

**Appendix E: Illegal Discharge  
Elimination Plan (PEP)  
for the  
CHARTER TOWNSHIP OF LANSING**



REVISED: January 2025

## **A. Introduction**

The National Pollutant Discharge Elimination System Permit (NPDES) for Discharge of Stormwater to Surface Waters from a Municipal Separate Storm Sewer System (MS4) requires that all MS4s develop an Illicit Discharge Elimination Plan (IDEP). The major components of the IDEP plan are highlighted below. These components include eliminating illicit discharges, reviewing the legal authority, minimizing seepage from septic systems and sanitary sewers, and the coordination of activities. To satisfy these various components, the Charter Township of Lansing will respond in a manner consistent with the scope of its current legal authority and is not assuming any authority or responsibility currently vested in another municipal entity, agency, or authority. If the legal authority or responsibility necessary to satisfy one of the components is vested in whole or in part in another municipal authority (city, county and community organizations) or municipal department, the Charter Township of Lansing will coordinate with that municipal authority or department in an effort to satisfy its responsibilities under this part. These entities include but are not limited to, the Ingham County Drain Commission, the Ingham County Department of Transportation and Roads, and the City of Lansing.

The Township may coordinate with the Ingham County Drain Commission to conduct IDEP work (dry-weather screening) on the Township's MS4.

## **B. Eliminating Illicit Discharges and Connections**

One of the primary actions under the IDEP is to identify and remove all illicit discharges from and connections to the municipal storm sewer system. The Charter Township of Lansing does not currently own or operate any stormwater outfalls to waters of the state. Its MS4 is exclusively limited to catch basins that drain several municipally owned and operated parking lots (Appendix B).

Catch basins and contributing pavements have been inventoried. Appendix B provides the identification number and the physical location of each outfall. The data has been recorded on a drainage system inventory sheet (see Attachment B). Dry-weather screening will be performed once per permit cycle at the point-of-discharge, and information regarding flow, visual appearance and odor will be recorded, and water will be sampled. This data will be recorded on a drainage system screening form (see Attachment C).

Water quality samples will be taken from the outfall if dry weather flow is present. The basic analytical tests performed will include surfactants, ammonia, fluoride, hardness, total organic carbon (TOC), and E. coli. Additional analytical tests may be added if specific sources need to be targeted. Collected data will be entered into a database for future tracking of potential sources.

The results of the water quality tests and observations noted on the drainage system screening form will be used to determine if potential problems exist at each catch basin.

Follow-up investigation will involve additional screening and sampling. This process will allow the pollutant stream to be traced throughout the system until the source is isolated within a relatively short reach of the conveyance. Once an illicit discharge source is identified, the Township will work with the relevant property owner to correct the problem. According to Township ordinance (see Appendix C), depending on the nature of the problem, a violator would have 30 days to correct the problem unless it poses an immediate threat to public health and safety or is a violation of other applicable state or federal law that requires or authorizes immediate remedy. If a violator does not abate a violation within 30 days, the Township ordinance enables it to correct the problem and seek compensation from the offending party.

### **C. Reviewing the Legal Authority**

Existing legal authority and enforcement procedures will be reviewed to ensure that all requirements of the General Permit are fulfilled. If the local ordinances do not adequately prohibit illicit connections and discharges an action plan will be developed and ordinance changes adopted, if necessary, to prohibit and remove illicit connections.

Additionally, the Michigan Drain Code, Section 280.423 prohibits sanitary connection to county drains and gives the Drain Commissioner authority to remove illegal connections. An excerpt of the relevant pages from the Michigan Drain Code is provided below. In addition, Township ordinances related to illicit connections are provided in Appendix C.

### **D. Minimizing Seepage from Septic Systems and Sanitary Sewers**

At present fewer than 10 septic systems are present within the Charter Township of Lansing. The Township requires connection to the public sanitary sewer (see Appendix C) where it is present; nearly the entire Township is currently served by sanitary sewer provided by the City of Lansing or the City of East Lansing.

### **E. Program Schedule, Staff Training and Evaluation**

Dry-weather screening will be performed once per permit cycle.

The Township water department, fire department, and planning & development staff will view the Excel training video, Illicit Discharge Detection and Elimination: A Grate Concern once per permit cycle, and new hires within the first year of employment.

Training, inspections, and enforcement actions shall be reviewed twice per permit cycle in order to evaluate implementation effectiveness.

### **F. Excerpt from 1956 Michigan Drain Code- Section 280.423**

Discharge of certain sewage or waste matter into drains is prohibited; construction to purify flow; petitions; order of determination; findings; construction of drain; plans and specifications; contracts; costs; review; acquisition of land; application and fee for sewer connections; powers of drain commissioner or drainage board; failure to comply with section; violation as misdemeanor; fine; "person" defined.

**Section 280.423. (1)** A person shall not continue to discharge or permit to be discharged into any county drain or intercounty 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. This section does not prohibit the conveyance of sewage or other waste through drains or sewers

that will not produce these injuries and that comply with section 3112 of part 31 (water resources protection) of the natural resources and environmental protection act, Act No. 451 of the Public Acts of 1994, being section 324.3112 of the Michigan Compiled Laws.

(2) Disposal plants, filtration beds, and other mechanical devices to properly purify the flow of any drain may be constructed as a part of any established drain, and the cost of construction shall be paid for in the same manner as provided for in this act for other drainage costs. Plants, beds, or devices may be described in the petition for the location, establishment and construction of drains or in the petition for the cleaning, widening, deepening, straightening, or extending of drains, or in the application for the laying out of a drainage district. Petitions for the construction of plants, beds, and devices for use on any established drain may be filed by the same persons and shall be received and all proceedings on the petitions in the same manner as other petitions for any drainage construction under this act.

(3) If the department of environmental quality determines that sewage or wastes carried by any county or intercounty drain constitutes unlawful discharge as prescribed by section 3109 or 3112 of part 31 of Act No, 451 of the Public Acts of 1994, being sections 324.3109 and 324.3112 of the Michigan Compiled Laws, that 1 or more users of the drain are responsible for the discharge of sewage or other wastes into the drain, and that the cleaning out of the drain or the construction of disposal plants, filtration beds, or other mechanical devices to purify the flow of the drain is necessary, the department of environmental quality may issue to the drain commissioner an order of determination identifying such users and pollutants, under section 3112 of Act No. 451 of the Public Acts of 1994, being section 324.3112 of the Michigan Compiled Laws. The order of determination constitutes a petition calling for the construction of disposal facilities or other appropriate measures by which the unlawful discharge may be abated or purified. The order of determination serving as a petition is in lieu of the determination of necessity by a drainage board pursuant to chapter 20 or 21 or section 122 or 192 or a determination of necessity by a board of determination pursuant to section 72 or 191, whichever is applicable. A copy of the findings of the department shall be attached to the order of determination which shall require no other signature than that of the director of the department of environmental quality. Upon receipt of the order of determination, the drain commissioner or the drainage board shall proceed as provided in this act to locate, establish, and construct a drain. If the responsible users of the drain are determined to be public corporations in the drainage district, the drain commissioner or the drainage board shall proceed as provided in chapters 20 and 21, as may be appropriate, using the order of determination as the final order of determination of the drainage board. If the responsible users are determined to be private persons, the drain commissioner shall proceed as provided in chapters 8 and 9, using the order of determination as the first order of determination.

(4) Plans and specifications for the construction as part of a drain of any disposal plant, filtration bed, or other mechanical device to properly purify the flow of the drain shall be prepared by the drain commissioner or the drainage board. Contracts for construction shall be let in the manner provided in this act. To meet the cost of any preliminary engineering studies for the construction of abatement or purification facilities, the drain commissioner or the drainage board shall apportion the cost among the several parcels of land, highways, and municipalities benefited thereby in the same manner as provided in chapter 7 or against the public corporations affected by the order of determination in the same manner as provided in chapters 20 and 21. The costs and charges for maintenance shall be apportioned and assessed each year. If the apportionment is the same as the last recorded apportionment, a day of review

or a hearing on apportionments is not necessary, but if the apportionment is changed, notice of a day of review or a hearing on apportionments shall be given to each person whose percentage is raised.

(5) Land may be acquired as a site for the construction of such plants, beds, and devices, and releases of land may be obtained in the same manner as provided in this act for other lands acquired for right of way.

(6) A person shall not connect sewage or other waste to a county or intercounty drain except with the written approval of the appropriate commissioner or the drainage board indorsed upon a written application for such service and the payment of a service fee of not to exceed \$50.00 for each connection to a covered drain. The application shall include information showing that all other local, state, and federal approvals related to the sewage or waste has been obtained.

(7) The fee provided for in subsection (6) shall be set and collected by the drain commissioner, as approved by the county board of commissioners or the drainage board, and deposited with the county treasurer, to be credited to the drain fund set up for the maintenance or construction of the drain. The commissioner or the drainage board shall keep a record of applications made and the action on the applications. The commissioner or the drainage board may reject applications for or require such modification in requested applications for sewer connections to county drains as necessary to attain the objectives set forth in this section.

(8) Subject to the review and approval of the department of environmental quality, the drain commissioner or drainage board may study the requirements of persons for flood control or drainage projects including sewage disposal systems, storm sewers, sanitary sewers, combined sanitary and storm sewers, sewage treatment plants, and all other plants, works, instrumentalities, and properties useful in connection with the collection, treatment, and disposal of sewage and industrial wastes or agricultural wastes or run-off, to abate pollution or decrease the danger of flooding. The objective of such studies shall be that sewers, drains, and sewage disposal facilities are made available to persons situated within the territorial limits of any drainage district or proposed drainage district as necessary for the protection of public health and the promotion of the general welfare.

(9) The drainage board or drain commissioner may cooperate, negotiate, and enter into contracts with other governmental units and agencies or with any public or private corporation including the United States of America, and to take such steps and perform such acts and execute such documents as may be necessary to take advantage of any act of the congress of the United States which may make available funds for any of the purposes described in this section.

(10) Failure to comply with any of the provisions of this section subjects the offender to the penalties described in section 602. However, for each offense, a person who violates Subsection(6), is guilty of a misdemeanor punishable by a fine of not more than \$25,000.00 or imprisonment for not more than 90 days, or both. In addition, the person may be required to pay the costs of prosecution and the costs of any emergency abatement measures taken to protect public health or the environment. Payment of a fine or costs under this subsection does not relieve a person of liability for damage to natural resources or for response activity costs under the natural resources and environmental protection act, Act No. 451 of the Public Acts of 1994, being sections 324.101 to 324.90106 of the Michigan Compiled Laws.

(11) As used in this section, "person" means an individual, partnership, public or private corporation, association, governmental entity, or other legal entity,

History: 1956, Act 40, Imd. Eff. Mar. 28, 1956 ;--Am. 1972, Act 298, Imd, Eff. Dec. 14, 1972 Am. 1996, Act 60, Imd. Eff. Feb. 26,1996 ;--Am. 1996, Act 552, Eff. Mar. 31,1997.

Popular Name: Act 40

**DRAINAGE SYSTEM INVENTORY**

Date \_\_\_\_\_ Time \_\_\_\_\_

ID

Crew Initials \_\_\_\_\_ Chk By: \_\_\_\_\_ Photographs: Roll # \_\_\_\_\_ Picture # \_\_\_\_\_

**LOCATION (see back side for location sketch)**

Community \_\_\_\_\_

Road \_\_\_\_\_ Nearest Cross-Street \_\_\_\_\_

Latitude \_\_\_\_\_ Determined by  Handheld GPS with Diff Receiver (+/- 10m)

Longitude \_\_\_\_\_  Other (Accuracy \_\_\_\_\_)

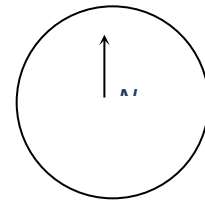
Description: \_\_\_\_\_

**STRUCTURE TYPE**

- Outfall  Yes  No  Unknown
- Manhole with piped connections
- Headwall connecting pipe to open channel
- Point within an open channel reach
- Pump Station Wet Well

**MANHOLE INFORMATION**

Direction from MH						
Sewer Size*, (in)						
Rim Elevation (ft)						
Rim to Invert, (ft)						
Invert Elevation (ft)						
Pipe Material						
Flow Depth, (in)						



\* Include appropriate dimensions and description if not circular

**CULVERT INFORMATION**

Shape  Round  Rectangular  Other \_\_\_\_\_ Height (in) \_\_\_\_\_ Width (in) \_\_\_\_\_

Pipe Material \_\_\_\_\_ Depth of Solids in Culvert, (in) \_\_\_\_\_

Distance culvert invert  above or  below ditch bottom, (in) \_\_\_\_\_

Flow Depth in: Culvert\*, (in) \_\_\_\_\_ Ditch, (in) \_\_\_\_\_

\* measure flow depth in culvert to pipe invert, not to top of solids





**DRAINAGE SYSTEM SCREENING**

**GENERAL**

ID

Date \_\_\_\_\_ Time \_\_\_\_\_ Air Temp \_\_\_\_\_

Clear/Sunny

Crew Initials \_\_\_\_\_ Chk By: \_\_\_\_\_ Rain  Yes  No

Partly Cloudy

Photographs: Roll # \_\_\_\_\_ Picture # \_\_\_\_\_

Overcast

**FLOW MEASUREMENTS**

Pipe Sampled: Size (in) \_\_\_\_\_ Direction \_\_\_\_\_

Depth:	<input type="checkbox"/> Dry, No Water Present	<b>General Data</b>		<b>Travel Time Trials</b>
	<input type="checkbox"/> Trace, insufficient to quantify	Depth, (in)	_____	_____
Velocity	<input type="checkbox"/> Insufficient to quantify	Dist Traveled, (ft)	_____ #1 (sec)	_____
:		Bucket Vol, (gal)	_____ #2 (sec)	_____
Method	<input type="checkbox"/> Area * Velocity	Channel Slope (%)	_____ #3 (sec)	_____
:	<input type="checkbox"/> Bucket	Channel Material	_____ Avg (sec)	_____
	<input type="checkbox"/> Manning's	Channel, n	_____ Vel (fps)	_____
Flow:	_____			

Intermittent  Not Checked

Flow Check  Left Sand Bag in Channel

Removed Sand Bag, intermittent DWF present  Yes  No

*if possible describe frequency, duration, time of day of flow slugs – put in comments section*

**OBSERVATIONS** (if "other" checked fill in description at bottom of page)

<b>Odor</b>	<input type="checkbox"/> None	<input type="checkbox"/> Musty	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rotten Egg	<input type="checkbox"/> Gas	<input type="checkbox"/> Oil	<input type="checkbox"/> Other
<b>Color</b>	<input type="checkbox"/> Clear	<input type="checkbox"/> Light Brown	<input type="checkbox"/> Dark Brown	<input type="checkbox"/> Green	<input type="checkbox"/> Grey	<input type="checkbox"/> Black	<input type="checkbox"/> Other
<b>Turbidity</b>	<input type="checkbox"/> Clear	<input type="checkbox"/> Slightly Turbid	<input type="checkbox"/> Moderate Turbid	<input type="checkbox"/> Highly Turbid	<input type="checkbox"/> Opaque		<input type="checkbox"/> Other
<b>Floatables</b>	<input type="checkbox"/> None	<input type="checkbox"/> Trash	<input type="checkbox"/> Sewage Scum	<input type="checkbox"/> Green Scum	<input type="checkbox"/> Oil Sheen		<input type="checkbox"/> Other
<b>Deposits/ Stains</b>	<input type="checkbox"/> None	<input type="checkbox"/> Mineral	<input type="checkbox"/> Sediment	<input type="checkbox"/> Oily	<input type="checkbox"/> Grease		<input type="checkbox"/> Other
<b>Vegetation</b>	<input type="checkbox"/> None	<input type="checkbox"/> Normal	<input type="checkbox"/> Excessive	<input type="checkbox"/> Algae			<input type="checkbox"/> Other

**Structural**    Normal    Cracking    Spalling    Corrosion    Settlement    Other

**CHEMICAL ANALYSIS**

FIELD ANALYSIS

LAB SAMPLE COLLECTED Chem. Sample ID

\_\_\_\_\_

Bact. Sample

ID \_\_\_\_\_

Temperature \_\_\_\_\_ °F

pH \_\_\_\_\_

Chemistry

Fluoride \_\_\_\_\_ mg/L

Ammonia (as N) \_\_\_\_\_ mg/L

Hardness (as CaCO<sub>3</sub>) \_\_\_\_\_ mg/L

Total Organic Carbon \_\_\_\_\_ mg/L

Surfactant \_\_\_\_\_ mg/L

Other (if necessary) \_\_\_\_\_

E. Coli \_\_\_\_\_ per 100ml

Comments \_\_\_\_\_

\_\_\_\_\_

