

If ninety (90) days has passed from the date of the first written notice, the third written notice will be sent. The third notice will remind the discharge owner of the illicit discharge, the prior notice, the regulatory authority to require correction, and plans to enforce the correction of the illicit discharge.

SASWA will make every reasonable effort to eliminate high priority illicit discharges/connections and illegal spills/dumping as soon as feasibly possible in cooperation with the Saginaw County Public Works Commissioner and the Saginaw County Public Health Department. Problems vary widely in complexity and cost of correction. Some problems can be corrected almost immediately or within 30 (thirty) days, while others may take preparation of detailed drawings and specifications, bidding, and construction. The severity of the problem will also affect the time frame for correction. Some illicit connections almost never have discharges. While these need to be corrected, they do not have the urgency of connections that have continuous discharges.

Please refer to Appendix III for the Saginaw Area Storm Water Authority IDEP Reporting Procedure, Illicit Discharge Report and Investigations Guidelines, Contact Information, an Incident Investigation Report Form Example for documentation purposes and any additional materials used by the SASWA.

PREVENTIVE MEASURES

Mechanisms will be put in place to prevent future illicit discharges and connections. The SASWA will evaluate strategies for prevention of new illicit discharges. Examples of potential preventive measures that will be considered include the following:

- Provide and advertise the availability of recreational vehicle sewage disposal.
- Programs to eliminate sanitary sewer overflows.
- Consideration of potential illicit connections/discharges during site plan review.
- Inspection procedures for new development or redevelopment.
- Training a permittee's personnel in recognizing indications of illicit discharges and how to properly report their observations.
- Training staff to recognize failing on-site treatment systems.

TRAINING

Training will be provided to increase the awareness of the permittee's employees in regard to the goals and provisions of the IDEP. Permittees will train staff who are involved in storm water management related activities, or who have jobs with the potential for witnessing illicit discharges and connections. Staff will be trained at least one (1) time every five (5) years (i.e. once per permit cycle), with various supporting training videos supplied to SASWA members on an ongoing basis, and within the first year of employment.

Field personnel will be provided training prior to conducting storm water outfall screening and activities associated with identifying and eliminating the source of unauthorized discharges and illicit connections. Training will include:

- Types of illicit discharges/connections
- Techniques for finding and identifying illicit discharges/connections
- Allowable discharges in an MS4
- Health and safety
- Documentation and reporting procedures
- Use of sampling equipment and other tools
- Outfall and point of discharge mapping
- Visual and olfactory outfall screening procedures
- Chain-of-Custody Record completion
- Proper protocol for sample handling, preparation, and transportation
- Procedures for eliminating illicit discharges/connections

Training will be provided by a registered professional engineer or similar competent person and include recognition of naturally occurring phenomena and their sources.

Municipal / County / Educational Institution Staff Training

SASWA members will have their staff trained in recognition of illicit connections and spills during the training sessions that SASWA provides for its membership staff.

DOCUMENTATION OF METRICS AND REPORTING

A Progress Report will be submitted to the EGLE on the implementation status of the IDEP. The progress report will cover all of the decisions, actions, and results performed as part of the IDEP during the reporting period. At a minimum, the progress report will include the following:

- Documentation of any actions taken to eliminate illicit discharges.
- A list of pollutants of concern, the estimated volume and load discharged, and the locations of the discharge into both the MS4 and the receiving water will be provided for significant illicit discharges.
- The status of the program to minimize seepage from sanitary sewers and onsite sewage disposal systems into the MS4.
- Updates to outfall and point of discharge source mapping.
- A schedule for elimination of illicit connections that have been identified, but have yet to be eliminated.

- An updated IDEP implementation schedule, if applicable.
- Report on the number of outfall and point of discharge sources screened based on an upstream search from a suspicious outfall outcome.
- An evaluation of the effectiveness of the IDEP program:
 1. Within each progress report the evaluation will include statistics on the number of outfalls and points of discharge that were screened within the timeframe of progress reporting (*Report on the number of outfalls and points of discharge screened on a year-by-year basis*). Evaluation of overall effectiveness include the following:
 - a. The prioritization process will be evaluated to determine if efforts are being maximized in areas with high illicit discharge potential.
 - b. The effectiveness of using different detection methods.
 - c. The number of discharges and/or quantity of discharges eliminated using different enforcement methods.
 - d. The program efficiency and how often staff are being trained for the IDEP program.
 2. Furthermore, the evaluation will include statistics on the number of illicit discharges/connections and/or illegal spills/dumping eliminated and the number and type of violations that were investigated upon during the progress reporting period.
- Number of municipal or SASWA member staffs attending training on an annual basis in the progress report.
- Number of contacts with the general population of the county increasing their awareness of the illicit discharge elimination plan.
- Number of illicit connections removed from the overall system in the county.

IMPLEMENTATION SCHEDULE

The implementation schedule for completion of the IDEP is as follows:

- The permittee's currently have legal authority to deal with illicit discharges.
- A program for *Finding the Source* of illicit discharges to the municipal separate storm water drainage system will begin after completion of *Locating Problem Areas*. Significant illicit discharges will be investigated immediately upon discovery.
- A map of outfall and point of discharge sources, reconnaissance locations, and the municipal separate storm water system will be updated on an as needed basis throughout the duration of the permit cycle. Additional outfall sources and point of discharge sources will be added to the list and the maps will be updated; any updates will be included in the Progress Report.
- A progress report will be submitted to the EGLE. It is impossible to measure the environmental benefit of actions taken to prevent water pollution. Monitoring of outfalls by the consultant or the SCHD will provide data that will be useful in assessing the success of the IDEP process.

MEASURABLE GOALS

- Number of reported illicit discharge reports received, investigated and passed on to the EGLE or EGLE 24-Hour Pollution Emergency Alerting System per year basis.
- Review of progress reports and how quickly illicit discharges were documented as being cleaned up.
- Review of the evaluation of the effectiveness of the IDEP program per year basis.

APPENDIX SECTION

Appendix I

SASWA Outfall and Point of Discharge Table

OBJECTID *	Shape *	outfall_no	lat	long	municipali	section	receive_wa	type	Insp_Year	Inspection Notes	Follow Up Needed?	Additional Notes
1	Point	TITT1	43.522711	-84.118489	Tittabawassee Township	21	New Freeland Tile Drain	Outfall	5			
2	Point	TITT2	43.520972	-84.118467	Tittabawassee Township	21	New Freeland Tile Drain	Outfall	5			
3	Point	TITT3	43.524261	-84.119601	Tittabawassee Township	21	Tittabawassee River	Outfall	5			
4	Point	TITT4	43.523843	-84.119608	Tittabawassee Township	21	Tittabawassee River	Outfall	5			
5	Point	TITT5	43.524847	-84.120778	Tittabawassee Township	21	Tittabawassee River	Outfall	5			
6	Point	TITT6	43.525688	-84.126365	Tittabawassee Township	16	Tittabawassee River	Outfall	5			
7	Point	TITT7	43.525064	-84.12707	Tittabawassee Township	16	Tittabawassee River	Outfall	5			
8	Point	TITT8	43.541763	-84.141931	Tittabawassee Township	8	Wetlands	Outfall	5			
9	Point	TITT9	43.52914	-84.110093	Tittabawassee Township	15	*	Outfall	5			
10	Point	SVSD1	43.410935	-84.080168		26	Scholtz & O'Hearn Drain	Outfall	4			
11	Point	SVSD2	43.412539	-84.080881		26	Scholtz & O'Hearn Drain	Outfall	4			
12	Point	SVSD3	43.409749	-84.088235		26	Swan Creek	Outfall	4			
13	Point	SVSD4	43.412366	-84.079363		26	Scholtz & O'Hearn Drain	Outfall	4			
14	Point	SVSD5	43.412363	-84.079033		26	Scholtz & O'Hearn Drain	Outfall	4			
15	Point	TT1	43.417985	-84.076993	Thomas Township	26	Scholtz & O'Hearn Drain	Outfall	4			
16	Point	TT2	43.418361	-84.071571	Thomas Township	26	Scholtz & O'Hearn Drain via SCPWC MS4	Outfall	4			
17	Point	TT3	43.466982	-84.111538	Thomas Township	23	Wiltse Branch No. 2 Drain via SCPWC MS4	Outfall	4			
18	Point	TT4	43.418739	-84.074686	Thomas Township	23	Scholtz & O'Hearn Drain via SCPWC MS4	Outfall	4			
19	Point	TT5	43.418034	-84.074396	Thomas Township	26	Scholtz & O'Hearn Drain via SCPWC MS4	Outfall	4			
20	Point	TT6	43.417727	-84.07156	Thomas Township	26	Scholtz & O'Hearn Drain via SCPWC MS4	Outfall	4			
21	Point	TT7	43.409833	-84.052167	Thomas Township	25	Tittabawassee River via SCPWC MS4	Outfall	4			
22	Point	TT8	43.409043	-84.064072	Thomas Township	25		Outfall	4			
23	Point	TT9	43.409513	-84.064001	Thomas Township	25		Outfall	4			
24	Point	TT10	43.413124	-84.104983	Thomas Township	27	Roethke Pond	Outfall	4			
25	Point	SVSU1	43.515378	-83.970809		23	Detention Basin	Outfall	1	CF		2 years of inspections unable to find, no invert shown on SVSU plans, remove from list
26	Point	SVSU2	43.513056	-83.970748	Saginaw Valley State University	23	Detention Basin	Outfall	1	Done	No	
27	Point	SVSU3	43.513246	-83.972623	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
28	Point	SVSU4	43.512236	-83.971648	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
29	Point	SVSU5	43.51094	-83.970144	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	Yes	
30	Point	SVSU6	43.510909	-83.969947	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	CF		2 years of inspections unable to find, show as 15" SVSU plans, remove from list?
31	Point	SVSU7	43.510785	-83.968438	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
32	Point	SVSU8	43.510795	-83.967997	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	Yes	
33	Point	SVSU9	43.510935	-83.966788	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	CF		Found in 2019, photo of catch basin, should be a 6" pipe from south according to SVSU plans
34	Point	SVSU10	43.511039	-83.966241	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	Yes	
35	Point	SVSU11	43.510993	-83.966102	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
36	Point	SVSU12	43.511003	-83.965552	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
37	Point	SVSU13	43.511049	-83.964772	Saginaw Valley State University		North Branch of Kochville Drain	Outfall	1	Not an outfall		Structure into culvert not dendritic system. Other manhole north of point location that needs to be confirmed, point location could be off based on SVSU plans
38	Point	SVSU14	43.511048	-83.964507	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
39	Point	SVSU15	43.511078	-83.963942	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
40	Point	SVSU16	43.511091	-83.962781	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
41	Point	SVSU17	43.51105	-83.962491	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	Yes	
42	Point	SVSU18	43.511	-83.961763	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
43	Point	SVSU19	43.51095	-83.961114	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
44	Point	SVSU20	43.510926	-83.960719	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
45	Point	SVSU21	43.510861	-83.960398	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
46	Point	SVSU22	43.510762	-83.960007	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
47	Point	SVSU23	43.510666	-83.959573	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
48	Point	SVSU24	43.510637	-83.959511	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	Yes	
49	Point	SVSU25	43.510479	-83.959096	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	Yes	
50	Point	SVSU26	43.510483	-83.957954	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	CF		Single outfall shown on SVSU plans (have 26 & 27 at same location and previous logs show the same pipe)
51	Point	SVSU27	43.510483	-83.957954	Saginaw Valley State University	23	North Branch of Kochville Drain	Outfall	1	Done	No	
52	Point	SVSU28	43.514654	-83.958653	Saginaw Valley State University	23	Detention Basin	Outfall	1	Done	No	
53	Point	SVSU29	43.515218	-83.959127	Saginaw Valley State University	23	Detention Basin	Outfall	1	Done	No	
54	Point	SVSU30	43.51701	-83.965314	Saginaw Valley State University	23	Detention Basin	Outfall	1	CF		Potentially swapped screening long for these two (30 & 31) should have pipe on each side of drain, only found one
55	Point	SVSU31	43.51701	-83.965314	Saginaw Valley State University	23	Detention Basin	Outfall	1	Done	No	
56	Point	SVSU32	43.51519	-83.96376	Saginaw Valley State University	23	Retention Basin	Outfall	1	CF		Unable to see pipe, upstream CB previously checked. Did not screen in 2021.
57	Point	SVSU33	43.51498	-83.9637	Saginaw Valley State University	23	Retention Basin	Outfall	1	Done	No	
58	Point	SVSU34	43.514661	-83.962708	Saginaw Valley State University	23	Retention Basin	Outfall	1	Done	No	
59	Point	SVSU35	43.508884	-83.953762		24	Bourdown Drain	Outfall	1	Done	No	
60	Point	SISD1	43.455057	-83.971167	Saginaw Township	11	Universal Drain via SCPWC MS4	Point of Discharge	1	Done, check number w/ STCS010	No	
61	Point	SISD2	43.415177	-84.040286	Saginaw Township	30	Wetland	Outfall	4			
62	Point	SISD3	43.414322	-84.039533	Saginaw Township	30	Wetland	Outfall	4			
63	Point	SISD4	43.370593	-83.903934	Saginaw Township	8	Branch #1 of Keogan Sieman Drain via SCPWC MS4	Point of Discharge	3			
64	Point	SISD5	43.463878	-83.969408	Saginaw Township	11	Universal Drain via SCPWC MS4	Point of Discharge	1	Done	No	
65	Point	STCSD1	43.454444	-84.015083	Saginaw Township	8	Universal Drain via SCPWC MS4	Point of Discharge	1	Construction/ CF		
66	Point	STCSD2	43.457289	-84.0152	Saginaw Township	8	Universal Drain via SCPWC MS4	Point of Discharge	1	Done	No	
67	Point	STCSD5	43.422696	-84.024609	Saginaw Township	20	Winterstein Drain via SCPWC MS4	Point of Discharge	4			
68	Point	STCSD6	43.452271	-83.994996	Saginaw Township	10	Universal Drain via SCPWC MS4	Point of Discharge	1	Look into, outfall into field		
69	Point	STCSD7	43.451775	-83.990361	Saginaw Township	10	Silverwood PK Branch of Universal Drain	Point of Discharge	1	Done	No	
70	Point	STCSD8	43.4509	-83.97179	Saginaw Township	14	Universal Drain via Shattuck Rd Br Bay Rd Tile	Point of Discharge	1	Done	No	
71	Point	STCSD9	43.450888	-83.972574	Saginaw Township	14	Universal Drain via Shattuck Rd Br Bay Rd Tile	Point of Discharge	1	Done	No	

OBJECTID *	Shape *	outfall_no	lat	long	municipali	section	receive_wa	type	Insp_Year	Inspection Notes	Follow Up Needed?	Additional Notes
72	Point	SCTSD010	43.455057	-83.971167	Saginaw Township	11	Universal Drain via SCPWC MS4	Point of Discharge	1	Done, check number w/ SCPWC	No	
73	Point	SCT1	43.45129	-84.012919	Saginaw Township	9	Universal Drain via SCPWC MS4	Point of Discharge	1	Done	No	
74	Point	SCT2	43.451452	-84.03857	Saginaw Township	18	Universal Drain via SCPWC MS4	Point of Discharge		5		
75	Point	SCT3	43.465193	-83.979149	Saginaw Township	10	Universal Drain via SCPWC MS4	Point of Discharge	1	CF		No catch basin in the area, maps do not show any pipes in that area, previously inspected points not the outfall.
76	Point	SCT4	43.453096	-84.014921	Saginaw Township	9	Universal Drain via SCPWC MS4	Point of Discharge	1	Done	No	
77	Point	SCT5	43.455267	-84.014974	Saginaw Township	9	Universal Drain via SCPWC MS4	Point of Discharge	1	Done, Clean CB	No	
78	Point	SCT6	43.456452	-84.014988	Saginaw Township	9	Universal Drain via SCPWC MS4	Point of Discharge	1	Done	No	
79	Point	SCT7	43.460099	-84.052233	Saginaw Township	12	Tittabawassee, Kochville & Saginaw Drain	Outfall		5		
80	Point	SCT8	43.462191	-84.060292	Saginaw Township	12	Wickes Pond	Outfall		5		
81	Point	SCT9	43.43031	-84.034425	Saginaw Township	20	Amanda Drain via SCPWC MS4	Outfall		4		
82	Point	SCT10	43.401434	-84.029628	Saginaw Township	32	Tittabawassee River to Saginaw River	Outfall		4		
83	Point	SCT11	43.394357	-84.016395	Saginaw Township	32	Tittabawassee River to Saginaw River	Outfall		4		
84	Point	SCT12	43.45828	-83.989136	Saginaw Township	10	Universal Drain	Outfall	1	Done	No	
85	Point	SCT13	43.465328	-83.985351	Saginaw Township	10	Universal Drain via SCPWC MS4	Point of Discharge	1	Done, Clean CB	No	
86	Point	SCT14	43.465303	-83.98675	Saginaw Township	10	Universal Drain via SCPWC MS4	Point of Discharge	1	Done	No	
87	Point	SCT15	43.465306	-83.986466	Saginaw Township	10	Universal Drain via SCPWC MS4	Point of Discharge	1	Done	No	
108	Point	BVCT2	43.415908	-83.986053	Buena Vista Township	28	Koehler Tile Drain (SCPWC)	Point of Discharge		2 Dry		
109	Point	BVCT3	43.424383	-83.894779	Buena Vista Township	21	Koehler Tile Drain (SCPWC)	Point of Discharge		2 Dry		
111	Point	BVCT5	43.467391	-83.894244	Buena Vista Township	9	Koehler Tile Drain (SCPWC)	Point of Discharge		2 Can't get to		
123	Point	SCPWC5	43.473205	-83.890349	Buena Vista Township	5	Saginaw River (Koehler Drain)	Outfall		2 Can't get to		
134	Point	SCPWC16	43.450862	-83.906673	Buena Vista Township	8	Dieckmann Drain (Tile) to Dieckmann Drain (Open)	Outfall		2 Culvert		
164	Point	SCPWC47	43.470161	-83.908054	Buena Vista Township	5	Saginaw River	Outfall		2 Flow	Yes	Odd situation, Lots of flow and poor water quality should be looked into
165	Point	SCPWC48	43.418339	-83.906845	Buena Vista Township	29	Dieckman Drain (Holland Grove Tile to Open Drain)	Outfall		2 Dry		
95	Point	CS6	43.40228	-83.965128	City of Saginaw	35	Tittabawassee River	Outfall		3		
96	Point	CS7	43.402469	-83.96792	City of Saginaw	35	Tittabawassee River	Outfall		3		
252	Point	SCPWC135	43.453969	-83.906631	Buena Vista Township	8	Dieckmann Drain	Outfall		2 Can't get to		
351	Point	SCRC 91	43.435949	-83.891577	Buena Vista Township	21	Koehler Tile Drain via MDOT Ditch	Outfall		2 Dry		
353	Point	SCRC 93	43.445503	-83.886086	Buena Vista Township	16	Gage No.1 Drain	Outfall		2 Dry		
356	Point	SCRC 96	43.448159	-83.886101	Buena Vista Township	16	Gage No.1 Drain	Outfall		2 Dry		
358	Point	SCRC 98	43.450854	-83.906656	Buena Vista Township	17	Dieckman Drain	Outfall		2 Culvert		
364	Point	SCRC 104	43.45233	-83.896409	Buena Vista Township	17	Koehler Drain	Outfall		2 Dry		
397	Point	SCRC 137	43.464756	-83.896183	Buena Vista Township	5	Koehler Drain	Outfall		2 Dry		
97	Point	CARR1	43.46426	-83.938088	Carrollton Township	7	Saginaw River via SCPWC MS4	Point of Discharge		2 Dry		
98	Point	CARR2	43.463485	-83.935644	Carrollton Township	7	Saginaw River via SCPWC MS4	Point of Discharge		2 Flow	Yes	Dry
99	Point	CARR3	43.463263	-83.935429	Carrollton Township	7	Saginaw River via SCPWC MS4	Point of Discharge		2 Dry		
107	Point	BVCT1	43.410394	-83.896554	Buena Vista Township	28	Koehler Tile Drain (SCPWC)	Point of Discharge		3		
100	Point	CARR4	43.462604	-83.940975	Carrollton Township	12	Universal Drain via SCPWC MS4	Point of Discharge		2 Stagnant		
101	Point	CARR5	43.461697	-83.94282	Carrollton Township	12	Universal Drain via SCPWC MS4	Point of Discharge		2 Stagnant		
110	Point	BVCT4	43.40804	-83.896368	Buena Vista Township	28	Koehler Tile Drain (SCPWC)	Point of Discharge		3		
102	Point	CARR6	43.461582	-83.944248	Carrollton Township	12	Universal Drain via SCPWC MS4	Point of Discharge		2 Dry		
112	Point	BSCSD1	43.370593	-83.903934	Bridgeport Township	8	Branch #1 of Keogan Sieman Drain	Outfall		3		
113	Point	BSCSD2	43.370593	-83.903934	Bridgeport Township	8	Branch #1 of Keogan Sieman Drain	Outfall		3		
114	Point	BSCSD3	43.354797	-83.867447	Bridgeport Township	15	McGrandy Drain	Outfall		3		
115	Point	BSCSD4	43.359236	-83.869853	Bridgeport Township	15	Baker Drain	Outfall		3		
116	Point	BSCSD5	43.362606	-83.869394	Bridgeport Township	15	Baker Drain	Outfall		3		
117	Point	BCT1	43.356033	-83.880912	Bridgeport Township	16	Cass River	Outfall		3		
118	Point	BCT2	43.356416	-83.881071	Bridgeport Township	16	Baker Drain to Cass River	Outfall		3		
119	Point	SCPWC1	43.415953	-84.077417	Thomas Township	26	Scholtz and O'Hearn Drain	Outfall		4		
120	Point	SCPWC2	43.356225	-83.880885	Bridgeport Township	16	Baker Drain (Baker Drain-Tile to Baker Drain-Open)	Outfall		3		
103	Point	CARR7	43.46617	-83.926229	Carrollton Township	7	Saginaw River via SCPWC MS4	Point of Discharge		2 Dry		
104	Point	CARR8	43.458067	-83.952416	Carrollton Township	12	Saginaw River via SCPWC MS4	Point of Discharge		2 Dry		
105	Point	CARR9	43.447295	-83.947864	Carrollton Township	13	Saginaw River via SCPWC MS4	Point of Discharge		2 Can't get to		
124	Point	SCPWC6	43.404987	-84.052174	Thomas Township	36	Garey Drain	Outfall		4		
125	Point	SCPWC7	43.412367	-84.080443	Thomas Township	26	Scholtz and O'Hearn Drain	Outfall		4		
126	Point	SCPWC8	43.41141	-84.034672	Saginaw Township	30	Seidel Drain	Outfall		4		
127	Point	SCPWC9	43.357963	-83.888529	Bridgeport Township	16	Cass River (Buckhardt Drain)	Outfall		3		
128	Point	SCPWC10	43.371355	-83.911246	Bridgeport Township	8	Branch No. 1 of Keogan-Sieman Drain	Outfall		3		
129	Point	SCPWC11	43.356247	-83.880867	Bridgeport Township	16	Baker Drain (Dixie Highway Relief Tile Drain)	Outfall		3		
130	Point	SCPWC12	43.362792	-83.875735	Bridgeport Township	16	Bridgeport Drain (Tile) to Towerline Tile Drain	Point of Discharge		3		
131	Point	SCPWC13	43.362508	-83.87573	Bridgeport Township	16	Bridgeport Drain (Tile) to Bridgeport Drain (Open)	Outfall		3		
132	Point	SCPWC14	43.358821	-83.883659	Bridgeport Township	16	Cass River (Bunyan Drain (Tile))	Outfall		3		
106	Point	CARR10	43.453401	-83.934958	Carrollton Township	7	Saginaw River via SCPWC MS4	Point of Discharge		2 Dry		
121	Point	SCPWC3	43.475964	-83.941572	Carrollton Township	1	Saginaw Zilwaukee Drain	Outfall		2 Dry		
135	Point	SCPWC17	43.381059	-83.897678	Bridgeport Township	5	King Road Drain	Outfall		3		
136	Point	SCPWC18	43.380896	-83.897588	Bridgeport Township	5	King Road Drain	Outfall		3		
137	Point	SCPWC19	43.448696	-84.073695	Thomas Township	14	Tittabawassee River (Hagerl Tile Drain)	Outfall		4		
138	Point	SCPWC20	43.400482	-83.886877	Buena Vista Township	33	Gage No 1 Drain (Hess Street Tile Drain)	Outfall		3		
139	Point	SCPWC21	43.408713	-84.126307	Thomas Township	33	Williams Creek Drain (Kiefer Tile Drain)	Outfall		4		
140	Point	SCPWC22	43.379412	-83.908811	Bridgeport Township	6	King Street Drain	Outfall		3		
141	Point	SCPWC23	43.487195	-83.979508	Kochville Township	34	Kochville & Branches Intercounty Drain- Branch No. 1 of the South Branch (Meijer Drain)	Outfall	1	Done	Yes	
142	Point	SCPWC24	43.417863	-84.048612	Thomas Township	30	Metzler Tile Drain	Outfall		4		
143	Point	SCPWC25	43.519453	-84.120888	Tittabawassee Township	22	Tittabawassee River (New Freeland Tile Drain)	Outfall		5		
144	Point	SCPWC26	43.36902	-83.856558	Bridgeport Township	10	Northeast Branch of Baker Drain (Tile to Open)	Outfall		3		
145	Point	SCPWC27	43.405083	-84.115933	Thomas Township	30	Williams Creek Drain (Oldenburg Drain (Tile))	Outfall		4		
146	Point	SCPWC28	43.421283	-84.029599	Saginaw Township	29	Winterstein Drain (Orchard Acres Branch Dr.)	Outfall		4		
147	Point	SCPWC29	43.419573	-84.120092	Tittabawassee Township	16	Ostrander Drain(Tile) to Ostrander Drain(Open)	Outfall		5		
148	Point	SCPWC30	43.400282	-83.903824	Buena Vista Township	28	SCRC MS4 (Pubanz Tile Drain)	Point of Discharge		3		

OBJECTID *	Shape *	outfall_no	lat	long	municipali	section	receive_wa	type	Insp_Year	Inspection Notes	Follow Up Needed?	Additional Notes
149	Point	SCPWC31	43.435341	-84.06197	Thomas Township	24	Reineke Drain Extension Drain	Outfall	4			
150	Point	SCPWC32	43.357926	-83.8791	Bridgeport Township	16	Richmond Drain (Tile) to Bridgeport Drain (Tile)	Point of Discharge	3			
151	Point	SCPWC33	43.41418	-84.021293	Saginaw Township	29	Seidel Drain (Tile) to Seidel Drain (Open)	Outfall	4			
152	Point	SCPWC34	43.458275	-83.989598	Saginaw Charter Township		Universal Drain	Outfall	1			No inspection log
122	Point	SCPWC4	43.451826	-83.934053	Carrollton Township	7	Saginaw River	Outfall	2	Dry		
154	Point	SCPWC37	43.476183	-83.980459	Saginaw Township	3	Saginaw Zilwaukee Drain	Outfall	1	Done	Yes	
155	Point	SCPWC38	43.476183	-83.977568	Saginaw Township	3	Saginaw Zilwaukee Drain	Outfall	1	CF		Has not been able to find in 2 inspection years, should be connection of two drains, could be open to open and not an outfall
156	Point	SCPWC39	43.453777	-84.114322	Thomas Township	10	Wiltse Drain	Outfall	4			
176	Point	SCPWC59	43.468061	-83.939864	Carrollton Township	12	Universal Drain	Outfall	2	Flow	Yes	Tested + tested again (Lots of E. coli)
177	Point	SCPWC60	43.465876	-83.944225	Carrollton Township	12	Universal Drain	Outfall	2	Flow	Yes	Tested + tested again (Lots of E. coli)
159	Point	SCPWC42	43.357504	-83.879428	Bridgeport Township	16	Dixie Highway Relief Drain (Tile) to Bridgeport Drain (Tile)	Point of Discharge	3			
160	Point	SCPWC43	43.357546	-83.879493	Bridgeport Township	16	Dixie Highway Relief Drain (Tile) to Bridgeport Drain (Tile)	Point of Discharge	3			
161	Point	SCPWC44	43.356398	-83.876988	Bridgeport Township	16	Dixie Highway Relief Drain (Tile) to Baker Drain (Tile)	Point of Discharge	3			
162	Point	SCPWC45	43.3685	-83.890529	Bridgeport Township	9	Buckhardt Drain (Dixie Highway Relief Drain to Buckhardt Drain)	Point of Discharge	3			
163	Point	SCPWC46	43.367166	-83.911184	Bridgeport Township	8	Branch No. 1 of Keogan-Siemann Drain	Outfall	3			
178	Point	SCPWC61	43.465362	-83.946344	Carrollton Township	12	Universal Drain	Outfall	2	Dry		
420	Point	SCRC 160	43.479545	-83.940753	Carrollton Township	1	Saginaw Zilwaukee Drain	Outfall	2	Flow	Yes	Tested
166	Point	SCPWC49	43.487191	-83.979565	Kochville Township	27	Kochville & Branches Intercounty Drain - Branch No. 1 of the South Branch (Meijer Drain)	Outfall	1	Done	No	
167	Point	SCPWC50	43.371599	-83.892764	Bridgeport Township	9	Buckhardt Drain (Branch No. 2 of Buckhardt Drain)	Point of Discharge	3			
168	Point	SCPWC51	43.369835	-83.892798	Bridgeport Township	9	Buckhardt Drain (Polzin Br. Of Buckhardt Drain)	Point of Discharge	3			
169	Point	SCPWC52	43.362697	-83.889239	Bridgeport Township	9	Buckhardt Drain (Branch No. 1 of Buckhardt Drain)	Point of Discharge	3			
170	Point	SCPWC53	43.49437	-83.967854	Kochville Township	35	FSB Tile	Outfall	1	Done, check SCRC 1		No SCPWC drain shown entering at this location appears to only be SCRC 1, confirm
171	Point	SCPWC54	43.379199	-83.914457	Bridgeport Township	8	King Rd. Drain	Outfall	3			
172	Point	SCPWC55	43.3894	-83.915898	Bridgeport Township	6	Lull Drain	Outfall	3			
173	Point	SCPWC56	43.3894	-83.915898	Bridgeport Township	7	Leidigin Drain	Outfall	3			
174	Point	SCPWC57	43.386492	-83.884186	Bridgeport Township	4	King Rd. Drain	Outfall	3			
175	Point	SCPWC58	43.386556	-83.886528	Bridgeport Township	4	King Rd. Drain	Outfall	3			
90	Point	CS1	43.41262	-83.963093	City of Saginaw	26	Saginaw River	Outfall	2	Dry		
91	Point	CS2	43.416528	-83.959202	City of Saginaw	26	Saginaw River	Outfall	2	Dry		
92	Point	CS3	43.41345	-83.962748	City of Saginaw	26	Saginaw River	Outfall	2	Can't get to		
179	Point	SCPWC62	43.409553	-84.02551	Saginaw Township	29	Side Drain	Outfall	4			
180	Point	SCPWC63	43.422632	-84.031181	Saginaw Township	20	Winterstein Drain	Outfall	4			
181	Point	SCPWC64	43.423365	-84.031316	Saginaw Township	19	Winterstein Drain	Outfall	4			
182	Point	SCPWC65	43.425554	-84.029685	Saginaw Township	20	Winterstein Drain	Outfall	4			
183	Point	SCPWC66	43.432484	-84.030246	Saginaw Township	20	Detention basin	Outfall	4			
184	Point	SCPWC67	43.433818	-84.030268	Saginaw Township	20	Detention basin	Outfall	4			
185	Point	SCPWC68	43.4296	-84.044919	Saginaw Township	19	Ismond Drain	Outfall	4			
186	Point	SCPWC69	43.43253	-84.044543	Saginaw Township	19	Amanda Drain	Outfall	4			
187	Point	SCPWC70	43.439808	-84.036946	Saginaw Township	18	Horgan Drain	Outfall	5			
188	Point	SCPWC71	43.445152	-84.036956	Saginaw Township	18	Horgan Drain (10")	Outfall	5			
189	Point	SCPWC72	43.446033	-84.03693	Saginaw Township	18	Horgan Drain (21")	Outfall	5			
190	Point	SCPWC73	43.447034	-84.036931	Saginaw Township	18	Horgan Drain (10")	Outfall	5			
191	Point	SCPWC74	43.438313	-84.046523	Saginaw Township	18	Tittabawassee River	Outfall	5			
192	Point	SCPWC75	43.442019	-84.049141	Saginaw Township	18	Tittabawassee River (Otto Drain outlet)	Outfall	5			
193	Point	SCPWC76	43.449487	-84.055163	Saginaw Township	13	Detention basin	Outfall	5			
194	Point	SCPWC77	43.451629	-84.046041	Saginaw Township	7	Branch of Kastorf Drain	Outfall	5			
195	Point	SCPWC78	43.451963	-84.047126	Saginaw Township	7	Branch of Kastorf Drain	Outfall	5			
196	Point	SCPWC79	43.457977	-84.056847	Saginaw Township	12	Tittabawassee, Kochville, & Saginaw Drain	Outfall	5			
197	Point	SCPWC80	43.476713	-84.089561	Saginaw Township	2	Open ditch	Outfall	5			Show four outfalls in same location on map (SCPWC 81, 82, & 83 and SCRC 133). Only two in the area. Believe could be 81 based off map. Other pipe is a 12" so assume RC since does not match sizes of others
198	Point	SCPWC81	43.458405	-84.019841	Saginaw Township	8	Universal Drain (30")	Outfall	1	CF		See note for SCPWC81
199	Point	SCPWC82	43.458472	-84.019917	Saginaw Township	8	Universal Drain (24")	Outfall	1	CF		See note for SCPWC81
200	Point	SCPWC83	43.458495	-84.019871	Saginaw Township	8	Universal Drain (27")	Outfall	1	Done	Yes	See note for SCPWC81
201	Point	SCPWC84	43.458403	-84.015368	Saginaw Township	9	Universal Drain (30")	Outfall	1	Done	Yes	
202	Point	SCPWC85	43.458438	-84.014653	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
203	Point	SCPWC86	43.458428	-84.013491	Saginaw Township	9	Universal Drain	Outfall	1	Done	Yes	
204	Point	SCPWC87	43.45844	-84.01227	Saginaw Township	9	Universal Drain	Outfall	1	Screening log fix SCRC131		
205	Point	SCPWC88	43.458445	-84.011639	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
206	Point	SCPWC89	43.458431	-84.010656	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
207	Point	SCPWC90	43.458346	-84.005287	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
208	Point	SCPWC91	43.458322	-84.002314	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
209	Point	SCPWC92	43.458284	-83.995358	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
210	Point	SCPWC93	43.458268	-83.990706	Saginaw Township	10	Universal Drain	Outfall	1	Done, confirm DC or RC	Yes	Only 30" CMP outletting. SCPWC drain says 27", no SCRC drain found. Confirm with SCRC 122
211	Point	SCPWC94	43.458254	-83.987267	Saginaw Township	0	Universal Drain	Outfall	1	Done	No	
212	Point	SCPWC95	43.458227	-83.986162	Saginaw Township	10	Universal Drain	Outfall	1	Done	No	
213	Point	SCPWC96	43.458247	-83.984703	Saginaw Township	10	Universal Drain	Outfall	1	Done	Yes	
214	Point	SCPWC97	43.458223	-83.983643	Saginaw Township	10	Universal Drain	Outfall	1	Done	No	SCPWC drains are 36" and 15" RCP at this location (SCPWC 97 & 98) Two plastic HPDE pipes noted in the area too for screening, as SCRC 109 & 116
215	Point	SCPWC98	43.458223	-83.983643	Saginaw Township	10	Universal Drain	Outfall	1	CF		See note for SCPWC 97
216	Point	SCPWC99	43.458214	-83.982318	Saginaw Township	10	Universal Drain	Outfall	1	Done	No	
217	Point	SCPWC100	43.458218	-83.981174	Saginaw Township	10	Universal Drain	Outfall	1	Done	Yes	

OBJECTID *	Shape *	outfall_no	lat	long	municipali	section	receive_wa	type	Insp_Year	Inspection Notes	Follow Up Needed?	Additional Notes
218	Point	SCPWC101	43.458144	-83.980783	Saginaw Township	10	Universal Drain	Outfall	1	Done	Yes	
219	Point	SCPWC102	43.458207	-83.978402	Saginaw Township	10	Universal Drain	Outfall	1	Done	Yes	
220	Point	SCPWC103	43.458207	-83.976016	Saginaw Township	10	Universal Drain	Outfall	1	CF		Appears point is misplaced, further west behind building near back building and is a point of discharge, can see on Google Earth
93	Point	CS4	43.419084	-83.950359	City of Saginaw	25	Lake Linton	Outfall		2 Dry		
94	Point	CS5	43.419342	-83.950116	City of Saginaw		Lake Linton	Outfall		2 Dry		
223	Point	SCPWC106	43.476174	-83.987303	Saginaw Township	3	Saginaw Zilwaukee Drain	Outfall	1	CF, next to SCRC 152		No SCPWC drain shown entering at this location appears to only be SCRC 152, confirm
224	Point	SCPWC107	43.476169	-83.988957	Saginaw Township	3	Saginaw Zilwaukee Drain	Outfall	1	Done	No	
225	Point	SCPWC108	43.472719	-84.003165	Saginaw Township	4	Saginaw Zilwaukee Drain	Outfall	1	Check SCRC 148		No SCPWC drain shown entering at this location appears to only be SCRC 148, confirm
226	Point	SCPWC109	43.472669	-84.004681	Saginaw Township	4	Saginaw Zilwaukee Drain	Outfall	1	Pipe fully submerged		No SCPWC drain shown entering at this location appears to only be SCRC 147, confirm
227	Point	SCPWC110	43.471448	-84.033963	Saginaw Township	6	Kastorf Drain	Outfall		5		
228	Point	SCPWC111	43.464974	-84.051768	Saginaw Township	12	Tittabawassee, Kochville, and Saginaw Drain (18")	Outfall		5		
229	Point	SCPWC112	43.468169	-84.051757	Saginaw Township	6	Tittabawassee, Kochville, and Saginaw Drain	Outfall		5		
230	Point	SCPWC113	43.411539	-84.048375	Thomas Township	30	Weigner Drain, Tittabawassee River	Outfall		4		
231	Point	SCPWC114	43.412916	-84.048084	Thomas Township	30	Monk Tile, Tittabawassee River	Outfall		4		
232	Point	SCPWC115	43.415782	-84.080831	Thomas Township	26	Scholtz and O'Hearn Drain	Outfall		4		
233	Point	SCPWC116	43.394974	-84.139859	Thomas Township	31	Branch No. 1 of No. 3 Drain	Outfall		4		
234	Point	SCPWC117	43.394945	-84.136006	Thomas Township	31	Branch No. 1 of No. 3 Drain	Outfall		4		
235	Point	SCPWC118	43.426593	-84.071512	Thomas Township	24	Reineke Drain	Outfall		4		
236	Point	SCPWC119	43.429127	-84.099784	Thomas Township	23	Liskow Tiled Drain	Outfall		4		
237	Point	SCPWC120	43.426648	-84.067394	Thomas Township	24	Reineke Drain	Outfall		4		
238	Point	SCPWC121	43.427041	-84.062782	Thomas Township	24	Reineke Drain	Outfall		4		
239	Point	SCPWC122	43.435092	-84.062063	Thomas Township	24	Winchester Farms Branch Drain	Outfall		4		
240	Point	SCPWC123	43.452205	-84.094896	Thomas Township	11	Hoffman Branch Drain	Outfall		4		
241	Point	SCPWC124	43.417629	-84.096756	Thomas Township	26	Detention Outlet, Wolgast Branch of Swan Creek	Outfall		4		
242	Point	SCPWC125	43.449283	-84.117845	Thomas Township	15	Wurtzel Tile Drain	Outfall		4		
243	Point	SCPWC126	43.517513	-84.109412	Tittabawassee Township	22	Ralph Drain	Outfall		5		
244	Point	SCPWC127	43.51863	-84.128832	Tittabawassee Township	21	Parker Swamp Drain	Outfall		5		
245	Point	SCPWC128	43.53236	-84.161288	Tittabawassee Township	18	Trickey Drain	Outfall		5		
246	Point	SCPWC129	43.53406	-84.162403	Tittabawassee Township	18	Trickey Drain	Outfall		5		
247	Point	SCPWC130	43.427847	-84.062283	Thomas Township	24	Reineke Drain	Outfall		4		
248	Point	SCPWC131	43.419698	-84.089973	Thomas Township	26	Wolgast Branch of Swan Creek Drain	Outfall		4		
249	Point	SCPWC132	43.410312	-84.091224	Thomas Township	27	Swan Creek	Outfall		4		
250	Point	SCPWC133	43.466586	-84.104799	Thomas Township	10	Wiltse Drain	Outfall		4		
251	Point	SCPWC134	43.49613	-83.953742	Kochville Township	25	Drain-Tile	Outfall	1	Done	No	
258	Point	SCPWC141	43.443208	-83.943589	City of Saginaw	13	Saginaw River	Outfall		2	Can't get to	
253	Point	SCPWC136	43.37618	-83.87861	Bridgeport Township	9	Herman Drain Ext. of Branch of King Road Drain	Outfall		3		
254	Point	SCPWC137	43.376992	-83.88885	Bridgeport Township	9	Herman Drain Ext. of Branch of King Road Drain	Outfall		3		
255	Point	SCPWC138	43.373613	-83.916967	Bridgeport Township	7	Liedlein Drain	Outfall		3		
256	Point	SCPWC139	43.40043	-84.014613	Saginaw Township	32	Center Road Drain	Outfall		4		
257	Point	SCPWC140	43.39333	-84.003259	Saginaw Township	32	Tittabawassee River (Gempel Tile Drain)	Outfall		4		
88	Point	CZ1	43.493755	-83.930158	City of Zilwaukee	31	Kochville Drain	Outfall		2	Dry	
89	Point	CZ2	43.47621	-83.913512	City of Zilwaukee	5	Saginaw River	Outfall		2	Dry	
133	Point	SCPWC15	43.487053	-83.9559	Kochville Township	35	Kochville & Branches Intercounty Drain- Branch 1 of the	Outfall		2	Stagnant	
261	Point	SCRC 1	43.494334	-83.968603	Kochville Township	35	Kochville Drain via SCRC Ditch	Outfall	1	Done, Check SCPWC 53		No SCPWC 53 drain shown entering at this location appears to only be SCRC 1, confirm
262	Point	SCRC 2	43.397253	-84.051852	James Township	31	Union Drain	Outfall		4		
263	Point	SCRC 3	43.48109	-84.089696	Saginaw Township	2	Tittabawassee River via Unamed Trib.	Outfall		5		
264	Point	SCRC 4	43.505083	-84.090908	Tittabawassee Township	26	Unamed Trib. of Tittabawassee River	Outfall		5		
265	Point	SCRC 5	43.470222	-84.081668	Saginaw Township		Unamed Trib. of Tittabawassee River	Outfall		5		
266	Point	SCRC 6	43.466283	-84.082388	Saginaw Township	2	Tittabawassee River	Outfall		5		
267	Point	SCRC 7	43.356215	-83.880854	Bridgeport Township	16	Cass River	Outfall		3		
268	Point	SCRC 8	43.35626	-83.88083	Bridgeport Township	16	Cass River	Outfall		3		
269	Point	SCRC 9	43.358385	-83.882254	Bridgeport Township	16	Cass River	Outfall		3		
270	Point	SCRC 10	43.3589	-83.883072	Bridgeport Township	16	Cass River	Outfall		3		
271	Point	SCRC 11	43.362526	-83.875732	Bridgeport Township	16	Cass River via Bridgeport Drain	Outfall		3		
272	Point	SCRC 12	43.366516	-83.898856	Bridgeport Township	9	Keogan Sieman Drain	Outfall		3		
273	Point	SCRC 13	43.368967	-83.856637	Bridgeport Township	10	Northeast Branch of Baker Drain	Outfall		3		
274	Point	SCRC 14	43.368997	-83.856613	Bridgeport Township	10	Northeast Branch of Baker Drain	Outfall		3		
275	Point	SCRC 15	43.369035	-83.856635	Bridgeport Township	10	Northeast Branch of Baker Drain	Outfall		3		
276	Point	SCRC 16	43.37151	-83.876049	Bridgeport Township	10	Branch Of Bunyan Drain via SCRC Ditch	Outfall		3		
277	Point	SCRC 17	43.373588	-83.917289	Bridgeport Township	7	Liedlein Drain	Outfall		3		
278	Point	SCRC 18	43.37378	-83.916332	Bridgeport Township	7	Liedlein Drain	Outfall		3		
279	Point	SCRC 19	43.375226	-83.878424	Bridgeport Township		Herman Drain	Outfall		3		
280	Point	SCRC 20	43.377282	-83.935245	Bridgeport Township	7	King Street Drain via SCRC Ditch	Outfall		3		
281	Point	SCRC 21	43.377487	-83.876217	Bridgeport Township	9	King Street Drain via SCRC Ditch	Outfall		3		
282	Point	SCRC 22	43.379204	-83.91446	Bridgeport Township	7	King Street Drain	Outfall		3		
283	Point	SCRC 23	43.379204	-83.891025	Bridgeport Township	9	Branch No.1 Kind Road Drain	Outfall		3		
284	Point	SCRC 24	43.379422	-83.890905	Bridgeport Township	9	Branch No.1 Kind Road Drain	Outfall		3		
285	Point	SCRC 25	43.381362	-83.906645	Bridgeport Township	5	King Street Drain	Outfall		3		
286	Point	SCRC 26	43.382264	-83.904633	Bridgeport Township	5	King Street Drain	Outfall		3		
287	Point	SCRC 27	43.38297	-83.901276	Bridgeport Township	5	King Street Drain	Outfall		3		
288	Point	SCRC 28	43.384896	-83.925607	Bridgeport Township	6	Lull Drain via SCRC Ditch	Outfall		3		
289	Point	SCRC 29	43.385482	-83.935747	Spaulding Township	6	Lull Drain	Outfall		3		

OBJECTID *	Shape *	outfall_no	lat	long	municipali	section	receive_wa	type	Insp_Year	Inspection Notes	Follow Up Needed?	Additional Notes
290	Point	SCRC 30	43.386495	-83.88645	Bridgeport Township		4 King Street Drain	Outfall	3			
291	Point	SCRC 31	43.38765	-83.930371	Bridgeport Township		6 Lull Drain	Outfall	3			
292	Point	SCRC 32	43.387757	-83.915892	Bridgeport Township		6 Lull Drain via SCRC Ditch	Outfall	3			
293	Point	SCRC 33	43.392982	-83.916177	Bridgeport Township		6 Lull Drain via Unamed Trib.	Outfall	3			
294	Point	SCRC 34	43.393161	-83.926674	Bridgeport Township		6 Lull Drain via SCRC Ditch	Outfall	3			
295	Point	SCRC 35	43.395628	-83.877099	Buena Vista Township		33 Boulton Drain	Outfall	3			
296	Point	SCRC 36	43.395632	-83.877099	Buena Vista Township		33 Boulton Drain	Outfall	3			
297	Point	SCRC 37	43.396211	-83.901865	Buena Vista Township		32 Detention Pond	Outfall	3			
298	Point	SCRC 38	43.396559	-83.877071	Buena Vista Township		33 Boulton Drain	Outfall	3			
299	Point	SCRC 39	43.400448	-83.886802	Buena Vista Township		33 Gage No.1 Extension Drain	Outfall	3			
300	Point	SCRC 40	43.401449	-84.05534	Thomas Township		36 Garey Drain	Outfall	4			
301	Point	SCRC 41	43.403202	-84.051932	James Township		31 Garey Drain	Outfall	4			
302	Point	SCRC 42	43.403544	-84.031486	Saginaw Township		32 Tittabawassee River	Outfall	4			
303	Point	SCRC 43	43.408881	-84.078767	Thomas Township		35 Scholtz & O'Hearn Drain	Outfall	4			
304	Point	SCRC 44	43.409932	-84.048142	Thomas Township		30 Tittabawassee River	Outfall	4			
305	Point	SCRC 45	43.410349	-84.064098	Thomas Township		25 Companion Drain	Outfall	4			
306	Point	SCRC 46	43.411131	-84.062742	Thomas Township		25 Companion Drain via Detention Basin	Outfall	4			
307	Point	SCRC 47	43.411504	-84.03647	Saginaw Township		30 Unamed Trib. of Tittabawassee River	Outfall	4			
308	Point	SCRC 48	43.411768	-84.036124	Saginaw Township		30 Unamed Trib. of Tittabawassee River	Outfall	4			
309	Point	SCRC 49	43.411975	-84.0376	Saginaw Township		30 Unamed Trib. of Tittabawassee River	Outfall	4			
310	Point	SCRC 50	43.412332	-84.080546	Thomas Township		26 Scholtz & O'Hearn Drain	Outfall	4			
311	Point	SCRC 51	43.412399	-84.08619	Thomas Township		26 Scholtz & O'Hearn Drain	Outfall	4			
312	Point	SCRC 52	43.413275	-84.085474	Thomas Township		26 Scholtz & O'Hearn Drain	Outfall	4			
313	Point	SCRC 53	43.41347	-84.077518	Thomas Township		26 Scholtz & O'Hearn Drain	Outfall	4			
314	Point	SCRC 54	43.413716	-84.067055	Thomas Township		26 Companion Drain	Outfall	4			
315	Point	SCRC 55	43.41636	-84.108634	Thomas Township		27 Swan Creek via MDOT Ditch	Outfall	4			
316	Point	SCRC 56	43.416893	-84.077054	Thomas Township		26 Scholtz & O'Hearn Drain	Outfall	4			
317	Point	SCRC 57	43.417714	-84.051856	Thomas Township		30 Tittabawassee River via Metzler Tile Drain	Outfall	4			
318	Point	SCRC 58	43.418813	-84.076971	Thomas Township		26 Scholtz & O'Hearn Drain	Outfall	4			
319	Point	SCRC 59	43.418821	-84.07702	Thomas Township		26 Scholtz & O'Hearn Drain	Outfall	4			
320	Point	SCRC 60	43.41909	-84.091394	Thomas Township		27 Wolgast Branch of Swan Creek Drain	Outfall	4			
321	Point	SCRC 61	43.419476	-84.091385	Thomas Township		27 Wolgast Branch of Swan Creek Drain	Outfall	4			
322	Point	SCRC 62	43.419765	-84.089594	Thomas Township		26 Wolgast Branch of Swan Creek Drain	Outfall	4			
323	Point	SCRC 63	43.419774	-84.08846	Thomas Township		26 Wolgast Branch of Swan Creek Drain	Outfall	4			
324	Point	SCRC 64	43.420452	-84.08581	Thomas Township		Wolgast Branch of Swan Creek Drain via Unamed Ditch	Outfall	4			
325	Point	SCRC 65	43.423124	-84.075498	Thomas Township		26 Reineke Drain	Outfall	4			
326	Point	SCRC 66	43.423144	-84.074013	Thomas Township		26 Reineke Drain	Outfall	4			
327	Point	SCRC 67	43.423162	-84.076172	Thomas Township		26 Reineke Drain	Outfall	4			
328	Point	SCRC 68	43.423214	-84.076544	Thomas Township		26 Reineke Drain	Outfall	4			
329	Point	SCRC 69	43.423404	-84.105352	Thomas Township		27 Swan Creek	Outfall	4			
330	Point	SCRC 70	43.423483	-84.031158	Saginaw Township		19 Winterstein Drain	Outfall	4			
331	Point	SCRC 71	43.425198	-84.09727	Thomas Township		27 Liskow Drain	Outfall	4			
332	Point	SCRC 72	43.425178	-84.029662	Saginaw Township		19 Winterstein Drain	Outfall	4			
333	Point	SCRC 73	43.426488	-84.097854	Thomas Township		27 Liskow Drain	Outfall	4			
334	Point	SCRC 74	43.426554	-84.067473	Thomas Township		24 Reineke Drain	Outfall	4			
335	Point	SCRC 75	43.426574	-84.070663	Thomas Township		24 Reineke Drain	Outfall	4			
336	Point	SCRC 76	43.42661	-84.071465	Thomas Township		24 Reineke Drain	Outfall	4			
337	Point	SCRC 77	43.426611	-84.06742	Thomas Township		24 Reineke Drain	Outfall	4			
338	Point	SCRC 78	43.42664	-84.070341	Thomas Township		24 Reineke Drain	Outfall	4			
339	Point	SCRC 79	43.426677	-84.03878	Saginaw Township		19 Ismond Drain via Ditch	Outfall	4			
340	Point	SCRC 80	43.426944	-84.09801	Thomas Township		22 Liskow Drain	Outfall	4			
341	Point	SCRC 81	43.427024	-84.062792	Thomas Township		24 Reineke Drain	Outfall	4			
342	Point	SCRC 82	43.427149	-84.066723	Thomas Township		24 Reineke Drain	Outfall	4			
343	Point	SCRC 83	43.428412	-84.098936	Thomas Township		22 Liskow Drain	Outfall	4			
344	Point	SCRC 84	43.430149	-84.064257	Thomas Township		24 Reineke Drain via SCRC Ditch	Outfall	4			
345	Point	SCRC 85	43.430283	-84.061811	Thomas Township		24 Reineke Drain	Outfall	4			
346	Point	SCRC 86	43.430439	-84.097878	Thomas Township		22 Liskow Drain	Outfall	4			
347	Point	SCRC 87	43.432534	-84.044521	Saginaw Township		19 Amanda Drain	Outfall	4			
348	Point	SCRC 88	43.433796	-84.061889	Thomas Township		24 Reineke Drain	Outfall	4			
349	Point	SCRC 89	43.435094	-84.062045	Thomas Township		24 Reineke Drain	Outfall	4			
350	Point	SCRC 90	43.436035	-84.066703	Thomas Township		24 Reineke Drain via Unamed Branch	Outfall	4			
423	Point	SCRC 163	43.484141	-83.960526	Kochville Township		35 Branch No.1 of South Branch of Kochville Drain via Unar	Outfall	2	Stagnant		
352	Point	SCRC 92	43.437458	-84.060421	Thomas Township		13 Tittabawassee River	Outfall	4			
425	Point	SCRC 165	43.484994	-83.949939	Kochville Township		36 Kochville Drain via SCRC Ditch	Outfall	2	No flow		
426	Point	SCRC 166	43.485623	-83.958724	Kochville Township		35 Branch No.1 of South Branch of Kochville Drain via Unar	Outfall	2	Stagnant		
355	Point	SCRC 95	43.44712	-84.07402	Thomas Township		13 Hagerl Tile Drain via SCRC Ditch	Outfall	4			
427	Point	SCRC 167	43.485933	-83.942557	Kochville Township		36 Saginaw Zilwaukee Drain via Unamed Ditch	Outfall	2	No flow		
357	Point	SCRC 97	43.449028	-84.117675	Thomas Township		16 Swan Creek	Outfall	4			
428	Point	SCRC 168	43.486299	-83.946222	Kochville Township		36 Kochville Drain via SCRC Ditch	Outfall	2	No flow		
359	Point	SCRC 99	43.45162	-84.04609	Saginaw Township		18 Branch of Kastorf Drain	Outfall	5			
360	Point	SCRC 100	43.451643	-84.046024	Saginaw Township		18 Branch of Kastorf Drain	Outfall	5			
361	Point	SCRC 101	43.451671	-84.046008	Saginaw Township		18 Branch of Kastorf Drain	Outfall	5			
362	Point	SCRC 102	43.452	-84.094906	Thomas Township		15 Branch of Hoffman Drain	Outfall	4			
363	Point	SCRC 103	43.452051	-84.047278	Saginaw Township		18 Branch of Kastorf Drain	Outfall	5			
429	Point	SCRC 169	43.492558	-83.935828	Kochville Township		36 Saginaw Zilwaukee Drain	Outfall	2	No flow		
365	Point	SCRC 105	43.454029	-84.115011	Thomas Township		10 Wiltse Drain	Outfall	4			
366	Point	SCRC 106	43.456083	-84.113576	Thomas Township		10 Wiltse Drain	Outfall	4			
367	Point	SCRC 107	43.457013	-84.113533	Thomas Township		10 Wiltse Drain	Outfall	4			

OBJECTID *	Shape *	outfall_no	lat	long	municipali	section	receive_wa	type	Insp_Year	Inspection Notes	Follow Up Needed?	Additional Notes
368	Point	SCRC 108	43.458181	-83.980777	Saginaw Township	10	Universal Drain	Outfall	1	Confirm DC or RC		SCPWC drain shown entering at this location SCPWC 101 that matches size listed, assume just SCPWC
369	Point	SCRC 109	43.458199	-83.983456	Saginaw Township	10	Universal Drain	Outfall	1	Review in office		See note for SCPWC 97
370	Point	SCRC 110	43.45823	-83.989425	Saginaw Township	10	Universal Drain	Outfall	1	Done	No	
371	Point	SCRC 111	43.458204	-83.978049	Saginaw Township	10	Universal Drain	Outfall	1	Done	No	
372	Point	SCRC 112	43.45828	-84.00083	Saginaw Township	9	Universal Drain	Outfall	1	Done	Yes	
373	Point	SCRC 113	43.458282	-84.001006	Saginaw Township	9	Universal Drain	Outfall	1	Done	Yes	
153	Point	SCPWC35	43.465391	-83.956362	Saginaw Township	2	Universal Drain	Outfall	2	Not Found		
375	Point	SCRC 115	43.458226	-83.982289	Saginaw Township	10	Universal Drain	Outfall	1	Confirm DC or RC		
376	Point	SCRC 116	43.458232	-83.983457	Saginaw Township	10	Universal Drain	Outfall	1	Review in office		See note for SCPWC 97
377	Point	SCRC 117	43.458236	-83.9847	Saginaw Township	10	Universal Drain	Outfall	1	Done	Yes	
378	Point	SCRC 118	43.458227	-83.981167	Saginaw Township	10	Universal Drain	Outfall	1	CF, confirm RC or DC		Appears to be SCPWC 100 only based on drain maps. Need to confirm with SCRC
379	Point	SCRC 119	43.458282	-83.997879	Saginaw Township	9	Universal Drain	Outfall	1	CF, confirm RC or DC		No SCPWC drains near by, confirm with SCRC that this is an outfall point. Have previous photo of CMP
380	Point	SCRC 120	43.458245	-83.986137	Saginaw Township	10	Universal Drain	Outfall	1	Done	No	
381	Point	SCRC 121	43.458248	-83.986916	Saginaw Township	10	Universal Drain	Outfall	1	Done	No	
382	Point	SCRC 122	43.458267	-83.990838	Saginaw Township	10	Universal Drain	Outfall	1			Likely able to remove, see note for SCPWC 93
157	Point	SCPWC40	43.465208	-83.961208	Saginaw Township	11	Universal Drain (Tile to Open Drain)	Outfall	2	Dry		
384	Point	SCRC 124	43.45832	-84.005037	Saginaw Township	10	Universal Drain	Outfall	1	Done	Yes	
385	Point	SCRC 125	43.458327	-84.006365	Saginaw Township	9	Universal Drain	Outfall	1	Done	Yes	
386	Point	SCRC 126	43.458321	-84.001002	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
387	Point	SCRC 127	43.458338	-84.002353	Saginaw Township	9	Universal Drain	Outfall	1	CF		Appears to be SCPWC 91 based on drain maps, confirm and potentially remove
388	Point	SCRC 128	43.458361	-84.008223	Saginaw Township	9	Universal Drain	Outfall	1	Done	Yes	
389	Point	SCRC 129	43.458391	-84.014877	Saginaw Township	9	Universal Drain	Outfall	1	Done	Yes	
390	Point	SCRC 130	43.458382	-84.010867	Saginaw Township	9	Universal Drain	Outfall	1	CF		Appears to be SCPWC 89 based on drain maps & size, confirm and potentially remove
391	Point	SCRC 131	43.458389	-84.011943	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
392	Point	SCRC 132	43.4584	-84.013217	Saginaw Township	9	Universal Drain	Outfall	1	Done	No	
393	Point	SCRC 133	43.458428	-84.019763	Saginaw Township	8	Universal Drain	Outfall	1	Done	Yes	
394	Point	SCRC 134	43.460167	-84.051895	Saginaw Township	8	Tittabawasse Kochville & Saginaw Drain	Outfall	5			
395	Point	SCRC 135	43.462057	-84.038288	Saginaw Township	7	Kastorf Drain	Outfall	5			
396	Point	SCRC 136	43.463168	-84.051878	Saginaw Township	7	Tittabawasse Kochville & Saginaw Drain	Outfall	5			
158	Point	SCPWC41	43.478126	-83.96544	Saginaw Township	3	Saginaw Zilwaukee Drain (Tile to Open Drain)	Outfall	2	Dry		
221	Point	SCPWC104	43.472427	-83.961151	Saginaw Township	2	Elmer Drain	Outfall	2	Culvert		
399	Point	SCRC 139	43.465922	-84.04093	Saginaw Township	6	Kastorf Drain	Outfall	5			
400	Point	SCRC 140	43.46734	-84.006582	Saginaw Township	4	Universal Drain via McCarty Tile Drain	Outfall	1	Done	No	
401	Point	SCRC 141	43.467729	-84.007133	Saginaw Township	4	Universal Drain via McCarty Tile Drain	Outfall	1	Done	No	
402	Point	SCRC 142	43.469144	-84.051834	Saginaw Township	6	Tittabawasse Kochville & Saginaw Drain	Outfall	5			
403	Point	SCRC 143	43.471247	-84.041247	Saginaw Township	6	Kastorf Drain	Outfall	5			
404	Point	SCRC 144	43.472007	-84.051778	Saginaw Township	6	Tittabawasse Kochville & Saginaw Drain	Outfall	5			
222	Point	SCPWC105	43.458112	-83.959232	Saginaw Township	11	Universal Drain	Outfall	2	Can't get to		
406	Point	SCRC 146	43.472647	-84.005678	Saginaw Township	4	Saginaw Zilwaukee Drain	Outfall	1	Done	No	
407	Point	SCRC 147	43.472664	-84.004679	Saginaw Township	4	Saginaw Zilwaukee Drain	Outfall	1	CF		No SCPWC 109 drain shown entering at this location appears to only be SCRC 147, confirm
408	Point	SCRC 148	43.472662	-84.003252	Saginaw Township	4	Saginaw Zilwaukee Drain	Outfall	1	Check SCPWC 108		
409	Point	SCRC 149	43.472795	-84.014765	Saginaw Township	4	Saginaw Zilwaukee Drain	Outfall	1	Done	No	
410	Point	SCRC 150	43.473814	-84.051736	Saginaw Township	6	Tittabawasse Kochville & Saginaw Drain	Outfall	5			
411	Point	SCRC 151	43.476154	-83.989065	Saginaw Township	3	Saginaw Zilwaukee Drain	Outfall	1	Done	No	
412	Point	SCRC 152	43.476149	-83.987277	Saginaw Township	3	Saginaw Zilwaukee Drain	Outfall	1	Done	No	
413	Point	SCRC 153	43.476181	-83.980437	Saginaw Township	3	Saginaw Zilwaukee Drain	Outfall	1	Done	Yes	
414	Point	SCRC 154	43.476484	-83.97776	Saginaw Township	3	Saginaw Zilwaukee Drain via SCRC Open Ditch	Outfall	1	Done	No	
259	Point	SCPWC142	43.478129	-83.963477	Saginaw Township	2	Saginaw Zilwaukee Drain	Outfall	2	Culvert		
260	Point	SCPWC143	43.478129	-83.963477	Saginaw Township	2	Saginaw Zilwaukee Drain	Outfall	2	Can't get to		
354	Point	SCRC 94	43.446314	-83.955734	Saginaw Township	14	Mershon Drain	Outfall	2	Dry		
418	Point	SCRC 158	43.479325	-84.034005	Saginaw Township	5	Kastorf Drain via SCRC Ditch	Outfall	5			
374	Point	SCRC 114	43.458145	-83.959161	Saginaw Township	11	Universal Drain	Outfall	2	Can't get to		
383	Point	SCRC 123	43.45816	-83.959158	Saginaw Township	11	Universal Drain	Outfall	2	Dry		
421	Point	SCRC 161	43.481904	-83.985033	Kochville Township	34	Branch No.1 of South Branch of Kochville Drain via Ditch	Outfall	1	CF		Nothing near by, confirm if point of discharge (no structure observed) and ditch further north
422	Point	SCRC 162	43.48346	-83.97811	Kochville Township	34	Branch No.1 of South Branch of Kochville Dain via Meijir Drain	Outfall	1	CF		Heavy vegetation detention basin, Meijer Drain across the street, no apparent connection, confirm
398	Point	SCRC 138	43.465226	-83.961348	Saginaw Township	11	Universal Drain	Outfall	2	Can't get to		
424	Point	SCRC 164	43.484752	-83.979509	Kochville Township	34	Meijir Drain	Outfall	1	Cannot Access		
405	Point	SCRC 145	43.472437	-83.961143	Saginaw Township	2	Elmer Drain	Outfall	2	Culvert		
415	Point	SCRC 155	43.478109	-83.963365	Saginaw Township	2	Saginaw Zilwaukee Drain	Outfall	2	Flow	Yes	Dry second time
416	Point	SCRC 156	43.478132	-83.965541	Saginaw Township	2	Saginaw Zilwaukee Drain	Outfall	2	Culvert		
417	Point	SCRC 157	43.478146	-83.963361	Saginaw Township	2	Saginaw Zilwaukee Drain	Outfall	2	Flow	Yes	Tested
419	Point	SCRC 159	43.479611	-83.959291	Saginaw Township	2	Saginaw Zilwaukee Drain via SCRC Ditch	Outfall	2	Dry		
430	Point	SCRC 170	43.508565	-83.956228	Kochville Township	25	Burdow Drain	Outfall	1	Done	No	
431	Point	SCRC 171	43.50858	-83.959748	Kochville Township	26	Bourdow Drain via SCRC Ditch	Outfall	1	Done	No	
432	Point	SCRC 172	43.514538	-84.119052	Tittabawsee Township	21	Tittabawasse River	Outfall	5			
433	Point	SCRC 173	43.514902	-83.955907	Kochville Township	23	SVSU MS4	Outfall	1	CF		No outfall in area, discharge to roadside swale or detention basin?, confirm
434	Point	SCRC 174	43.519355	-84.131967	Tittabawasse Township	20	Parker Swamp Drain	Outfall	5			
435	Point	SCRC 175	43.519893	-84.134213	Tittabawasse Township	20	Parker Swamp Drain	Outfall	5			
436	Point	SCRC 176	43.52024	-84.137747	Tittabawasse Township	20	Parker Swamp Drain	Outfall	5			
437	Point	SCRC 177	43.520367	-84.143048	Tittabawasse Township	20	Parker Swamp Drain	Outfall	5			

OBJECTID *	Shape *	outfall_no	lat	long	municipali	section	receive_wa	type	Insp_Year	Inspection Notes	Follow Up Needed?	Additional Notes
438	Point	SCRC 178	43.521083	-84.118836	Tittabawassee Township	21	New Freeland Tile Drain	Outfall	5			
439	Point	SCRC 179	43.521249	-84.141238	Tittabawassee Township	20	Parker Swamp Drain	Outfall	5			
440	Point	SCRC 180	43.524901	-84.133276	Tittabawassee Township	20	Tittabawassee River	Outfall	5			
441	Point	SCRC 181	43.525846	-84.120574	Tittabawassee Township	16	Ostrander Drain	Outfall	5			
442	Point	SCRC 182	43.525969	-84.113871	Tittabawassee Township	16	Ostrander Drain via Lake State Railway	Outfall	5			
443	Point	SCRC 183	43.526046	-84.121068	Tittabawassee Township	16	Ostrander Drain	Outfall	5			
444	Point	SCRC 184	43.526103	-84.121043	Tittabawassee Township	16	Ostrander Drain	Outfall	5			
445	Point	SCRC 185	43.527865	-84.117115	Tittabawsee Township	16	Ostrander Drain	Outfall	5			
446	Point	SCRC 186	43.530457	-84.119929	Tittabawassee Township	16	Ostrander Drain via Lake State Railway	Outfall	5			
447	Point	SCRC 187	43.534064	-84.162403	Tittabawassee Township	18	Trickery Drain	Outfall	5			
448	Point	SCRC 188	43.535302	-84.162366	Tittabawassee Township	18	Trickery Drain	Outfall	5			
449	Point	SCRC 189	43.535531	-84.134809	Tittabawassee Township	17	Tittabawassee River	Outfall	5			
450	Point	SCRC 190	43.536439	-84.136178	Tittabawassee Township	17	Tittabawassee River	Outfall	5			
451	Point	SCRC 191	43.537445	-84.1605	Tittabawassee Township	18	Trickery Drain via SCRC Ditch	Outfall	5			
452	Point	STCSD4	43.422556	-84.021337	Saginaw Township	20	Winterstein Drain via SCPWC MS4	Point of Discharge	4			
453	Point	SCRC 66	-84.08581	43.42045	Thomas Township	27	Wolgast Branch of Swan Creek Drain via Unnamed Ditch	Outfall	4			
454	Point	SCPWC 34	43.458275	-83.9896	Saginaw Township	10		Outfall	1			Duplicate point, see above
455	Point		0	0				Outfall	1			SVSU point, not an outfall because not dendritic system

Appendix II

*NPDES Phase II Dry-Weather Outfall and Point of Discharge Inspection
Form*

NPDES PHASE II OUTFALL SURVEY SHEET

General

Outfall #: _____ Photograph #: _____ Date: _____ Crew Initials: _____

Right _____ Left _____ Side of drain looking upstream

Location: _____

Latitude: _____ Longitude: _____

Weather: Air temp.: _____ Rain: Yes ___ No ___ Sunny: ___ Cloudy: ___

Number of days of no precipitation or runoff events prior to inspection: ___

Outfall

Point Source Information

Size _____

Type/Material _____

Flow Present _____

Depth of Flow in Pipe (inches) _____

Check if Submerged _____

Land Use/Area

- | | | | |
|--|-------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> Residential | <input type="checkbox"/> single | <input type="checkbox"/> multi | <input type="checkbox"/> Manufactured |
| <input type="checkbox"/> Commercial/Business | <input type="checkbox"/> Industrial | <input type="checkbox"/> Agricultural | <input type="checkbox"/> Wooded Area |
| <input type="checkbox"/> Transportation | <input type="checkbox"/> Meadow | Known Use _____ | |

Physical Discharge Observations

Odor: None ___ Sewage ___ Sulfide ___ Oil ___ Gas ___ Sour ___ Other _____

Color: None ___ Yellow ___ Brown ___ Green ___ Red ___ Gray ___ Other _____

Turbidity: None ___ Cloudy ___ Opaque ___

Floatables: None ___ Petroleum ___ Sheen ___ Sewage ___ Other ___ (collect sample)

Deposits/Stains: None ___ Sediment ___ Oily ___ Describe _____ (collect sample)

Vegetation Conditions: Normal ___ Inhibited Growth ___ Excessive Growth ___

Extent: _____

Erosion present: Yes ___ No ___ Describe: _____
at Outfall _____

Damage to outfall structures:

None ___ Concrete Cracking ___ Concrete Spalling ___ Peeling Paint ___ Metal Corrosion ___

Other damage: _____ Extent: _____

Chemical Analysis

Temperature: _____ °F Conductivity: _____ μS Surfactants: ___ high ___ low ___ none

pH: _____ Ammonia: _____ ppm DO: _____ Turbidity: _____ TDS: _____

Other

Known industrial or commercial uses in drainage area? Yes ___ No ___ Describe _____

Stream Conditions: _____



Appendix III

SASWA IDEP Reporting Procedure
Illicit Discharge Report and Investigations Guidelines
Incident Investigation Report Form Example
Illicit Discharge from a Construction Site Document



Saginaw Area Storm Water Authority

IDEP REPORTING PROCEDURE

GOAL:

To protect water quality in Saginaw County in the event of spills, illicit dumping, connections, or discharges into storm sewer systems or waters of the state of Michigan.

OBJECTIVE:

The primary objective of this procedure is to protect the water quality of surface waters of the state of Michigan. This procedure is to address the spills and illicit dumping into the storm drainage system within the SASWA's urbanized area. This procedure does not cover incidents that are emergent in nature and can effect Public Health and Safety, such as gasoline or fuel oil spills from vehicular accidents, railway accidents with spills of large quantities of volatile or chemical materials/fluids. These incidences must be routed to 9-1-1 for proper Hazardous Material Team Response. After the 9-1-1 system is notified, contact EGLE's 24-Hour Pollution Emergency Alerting System at 1-800-292-4706.

METHOD:

1. The Saginaw Area Storm Water Authority (SASWA) through the Saginaw County Public Works Commissioner's Office at 790-5258 will receive messages reporting illicit discharges or connections to the storm in Saginaw County.
2. Staff from the Office of Public Works will be available to receive calls Monday through Friday from 8:30 a.m. to 5:00 p.m.
3. After hours, and on weekends and holidays the calls will be forwarded to 9-1-1 or 989-790-5456 the Sheriff Dept. Non-Emergency number at the county's Central Dispatching agency.

FOR MINOR INCIDENCES Staff will complete the After Hours – Operator Referral Form and fax to SASWA (SCPWC office) at the number listed on the form.

4. The Urgent or High Concern problems to be addressed include:
 - Illegal dumping
 - Suspicious waste disposal activities including solid waste such as tires, trash, barrels, appliances, gasoline and petroleum products, oil slicks, discolored water discharges, etc. being improperly disposed of into the Saginaw River, its tributaries, streams or county drains.
 - Changes in water characteristics, foaming, discoloration, oily films or sheens.



Saginaw Area Storm Water Authority

- Soil Erosion and Sediment Control failures from construction sites or other areas that enter into the River systems, or its tributaries, streams or county drains.
 - Unusual odors coming from the river, stream, drain, or storm sewer system.
 - Fish kills and / or other dead aquatic animals (e.g. dead birds, reptiles, frogs, or toads).
 - Urgent calls regarding watershed management issues from other agencies or the Michigan Department of the Environment Great Lakes and Energy (EGLE).
5. Staff will utilize the established triage questions for reporting illicit discharges:
- a. What is the location of the problem:
 - Name the nearest cross streets, intersections or landmarks
 - Caller's address or phone number for verification or additional contact or call back.
 - b. Is there a strong odor of wastewater? Is there a strong odor that the caller can describe?
 - If odor is petroleum based or a chemical type that may have hazardous implications begin contact with 9-1-1 to activate hazardous response teams to the location.
 - c. Did you observe the discharges or dumping of pollutants into drains, ditches, ponds, lakes, rivers?
 - d. Did you witness wastewater or other evidence on the ground surface? Can you describe it?
 - e. Do you know the source of the pollution or the responsible party? Can you give any descriptions of vehicles or persons involved? License numbers?
 - f. Are there any other comments the caller would like to make?
6. After completion of the call the Public Works Commissioner or his/her designee will refer the call to the municipality, school district, agency or university that has jurisdictional responsibility.
7. As necessary, the Public Works Commissioner or his/her designee will refer the call to the EGLE, as it relates to water quality issues for waters of the state, if polluting material is in excess of the threshold reporting quantities in the Part 5 Rules, or if the notice is provided after regular working hours, the EGLE's 24-Hour Pollution Emergency Alerting System at 1-800-292-4706 will be contacted.
8. A log will be kept of all calls in a database established by SASWA. This will be available for the annual report presented to EGLE.
9. Proper incident response and disposition forms must be filled out and distributed to the SASWA member with jurisdiction, Saginaw County Public Works Commissioner, the consultant (Spicer Group). This must be done within 5 days in order to provide time for a response to the EGLE to



Saginaw Area Storm Water Authority

cover spill incident reporting. Spill reporting must be completed within 10 days of the incident and submitted to EGLE as required and directed in the permit.



Saginaw Area Storm Water Authority

ILLICIT DISCHARGE REPORT & INVESTIGATION GUIDELINES: (Forms attached)

General Questions:

1. What is the location of the problem:
 - Name the nearest cross streets, intersections or landmarks
 - Caller's address or phone number for verification or additional contact or call back.
Note: Caller may wish to remain anonymous.
2. Nature of the Illicit Discharge:
 - Is the discharge entering a storm sewer, open ditch, pond, or river? Other?
 - Composition of discharge? Petroleum product or chemical in nature? Other?
 - What is the volume of the discharge? How much are we talking about?
 - Did you witness the discharge or know the source of the pollution? Description of vehicles, parties involved? License numbers?

Response/Dispatch:

Hazardous or potential to be hazardous:

1. If the Illicit discharge is a petroleum product, chemical type in nature, or large volume with unknown composition, please contact/activate the appropriate Fire Department/Haz Mat Response Team within the Municipality or Township involved.
2. If the caller's description of the illicit discharge signifies a potential public safety concern, please contact/activate the appropriate Fire Department/Haz Mat Response Team.

Minor spill/discharge:

1. If caller information signifies a minor or non-hazardous spill/discharge, please contact the Saginaw County Public Works Commissioner and advise him/her of the nature of the call.
Examples:
 - A. A resident dumping oil, antifreeze, or paint down a catch basin in front of home.
 - B. A resident spots a small amount of something in open ditch, etc....
 - C. Human or animal waste products in storm water.
2. If the SCPWC is not available, please contact the appropriate person on the Contact List to investigate the incident.



Saginaw Area Storm Water Authority

3. The responder shall evaluate the scene and mitigate the situation as needed (e.g. use absorbent pads, place a boom, apply an absorbent product and dispose of clean up materials properly).
4. Any questions on clean-up call the Saginaw County Public Works Commissioner's office.

Form Distribution:

1. When the form is completed a copy should be retained by the jurisdictional area where the incident occurred and provided to the municipality's representative to the SASWA.
2. A copy must be submitted via the "Report Spill or Illicit Discharge" page linked below.
3. NOTE: this distribution method is to be used for either paper or electronic reporting forms. Either obtain the REPORTING FORM at:
http://www.saswa.org/filemgt/illicit_discharge/Incident%20Report%20Form.pdf

GO TO SASWA Website for all forms and procedures at:

http://www.saswa.org/illicit_discharge.php

At the bottom of the page are all the links to forms, procedures, call lists, etc.

OR, Contact the consultant and the excel form will be emailed or placed on a disk and sent to you.



Incident Investigation Report

Incident address or location: [Redacted]

Complaint: [Redacted]

Property Owner: [Redacted]

Inspector(s): [Redacted] Date/Time: [Redacted]

Incident Reported by: (Name / Title): [Redacted] Date/Time: [Redacted]

Complaint by: (Name): [Redacted] Phone#: [Redacted] Fax: [Redacted]

Is site in combined sewer district? Yes No

If yes, was appropriate contact made with jurisdictional department? Yes No

Name of agency or person who took call: [Redacted]

If no, continue:

Was area fire department on site? Yes No

If yes, obtain a report from them within 24 hours.

If no, continue:

Material or substance spilled or found in storm water system: [Redacted]

Estimated quantity: [Redacted] gallons/pounds/volume indicator

Was the Saginaw Public Works office contacted? Yes No

Was the MDEQ contacted? Yes No

Incident contained? Yes No Describe: [Redacted]

Equipment Used: [Redacted]

Sample Taken? Yes No By Whom: [Redacted]

Source Identified? Yes No

Responsible Party(s) Name: [Redacted] Address: [Redacted] Phone #: [Redacted]

Disposition (Outcome) of Call: [Redacted]

copies to: Saginaw County Public Works Commissioner Spicer Group, Russ Beaubien Jurisdictional Municipality



ILLICIT DISCHARGE FROM A CONSTRUCTION SITE

Objective: Municipal or county staff have a duty to report illicit discharges from construction sites in Saginaw County to their supervisory staff for further action.

Procedure:

1. If a municipal or county employee observe a construction site that is discharging unclean stormwater runoff, waste materials, petroleum products, dirty water, vehicle fluids, or cement, excess sediment or any polluting substance with the exception of clean storm water from a construction site into a stormwater conveyance system. They should:
 - a. Observe the type of discharge and be prepared to describe it. Take notes on location what you observed, if possible
 - b. Take a picture of the discharge or problem if you have a camera or cell phone with a camera.
 - c. Contact your immediate supervisor.
2. Supervisors / Management staff should determine what the problem is; determine if this project is under a soil erosion and sediment control permit by calling the Saginaw County Public Works Commissioner's office at 989-790-5258. If there is a permit for this site report the problem to them.
3. If there is no permit then please visit the "Report a Spill or Illicit Discharge" page on the SASWA website.
4. The site should be investigated as soon as possible. If there are chemicals, sediment laden water or other waste discharging from the site into a storm drain system, wetland, or surface waters of the state then EGLE should be contacted.

STATE of MICHIGAN:

EGLE (Michigan Department of the Environment, Great Lakes, and Energy)

Bay City (Saginaw Bay District).....(989) 894-6200

Contact the Saginaw Bay District office from 8 a.m. to 5 p.m. (Mike Kraut or Bob Lehman is responsible for Saginaw County).

If after hours or on holidays or weekends use the PEAS number listed directly below this statement.

PEAS (Pollution Emergency Alert System).....1-800-292-4706

5. After reporting the illicit construction site discharge go to www.saswa.org and click on the Illicit Discharge Elimination Plan in the left column. At the bottom of this next page the Incident reporting forms are located along with reporting procedures. Complete the report and submit it to the Saginaw Area Storm Water Authority (SASWA) website.

Appendix IV

2012 Michigan Plumbing Code Excerpts

2009 Michigan Residential Code Excerpts

(NOTE: SASWA is not paying to get access to this code, as we have established a code enforcement officer has right of entry.)

International Property Maintenance Code of 2012 Excerpts

Michigan Plumbing Code – 2012 / 2015

R 408.30717 Duties and powers of code official.

Rule 717. Sections 104.1 and 104.5 of the code are amended to read as follows:

104.1 General. The code official shall enforce all of the provisions of the code and shall act on any question relative to the installation, alteration, repair, maintenance, or operation of all plumbing systems, devices, and equipment except as specifically provided for by statutory requirements or as provided for in sections 104.3 through 104.8.

104.5. Right of entry. In the discharge of duties, the code official may enter any building, structure, or premises in the jurisdiction to enforce the provisions of the act and the code.

History: 1982 AACCS; 1985 AACCS; 1998-2000 AACCS; 2001 AACCS; 2003 AACCS; 2007 AACCS.

2012 International Property Maintenance Code

Available at: <https://law.resource.org/pub/us/code/ibr/icc.ipmc.2012.html>

2012 International Property Maintenance Code®
First Printing: April 2011
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by
INTERNATIONAL CODE COUNCIL, INC.

Relevant Sections:

[A] 102.5 Workmanship. Repairs, maintenance work, alterations or installations which are caused directly or indirectly by the enforcement of this code shall be executed and installed in a *workmanlike* manner and installed in accordance with the manufacturer's instructions.

[A] 102.8 Requirements not covered by code. Requirements necessary for the strength, stability or proper operation of an existing fixture, structure or equipment, or for the public safety, health and general welfare, not specifically covered by this code, shall be determined by the *code official*.

[A] 103.1 General. The department of property maintenance inspection is hereby created and the executive official in charge thereof shall be known as the *code official*.

[A] 103.2 Appointment. The *code official* shall be appointed by the chief appointing authority of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *code official* shall have the authority to appoint a deputy(s). Such employees shall have powers as delegated by the *code official*.

[A] 103.4 Liability. The *code official*, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties. Any suit instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The *code official* or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 103.5 Fees. The fees for activities and services performed by the department in carrying out its responsibilities under this code shall be as indicated in the following schedule.

SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL

[A] 104.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 Inspections. The *code official* shall make all of the required inspections, or shall accept reports of inspection by *approved* agencies or individuals. All reports of such inspections shall be in writing and be certified by a responsible officer of such *approved* agency or by the responsible individual. The *code official* is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

[A] 104.3 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or whenever the *code official* has reasonable cause to believe that there exists in a *structure* or upon a *premises* a condition in violation of this code, the *code official* is authorized to enter the structure or *premises* at reasonable times to inspect or perform the duties imposed by this code, provided that if such *structure* or *premises* is occupied the *code official* shall present credentials to the *occupant* and request entry. If such structure or *premises* is unoccupied, the *code official* shall first make a reasonable effort to locate the *owner* or other person having charge or control of the *structure* or *premises* and request entry. If entry is refused, the *code official* shall have recourse to the remedies provided by law to secure entry.

[A] 104.4 Identification. The *code official* shall carry proper identification when inspecting *structures* or *premises* in the performance of duties under this code.

[A] 104.5 Notices and orders. The *code official* shall issue all necessary notices or orders to ensure compliance with this code.

[A] 104.6 Department records. The *code official* shall keep official records of all business and activities of the department specified in the provisions of this code. Such records shall be retained in the official records for the period required for retention of public records.

SECTION 506 SANITARY DRAINAGE SYSTEM

[P] 506.1 General. All plumbing fixtures shall be properly connected to either a public sewer system or to an *approved* private sewage disposal system.

[P] 506.2 Maintenance. Every plumbing stack, vent, waste and sewer line shall function properly and be kept free from obstructions, leaks and defects.

[P] 506.3 Grease interceptors. Grease interceptors and automatic grease removal devices shall be maintained in accordance with this code and the manufacturer's installation instructions. Grease interceptors and automatic grease removal devices shall be regularly serviced and cleaned to prevent the discharge of oil, grease, and other substances harmful or hazardous to the building drainage system, the public sewer, the private sewage disposal system or the sewage treatment plant or processes. All records of maintenance, cleaning and repairs shall be available for inspection by the code official.

SECTION 507

STORM DRAINAGE

[P] 507.1 General. Drainage of roofs and paved areas, *yards* and courts, and other open areas on the *premises* shall not be discharged in a manner that creates a public nuisance.