VILLAGE OF LAKE ORION

STORMWATER MANAGEMENT PROGRAM

August 8, 2025

For Permit Effective October, 2025 through xxxxxxxx

VILLAGE OF LAKE ORION

STORM WATER MANAGEMENT PROGRAM

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VILLAGE OF LAKE ORION
MUNICIPAL SEPARATE STORM SEWER SYSTEM
ENFORCEMENT RESPONSE PROCEDURE

1. **POLICY:**
   This policy is to establish the Village of Lake Orion Enforcement Response Procedure.

2. **BACKGROUND:**
   The EGLE NPDES Phase II Stormwater Discharge Permit Application requires a procedure for Enforcement Response to address violations of the ordinances or regulatory mechanism identified in the Stormwater Management Plan.

3. **PROCEDURE:**
   Each ordinance/regulatory mechanism within this jurisdiction includes an enforcement response to violations of the ordinance. The ordinances referenced in this application include:
   - Chapter 51: Sewage Disposal System
   - Chapter 52: Industrial Sewer Regulations; Section 52.15 – Sewer Systems Connected to County Sewers
   - Chapter 130: Offenses Against Village Regulations; Section 130.65 – Littering
   - Chapter 151: Design and Construction Standards
   - DRAFT Municipal Separate Storm Sewer System
   - Illicit Discharge Elimination Plan

   As ordinances are completed and passed by the governing body, the enforcement mechanism will be conveyed to the EGLE NPDES Permit Contact.

   See the Village of Lake Orion Code of Ordinances for copies of the cited ordinances.

   In addition to the enforcement mechanisms noted in ordinance, additional tracking of instances of noncompliance occurs and includes the following information:
   - Name
   - Date
   - Location of Violation (address, cross streets, etc.,)
   - Business/Agency/Organization (as appropriate)
   - Description of Violation
   - Description of Enforcement Response
   - Schedule for Returning to Compliance
   - Date Violation was Resolved.

4. **OTHER:**
   Any questions on this policy and procedure should be directed to the Storm Water Manager.

5. **PROCESS FOR UPDATING/REVISING THIS PROCEDURE**
   This procedure shall be reviewed on an annual basis by the Stormwater Manager for any updates to streamline the requirements.

MEASURABLE GOALS ***(Timeframe: Immediately; Throughout Permit Period)***
Proper tracking of complaints and spills. Number of complaints to be provided in progress reports to EGLE.

VILLAGE OF LAKE ORION
MUNICIPAL SEPARATE STORM SEWER SYSTEM
PUBLIC PARTICIPATION / INVOLVEMENT POLICY

1. **POLICY:**
   This policy is to establish procedures for the Village of Lake Orion Public Participation / Involvement Program (PPP)

2. **BACKGROUND:**
   The EGLE NPDES Phase II Stormwater Discharge Permit Application requires a procedure for public participation/involvement program as identified in the Application. This procedure includes a description of the opportunities for the public to provide comments on the Stormwater Management Plan and inviting public involvement and participation in the implementation and period review of the Stormwater Management Plan.

3. **PROCEDURE:**
   Stormwater Management Plan Available for Public Inspection and Comment
   The stormwater management plan will be posted on the Village web site for review and comment by the public when the application is approved by the EGLE. On the Village website, direction is provided to stormwater management plan. Under stormwater management, a link is available for opportunities to provide comment. The information will include the contact information of the stormwater manager to forward comments. The stormwater manager will compile and track comments from the public including: commenter name, date, and comment.

   Further public involvement will be encouraged once per year where a public meeting will be held to invite public participation in the implementation of the SWMP. Information on the status of activities and an opportunity for comment will be provided. This public meeting will be held as part of a regularly scheduled Village Council meeting, and will be posted as part of the agenda.

   Public Involvement and Participation in the Implementation and Periodic Review of the Stormwater Management Plan

   The following BMPs will be utilized to allow for public involvement and participation in the implementation and periodic review of the stormwater management plan.

BMP	Description	Schedule	Method of Assessment
Web Site	The web site will be utilized to explain the program and opportunities for public involvement and participation.	Ongoing	Number of hits on community web site.
Village Cable TV Channel	The local government cable channel will have a notice providing information on the SWMP and where it can be viewed and commented on.	Ongoing	Number of comments to Stormwater Manager
Public Meeting	Presentation and solicit input of stormwater management plan	Annual	Meeting Minutes

4. **OTHER**:
   Any questions on this policy and procedure should be directed to the Storm Water Manager.

5. PROCESS FOR UPDATING/REVISING THIS PROCEDURE
This procedure shall be reviewed on an annual basis by the Stormwater Manager for any updates to streamline the requirements.

MEASURABLE GOALS (Timeframe: Throughout the Permit Period)
Number of venues that the Stormwater Management Plan is posted on, and number of hits (website) or comments to the Stormwater Manager.

VILLAGE OF LAKE ORION
MUNICIPAL SEPARATE STORM SEWER SYSTEM
PUBLIC EDUCATION PROGRAM POLICY

1. **POLICY:**
   This policy is to establish procedures for the Village of Lake Orion Public Education Program (PEP)

2. **BACKGROUND:**
   The EGLE NPDES Phase II Stormwater Discharge Permit Application requires a procedure for public education program as identified in the Application. This procedure includes a description of the education opportunities for the public. The Village of Lake Orion participates in a collaborative Public Education Plan with the Clinton River Watershed Council.

3. **PROCEDURE:**
   The measurable goals will be completed and ongoing activities consistent with the measurable goals will be implemented. The measurable goals for the collaborative plan are included in Appendix A of the Collaborative Plan.

   Public Education Topics

PEP Topic Number	Description
1	Promote public responsibility and stewardship in the watershed
2	Inform and educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have on surface waters of the state
3	Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4
4	Promote preferred cleaning materials and procedures for car, pavement and power washing
5	Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers
6	Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4
7	Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids
8	Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure
9	Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development
10	Promote methods for managing riparian lands to protect water quality
11	Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff

4. **OTHER**:
   Any questions on this policy and procedure should be directed to the Storm Water Manager.

5. PROCESS FOR UPDATING/REVISING THIS PROCEDURE
This procedure shall be reviewed on an annual basis by the Stormwater Manager for any updates to streamline the requirements.

MEASURABLE GOALS ***(Timeframe: Throughout the Permit Period)***
Implementation of achievement of measurable goals indicated in plan.

ILLICIT DISCHARGE ELIMINATION PLAN

FOR

Village of Lake Orion
EST 1859

Oakland County, Michigan

PREPARED IN COMPLIANCE WITH

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

PHASE II STORM WATER REGULATIONS

STORM WATER PERMIT

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Village of Lake Orion Contact

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Section I - Plan Objectives

Illicit Discharge Elimination Plan (IDEP) Objectives

This document describes the *Village of Lake Orion* plan for identifying and eliminating illicit connections and discharges to the Waters of the State in its jurisdiction. The *Village of Lake Orion* has not agreed to cover the Lake Orion Community School District under its Certificate of Coverage (COC), but this plan, in the future, could apply to that District's facilities that lie within the *Village of Lake Orion*.

This plan has been developed to fulfill the requirements for Part I. Section A.3.a. of the State of Michigan's National Pollutant Discharge Elimination System (NPDES) General Permit (MIG619000) for Storm Water Discharges from Separate Storm Water Drainage Systems (MS4s) with Watershed Plans and the Certificate of Coverage #MIG610223 that was issued to the *Village of Lake Orion* on December 15, 2003 under the General Permit. The *Village of Lake Orion* is participating in the Stony/Paint Creek Subwatershed Group. The group is being facilitated by the Clinton River Watershed Council, and the plan was developed in collaboration with the other subwatershed partners.

The *Village of Lake Orion* has no property within other Watersheds, and the IDEP will be implemented *Village of Lake Orion*-wide. The Lake Orion Community School District has facilities in Orion, Oakland and Oxford Townships, and the School District is making separate arrangements for coverage in those communities.

The purpose of the IDEP is to develop a program to prohibit and effectively eliminate illicit discharges and connections to storm water conveyances within the *Village of Lake Orion.* The Federal Phase II storm water regulations define "illicit discharge" and "illicit connection" as follows:

> Illicit discharge - the discharge of untreated sanitary wastewater (including industrial and commercial wastewater) or other polluting materials into a river, stream or other water body from: improper sewage connections - such as sources of sanitary sewage which should be connected to the sanitary sewer but are inappropriately connected to the storm sewer; effluent from improperly designed and/or operated septic systems; sanitary sewer overflows; improper disposal of waste products – such as emptying a mobile home holding tank into a catch basin or pouring used motor oil into a catch basin; other discharges not composed entirely of storm water (except as specified in the permit).
>
> Illicit connection – an improper physical connection of illicit discharges to the storm water drainage system, or other connections not authorized by the local authority (where required), to the storm water drainage system. Examples of illicit connections are: a) a floor drain in an automobile repair shop that is connected to the storm sewer rather than the sanitary sewer; and b) a septic tank discharge line that has been connected to the storm sewer. An improper connection of a source of storm water to the sanitary sewer would also be considered an illicit connection, for example, a parking lot catch basin that is tapped into the sanitary sewer. Illicit connections refer to a physical connection to the drainage system that either: Primarily conveys illicit discharges into the storm sewer system, or is not authorized or permitted by the local authority, if required.

The *Village of Lake Orion* has MS4s under its jurisdiction and as such, the objectives of this IDEP are to:

1) train appropriate *Village of Lake Orion* staff on the investigation of illicit connections and discharges, with emphasis on outfall observations/screenings, safety issues and natural occurring phenomenon,

2) implement a system for identifying and eliminating illicit discharges and connections to the MS4s including outfall observations and follow-up sampling,

3) the development of adequate legal authority to eliminate illicit discharges and connections to MS4s and provide for inspections of any MS4s that may be constructed in the *Village of Lake Orion* in the future,

4) locate and accurately map the storm water conveyances and outfalls owned and operated by the *Village of Lake Orion*,

5) determine the ownership of other significant storm water conveyances in the *Village of Lake Orion*, and initiate a process to bring any "orphan" drains under proper jurisdiction,

6) work with the Oakland County Water Resources Commissioner and other agencies such as the County Department of Public Health to develop a County-wide complaint response and referral system for storm water/water quality related complaints,

7) coordinate *Village of Lake Orion* IDEP efforts with other local communities and impacted County agencies.

Section II - Community Background

A. General Information

The *Village of Lake Orion* covers approximately 1.3 square miles in the northeast quadrant of Oakland County. Originally established as a residential and commercial center built around the lake named Lake Orion, the *Village of Lake Orion* was incorporated in 1859. Exhibit A is an aerial photograph of the *Village of Lake Orion* with the jurisdictional limits shown in red.

The center of its business district is at Broadway and Flint Streets. The *Village of Lake Orion* has a total population of 2,973 as determined in the 2010 census. The entire *Village of Lake Orion* falls within the "urbanized area", and the storm water regulations apply to all the public separate storm sewer systems within the *Village of Lake Orion* limits.

The Village Manager has been appointed as Storm Water Program Manager by the Village Council of the *Village of Lake Orion* and is responsible for implementation of the plan and compliance with the Permit. The Village Manager can be contacted at (248) 693-8391 Ext 101.

B. Nested Jurisdictions

The *Village of Lake Orion* does not know the permit status of the other School Districts.

The Lake Orion Community Schools District consists of 1 high school, 3 middle schools, 7 elementary schools and an administration building. One elementary school as well as the administration building are within the limits of *Village of Lake Orion*. The elementary school has separate storm sewers and the potential for contamination of storm water runoff from the parking lot, and thus will be the focus of IDEP efforts.

The Michigan Department of Transportation has a regulated separate storm sewer within the *Village of Lake Orion* and has coverage under a permit.

C. Storm Water Drainage and Sanitary Waste Disposal

The majority of the land use in the *Village of Lake Orion* is residential and most is zoned single family residential. For example, over 250 acres of single family residential zoning area is within the *Village of Lake Orion* limits (see Exhibit B, zoning map for the *Village of Lake Orion* located in the appendix). None of the *Village of Lake Orion* residences are being served by on-site sewage disposal systems (OSDS) to the Village's knowledge.

The *Village of Lake Orion* has separate sanitary and storm drainage systems under its jurisdiction. Exhibit C, located at the end of this application, shows the locations of known storm sewer outfalls and their receiving conveyance. The Village has never had a map of its storm sewer system.

The information presented in Exhibit C is based on observations by members of the Department of Public Works. This information will be verified as the IDEP is implemented. The *Village of Lake Orion* currently knows of 50 outfalls within the Village and 45 under their jurisdiction. They ultimately discharge to various receiving sites including Lake Orion and Paint Creek. The receiving waters are shown in Exhibits A and B.

The Lake Orion Community School District has 2 facilities within the *Village of Lake Orion*. They include Blanche Sims Elementary School and school district's administration building.

Section III - Planned Efforts

The following subsections summarize the four required elements of an IDEP as specified in Part I, Section A.3.a of the MDEQ Storm Water Permit and the Village of Lake Orion's plans for addressing each element. The *Village of Lake Orion* is committed to beginning the IDEP and completing activities to meet each of the required elements within five years of Permit issuance. The actions completed will comply with the regulations and meet plan objectives. The planned actions are summarized and tabulated in Section IV of this plan. The *Village of Lake Orion* IDEP will be reviewed during preparation of the annual report to the MDEQ to determine if modifications are needed. The MDEQ will be advised of any changes in the plan.

For the purposes of this program **"outfall"** and **"point source"** are defined as a location where the storm water from a separate storm water conveyance under the jurisdiction of the *Village of Lake Orion* passes into a water body, wetland, upland or into a conveyance or property under the ownership or jurisdiction of an entity other than the *Village of Lake Orion*. **"Significant Illicit Discharge"** is a discharge that shows evidence of impairing water quality in the receiving water.

The *Village of Lake Orion* believes that public education and resident involvement is essential for protection and enhancement of our natural resources. For an IDEP to be effective there needs to be an ongoing Public Education Plan that meets the objectives for the community. The *Village of Lake Orion* plans to coordinate its IDEP with its Public Education Plan to develop target audiences and messages.

1. Develop and implement a program to find and eliminate illicit discharges and illicit connections found during dry weather screening.

Task 1.1 **Develop a schedule for the inspection of all *Village of Lake Orion* drains and outfalls.**

Description: The *Village of Lake Orion* will use existing water quality data, knowledge of problem areas, existing work/inspection schedule, location of urbanized area and other criteria to prioritize the inspection of the *Village of Lake Orion* drains and outfalls. The schedule will allow the inspection of all of the outfalls / the outfalls where water quality problems exist (Impaired Uses, TMDLs, etc.) during the 5 year permit cycle.

Responsibility: Department of Public Works

Measure: A written inspection schedule

Schedule: Complete inspection of all outfalls within 5 year permit cycle.

Task 1.2: **Perform visual inspections and dry weather screenings of *Village of Lake Orion* owned and/or operated storm water conveyance outfalls.**

Description: Based on the schedule developed in Task 1.1., dry weather visual inspections will be conducted at each of the *Village of Lake Orion's* known outfalls shown in Appendix C. In instances where the outfall is submerged, directed to another enclosed sewer, or is otherwise inaccessible, the *Village of Lake Orion* will visually inspect the nearest upstream accessible location.

Dry weather inspections are defined as those conducted when no rain/precipitation event has occurred for a minimum of 48 hours. If flow is observed in the sewer at that time, it will be determined if the flow is natural base flow or a possible illicit discharge.

Responsibility: Department of Public Works

Measure: Documentation of findings and observations. Number of possible illicit connections discovered.

Schedule: Complete all evaluations by the 5th year and repeat visual inspection every 5 years or by some alternative schedule approved by the MDEQ.

Task 1.3: **Trace Illicit Connections and Owner Notification**

Description: Trace suspected illicit connections found in Task 1.2 to their source using the techniques described below, and notify the owner or responsible jurisdiction of the problem in writing. If the illicit connection or discharge is a direct discharge to a *Village of Lake Orion*-owned conveyance, then the *Village of Lake Orion* will direct the owner of the source to eliminate the illicit connection/discharge within a specified timeframe and require a notification of correction. If the illicit discharge is to another jurisdiction's storm water conveyance and reaches a *Village of Lake Orion* conveyance indirectly, then the *Village of Lake Orion* will require the owner of the system to provide updates on their investigation and inform the *Village of Lake Orion* when the connection has been eliminated. The timeframe for eliminating the connection/discharge will depend on the type and significance of the illicit connection/discharge, and the expense and difficulty of repair. The goal of the plan is to have most illicit connections/discharges eliminated within 90 days of notification. Illicit connections/discharges that are more complex may take longer than 90 days to eliminate.

Tracing techniques - All storm outfalls that are discharging during dry weather will be investigated further. The *Village of Lake Orion* may be able to locate the source of an illicit connection/discharge solely through visual observation. Odor, color, turbidity, bacteria growth, quantity of flow, etc., may lead to the source of a problem without additional sampling. As needed, sampling, dye and/or smoke testing, as-built plan review, or other investigative techniques will be used to determine the nature and source of the flow.

1. Sampling - Investigation of dry weather discharges will be prioritized based on the number of discharges identified, as well as other factors including location, volume of flow, and suspected contaminants based on color, turbidity, or odor. If flow is observed during the dry weather outfall inspections but visual observations do not lead to a source, the *Village of Lake Orion* may decide to sample the flow for pollutant parameters typically found in illicit connections. Sampling can rule out some dry weather discharges such as groundwater. Sampling should be conducted at the time of the outfall inspection, or within 2 business days of the discovery of the possible illicit connection. The sampling will typically begin at the outfall and continue upstream from access site to access site until a source is found. The choice of sampling parameters will depend on several factors including:
   - Location of the storm outfall (i.e., in residential or commercial area);
   - Turbidity and color of discharge which could distinguish between an illicit discharge from a commercial establishment versus a residence;
   - Odor associated with discharge such as petroleum, or raw sewage.

The *Village of Lake Orion* may choose to analyze the samples for some or all of the following parameters:

Parameters	Found In	Potential Source(s)
Escherichia coli	Sewage	**Human or Animal Waste**
Surfactants	Soap, Emulsifiers	**Industrial/Commercial/ Residential**
Ammonia	Sewage, Fertilizers, Industrial Chemicals	**Industrial/Residential/ Agricultural**
Nitrates	Sewage, Fertilizers, Industrial Chemicals	**Fertilizers/ Industrial/ Residential/Agricultural**
Nitrites	Sewage, Fertilizers, Industrial Chemicals	**Fertilizers/ Industrial/ Residential/Agricultural**
Conductivity	Industrial Waste, Sewage, Salt	**Industrial/ Residential/ Agricultural**
Total Dissolved Solids	Industrial Waste, Sewage, Salt	**Industrial/Residential/ Agricultural**
Temperature	Cooling Water, Sewage	**Industrial/ Residential**
pH	Acids and Bases	**Industrial/ Residential**

2. As-built plan review - Where available, the *Village of Lake Orion* will utilize as-built pipe schematic drawings as a tool to determine the source of an illicit connection/discharge.
3. Dye or smoke testing - The *Village of Lake Orion* will conduct physical inspection of commercial and/or residential facilities as needed to verify suspected illicit connections that are detected through visual observations/sampling of yards, outfalls and manholes. As necessary, facility inspections will include dye or smoke testing of suspect facility plumbing fixtures to determine if the fixture discharges to the sanitary system or to the storm sewer. All facility inspections will be documented.
4. Televising - The *Village of Lake Orion* may elect to televise those enclosed storm sewers that have suspicious flows to identify pollutant sources that cannot be located through simple visual observation and/or sampling. For example, the *Village of Lake Orion* may determine through visual observation and/or sampling that an illicit connection exists between two specific manholes. Video inspection of the stretch of storm sewer between these two manholes could be used to isolate the exact source of the connection/discharge.
5. The *Village of Lake Orion* may elect to conduct wet weather observations of some outfalls to determine if runoff from certain areas is contaminated. For instance, oil sheen at the outfall may indicate illicit disposal of oils or grease upstream in the service area. All outfall inspections will be documented.

Responsibility: Department of Public Works

Measure: Number of illicit connections/discharges traced and documentation of notification and elimination.

Schedule: Continue until all illicit connections are traced.

Task 1.4 **Follow-up Enforcement for Non-correction**

Description: The *Village of Lake Orion* will follow up with the owner of the source of an illicit discharge that is going directly to a *Village of Lake Orion*-owned drain to ensure that the connection/discharge has been eliminated. If the illicit discharge has not been eliminated, the *Village of Lake Orion* will use its legal authority to obtain compliance. If the illicit discharge is an indirect source, the *Village of Lake Orion* will coordinate follow-up and enforcement with the jurisdiction in which the discharge originates.

Responsibility: Department of Public Works

Measure: Documentation of enforcement actions. Number of illicit connections/discharges found vs. number eliminated.

Schedule: Continue as needed.

Task 1.5: **Coordination with the MDEQ**

Description: The *Village of Lake Orion* will submit an annual report to MDEQ summarizing the activities completed including illicit connections and discharges the Village identified and corrected. For significant illicit discharges, the *Village of Lake Orion* will list the pollutants of concern, the estimated load and volume discharged, and the locations of the discharge into the system and to the waters of the state.

Responsibility: Department of Public Works

Measure: Copy of the referral and/or progress report

Schedule: As set by the MDEQ NPDES Permit.

Task 1.6: **Provide training to appropriate *Village of Lake Orion* staff on illicit connections and discharges, safety issues and natural occurring phenomenon. Determine the feasibility of coordinating this training with the other agencies and the local communities in the County.**

Description: The *Village of Lake Orion* will attempt to coordinate IDEP training with the other local communities and the Water Resources Commissioner, Road Commission, County Health Department, etc. As an individual or coordinated effort, the *Village of Lake Orion* will provide training on illicit connections and discharges, and natural occurring phenomenon to appropriate *Village of Lake Orion* staff.

Responsibility: Village Manager and consulting engineers

Measure: Meeting minutes, conclusions and recommendations. Training records.

Schedule: Every 5 years and within first year for new hires.

Task 1.7: **Review existing legal authority to implement the IDEP.**

Description: The *Village of Lake Orion* must have adequate legal authority and enforcement capability to allow it to find, track and eliminate illicit connections. The *Village of Lake Orion* will conduct a thorough review of its existing legal authority to ensure it is adequate.

Responsibility: Village Attorney and Village Manager

Measure: Documentation of review and written recommendations

Schedule: Ordinance currently being adopted.

Task 1.8: **Develop adequate legal authority (if necessary).**

Description: If needed, based on the recommendations of Task 1.7 adequate legal authority will be developed to allow the *Village of Lake Orion* to implement the IDEP within its jurisdiction and the jurisdiction of the Nested. The *Village of Lake Orion* will conduct a thorough review of its existing ordinance, and amend it as necessary, to ensure that:

- the ordinance adequately defines illicit connections and discharges;
- the ordinance prohibits illicit connections and discharges;
- the *Village of Lake Orion* has adequate legal authority to investigate suspected illicit connections and discharges;
- the *Village of Lake Orion* has adequate legal authority to require elimination of illicit connections and discharges;
- the *Village of Lake Orion* has adequate enforcement capability.

Responsibility: Village Council with input from Village Attorney and Village Manager

Measure: Documentation of adoption of amendments

Schedule: Currently being adopted

Task 1.9: **Maintain the complaint receipt and response system.**

Description: The *Village of Lake Orion* will work with the Water Resources Commissioner and the other communities in the watershed to maintain the County-wide system to receive and track complaints regarding storm water, construction site issues in the County. The use of any existing systems such as the computerized complaint tracking system that is used by the Water Resources Commissioner will be investigated. The *Village of Lake Orion* will advertise the complaint system telephone number and e-mail address through various means such as newspapers, posters, mailings, web sites, etc.

Responsibility: Village Manager

Measure: Documentation of development and use of the system

Schedule: Ongoing

Task 1.10: **Notify proper jurisdictions of illicit discharges or connections found by *Village of Lake Orion* staff.**

Description: During the course of normal business, staff of the *Village of Lake Orion* may observe illicit connections or discharges that are not under the *Village of Lake Orion*'s jurisdiction. The *Village of Lake Orion* will notify the owner or agency with jurisdiction of the problem in writing. The *Village of Lake Orion* will report any identified significant illicit discharges including those of untreated or partially treated sewage to the MDEQ within 24 hours after the discharge begins or is discovered and of corrective actions being taken to eliminate the connection/discharge. The reports will cover the information required by the Permit.

The Village of Lake Orion will submit progress reports to MDEQ summarizing the activities completed including illicit connections and discharges *Village of Lake Orion* identified and corrected. For significant illicit discharges, the *Village of Lake Orion* will list the pollutants of concern, the estimated load and volume discharged, and the locations of the discharge into the system and to the waters of the state.

Responsibility: Department of Public works and Village Manager

Measure: Documentation of the notification

Schedule: Ongoing

Task 1.11: **Investigate the feasibility of coordinating the drainage system outfall inspection efforts of the *Village of Lake Orion* with other agencies and the local communities in the County.**

Description: The *Village of Lake Orion* will attempt to coordinate drain and outfall inspections with other local communities, Road Commission, Water Resources Commissioner, and other appropriate agencies in an effort to eliminate duplication, reduce costs and provide consistency.

Responsibility: Department of Public Works and Village Manager

Measure: Meeting minutes, conclusions and recommendations

Schedule: Ongoing

Task 1.12: **Develop a priority schedule for the inspection of all *Village of Lake Orion* drains and outfalls.**

Description: The *Village of Lake Orion* will use existing water quality data, knowledge of problem areas, existing work/inspection schedule, location of urbanized area and other criteria to prioritize the inspection of the *Village of Lake Orion* drains and outfalls. The schedule will allow the inspection of all of the outfalls / the outfalls where water quality problems exist (Impaired Uses, TMDLs, etc.).

Responsibility: Department of Public Works

Measure: A written inspection schedule

Schedule: Ongoing

Task 1.13: **Review any existing water quality data for drains and water bodies in the *Village of Lake Orion.***

Description: The *Village of Lake Orion* will obtain and review any available water quality data for the water bodies in the *Village of Lake Orion*. Possible sources are Drain Commissioner and Health Department records, Michigan Department of Environmental Quality (MDEQ), the Watershed Council, local universities and local communities. The review will be used to assist the *Village of Lake Orion* in prioritizing actions and tracking progress for the IDEP.

Responsibility: Department of Public Works and Village Manager

Measure: Documentation of review and recommendations

Schedule: Ongoing

Task 1.14: **Investigate the feasibility/benefit of conducting base-line and then follow-up water quality monitoring in select drains and water bodies in the *Village of Lake Orion*.**

Description: The *Village of Lake Orion* will investigate the feasibility and benefit of conducting base-line and periodic follow-up water quality monitoring in select drains and water bodies in the *Village of Lake Orion*. The monitoring may provide a measure of the effectiveness of the IDEP. The *Village of Lake Orion* will look at costs versus value of information obtained and decide if monitoring will be added as an additional IDEP task.

Responsibility: Department of Public Works and Village Manager

Measure: Documentation of evaluation, conclusions and recommendations.

Schedule: If found to be of value, will add monitoring to implementation schedule.

Task 1.15: **Develop and adopt construction specifications that require contractors working in the *Village of Lake Orion* to report any illicit connections and discharges they may observe.**

Description: The *Village of Lake Orion* will adopt construction specifications to require contractors that are working on sewers, drains, etc. within the *Village of Lake Orion* to report all illicit connections and discharges they observe to the *Village of Lake Orion.*

Responsibility: Village Council with assistance from consulting engineers and Village Attorney
Measure: Documentation of adoption, records of reports.
Schedule: Ongoing

2. Develop and implement a program to minimize seepage from sanitary sewers into the applicant's separate storm water drainage system.

Task 2.1: **Provide training to appropriate *Village of Lake Orion* staff on illicit connections and discharges, safety issues and natural occurring phenomenon. Determine the feasibility of coordinating this training with the other agencies and the local communities in the County. (See Task 1.6)**
Description: The *Village of Lake Orion* will coordinate IDEP training with local communities and the Water Resources Commissioner, Road Commission, County Health Department, etc. As an individual or coordinated effort, the *Village of Lake Orion* will provide training on illicit connections and discharges to appropriate *Village of Lake Orion* and other County agency staff.
Responsibility: Consulting Engineers and Village Manager
Measure: Meeting minutes, conclusions and recommendations. Training records.
Schedule: Once per permit cycle and within the first year for new hires.

Task 2.2: **Evaluate the integrity of the *Village of Lake Orion* sanitary systems.**
Description: The *Village of Lake Orion* will coordinate the evaluation of the sanitary systems, and sewers at *Village of Lake Orion*-owned and -operated facilities to insure that seepage into the groundwater and surface water is minimized. The evaluation may include visual inspection, flow record review, sewer televising and other means as appropriate.
Responsibility: Department of Public Works
Measure: Report of findings, corrections and/or recommendations
Schedule: Ongoing

Task 2.3: **Televise storm sewers as needed to detect illicit connections.**
Description: On an as-needed basis, the *Village of Lake Orion* will televise those separate storm sewers under its jurisdiction to determine if illicit connections that were not detected during outfall inspections/sampling exist. (***This also allows the community to detect any structural defects)***
Responsibility: Village Manager and Department of Public Works
Measure: videos of work.
Schedule: Ongoing

3. Develop a method for determining the effectiveness of the illicit discharge elimination activities which shall, at a minimum, result in the inspection of each storm water point source every five years unless an alternative schedule is approved by the MDEQ.

Task 3.1: **Perform visual inspections and dry weather screenings of *Village of Lake Orion*-owned and/or -operated storm water conveyance outfalls. (See Task 1.2)**
Description: Based on the schedule developed in Task 1.1., visual inspections will be conducted for each of the *Village of Lake Orion's* known outfalls shown in Appendix C during dry weather. In instances where the outfall is submerged, directed to another enclosed sewer, or is otherwise inaccessible, the *Village of Lake Orion* will visually inspect the nearest accessible upstream location.
Dry weather inspections are defined as those conducted when no rain/precipitation event has occurred for a minimum of 48 hours. If flow is

observed in the sewer at that time, it will be determined if the flow is natural base flow or possibly due to illicit discharges.

Responsibility: Department of Public Works

Measure: Documentation of findings and observations. Number of possible illicit connections/discharges discovered.

Schedule: Complete all evaluations once per permit cycle (every 5 years) or have an alternative schedule approved by the MDEQ.

Task 3.2: **The *Village of Lake Orion* will maintain a tracking system to evaluate and determine overall effectiveness of the IDEP.**

Description: As established by the MDEQ and the Permit, the *Village of Lake Orion* will prepare and submit a report summarizing its illicit discharge elimination efforts to MDEQ. The report will summarize the following:

- illicit connections/discharges identified through citizen complaints, OCWRC referral, inspections, sampling and/or sewer television and the corrective actions taken, including follow up inspections and sampling;
- results of inspections and sampling (including pollutant, estimated volume and load and location for significant illicit discharges);
- dry/wet weather storm water outfall inspections conducted;
- OSDS found to be improperly functioning and the actions taken to correct the problems;
- schedules for the elimination of unresolved problems/discharges;
- if applicable, the annual CSO/SSO report required by Section 324.3112a of Part 31 of Public Act 451 of 1994, as amended, (www.deq.state.mi.us.documents/deq-swq-csosso-eqp5857.doc).

Optional reporting items:

- storm sewers televised in the past year as well as the findings;
- corrective actions taken as a result of storm sewer televising;
- the anticipated schedule for televising storm sewers in the upcoming year;
- sanitary sewers televised in the past year as well as the findings;
- corrective actions taken as a result of sanitary sewer televising;
- the anticipated schedule for televising the sanitary sewers in the upcoming year.

Responsibility: Department of Public Works and Village Manager

Measure: Progress Report

Schedule: As directed by the Permit

Task 3.3: **Investigate the feasibility/benefit of conducting base-line and then follow-up water quality monitoring in select drains and water bodies in the *Village of Lake Orion*. (See Task 1.14)**

Description: The *Village of Lake Orion* will investigate the feasibility and benefit of conducting base-line and periodic follow-up water quality monitoring in select drains and water bodies in the *Village of Lake Orion*. The monitoring may provide a measure of the effectiveness of the IDEP. The *Village of Lake Orion* will look at costs versus value of information obtained and decide if monitoring will be added as an additional IDEP task.

Responsibility: Department of Public Works

Measure: Documentation of evaluation, conclusions and recommendations.

Schedule: Complete evaluation in 2nd year and, if found to be of value, will add monitoring to implementation schedule.

Task 3.4: **Continue the procedure to identify and record, map and inspect outfalls from new construction.**

Description The *Village of Lake Orion* will continue the procedure to add any new outfalls that result from new construction. The procedure will involve identifying new outfalls and receiving waters through construction approval process, adding the outfalls to the existing drainage system map, and performing an initial dry weather inspection of the outfall.

Responsibility: Department of Public Works and Building Inspector

Measure: Procedure documented and implemented. New outfalls mapped and inspected.

Schedule: Ongoing

4. Prepare an updated map of the location of each known storm water point source and the respective receiving water or drainage system.

Task 4.1: **Update drainage system map based on field observations.**

Description: The *Village of Lake Orion* will maintain and update the maps of the storm conveyance system and outfalls that are owned and/or operated by the *Village of Lake Orion*. This verification may be completed during follow-up inspections or as a separate field reconnaissance. The drainage system map and outfall table will be updated based on the field observations.

Responsibility: Department of Public Works and Village Manager

Measure: Outfall map and table updated.

Schedule: Ongoing

Task 4.2: **Inventory and identify ownership of the significant storm water conveyances within the *Village of Lake Orion* and address ownership of any "orphan" drains.**

Description: Determine ownership of the significant storm water conveyances within the *Village of Lake Orion* upon discovery or construction, and initiate a process to either obtain ownership or petition the Water Resources Commissioner to accept responsibility of any "orphan" drains – those with no known ownership.

Responsibility: Department of Public Works and Village Manager

Measure: Documentation of evaluation and decision.

Schedule: Ongoing

Task 4.3: **Maintain and improve the procedure to identify and record, map, and inspect outfalls from new construction.**

Description The *Village of Lake Orion* will maintain and continually improve the procedure to add any new outfalls that result from new construction. The procedure will involve identifying new outfalls and receiving waters through construction approval process, adding the outfalls to the existing drainage system map, and performing an initial dry weather inspection of the outfall.

Responsibility: Department of Public Works

Measure: Procedure documented and implemented. New outfalls mapped and inspected.

Schedule: Ongoing

Task 4.4: **Use of hand-held GPS monitors.**

Description The *Village of Lake Orion* will use a hand-held GPS monitor during observation/sampling to more accurately map the location of the conveyances, outfalls, and problem areas.

Responsibility: Village Council and Village Manager

Measure: Documentation of evaluation and decision.

Schedule: Ongoing

Section IV - Summary of Planned Efforts

The *Village of Lake Orion* IDEP is summarized in the tables that follow. The first table lists the IDEP tasks by the associated General Permit (MIG619000) requirement (Part I, Section A.3.a) and it provides the implementation schedule and measure for each task.

Summary of IDEP tasks, implementation schedules and measures:

PERMIT REQUIREMENT	TASK #	TASK DESCRIPTION	SCHEDULE	MEASURE
1. Develop and implement a program to find and eliminate illicit discharges and illicit connections found during dry weather screening.	1.1	Develop drain inspection schedule	Every 5 years	Written schedule
	1.2	Inspect Village of Lake Orion outfalls	Complete every 5 years	Records of findings
	1.3	Trace illicit discharges	Continue until eliminated	Records of findings and eliminations
	1.4	Enforcement for non-correction	Continue as needed	Records of actions; number of illicits found vs. number eliminated
	1.5	Coordination with MDEQ	As set by NPDES Permit	Copies of referrals and reports
	1.6	Provide IDEP training to staff	Every 5 years, 1st year for new hires	Training records
	1.7	Review existing legal authority	Currently	Written recommendations
	1.8	Develop needed legal authority	Currently	Copies of modified authority
	1.9	Maintain complaint system	Ongoing	Documented use of system
	1.10	Notify jurisdictions of illicit discharges/ corrections	Ongoing	Documentation of notification
	1.11	Investigate the coordination of inspections	Complete in 1st	Meeting minutes, written recommendation
	1.12	Inspect outfalls at Village of Lake Orion owned offices	Ongoing	Records of inspection and correction
	1.13	Review existing water quality data	Ongoing	Written report and recommendations
	1.14	Investigate ambient water quality monitoring	Ongoing	Written recommendations
	1.15	Adopt construction specs to report illicit connection/discharge	Ongoing	Documentation of adoption and report records

Summary of IDEP tasks, implementation schedules and measures (cont.):

PERMIT REQUIREMENT	TASK #	TASK DESCRIPTION	SCHEDULE	MEASURE
2. Develop and implement a program to minimize seepage from sanitary sewers into the applicant's separate storm water drainage system.	2.1	Provide training for staff and investigate coordinated training	Every 5 years, 1st year for new hires	Meeting minutes. Conclusions & recommendations, training records
	2.2	Evaluate sanitary systems at *Village of Lake Orion* facilities	Ongoing	Report of findings, corrections and/or recommendations
	2.3	TV storm sewers	Ongoing	Videos of storm sewers
3. Develop a method for determining the effectiveness of the illicit discharge elimination activities which shall, at a minimum, result in the inspection of each storm water point source every five years unless an alternative schedule is approved by the MDEQ.	3.1	Inspect outfalls at *Village of Lake Orion* offices	Every 5 years	Records of inspection and correction
	3.2	Maintain tracking system to evaluate effectiveness of the IDEP	Ongoing	Annual report
	3.3	Investigate ambient water quality monitoring	Ongoing	Written recommendations
	3.4	Continue procedure to identify, map, and inspect outfalls from new construction	Ongoing	Procedure documented, implemented and new outfalls mapped and inspected
4. Prepare an updated map of the location of each known storm water point source and the respective receiving water or drainage system.	4.1	Update drainage map based on field observations	Ongoing	Copy of updated map and table of outfalls
	4.2	Inventory & identify ownership of storm water systems and address ownership of orphan drains	Ongoing	Documentation of evaluation and decision
	4.3	Implement process to record new outfalls	Ongoing	Documentation of implementation; map and table updated with new outfalls
	4.4	Use GPS in the inspections of outfalls and tracking illicit discharges	Ongoing	Documentation of decision

IDEP tasks in chronologic order in which the task will be initiated:

TASK #	TASK DESCRIPTION	SCHEDULE
1.7	Review existing legal authority	Ordinance Currently be adopted
1.8	Develop adequate legal authority	Ordinance Currently be adopted
1.4	Follow-up Enforcement for Non-correction	Continue as needed
1.9	Maintain complaint system w/County	Ongoing
1.10	Notify jurisdictions of illicit discharges/corrections	Ongoing
1.11	Investigate coordination of IDEP inspections throughout the County	Ongoing
1.12	Develop priority schedule for inspection of outfalls	Ongoing
1.13	Review existing water quality data	Ongoing
1.14	Water Quality Monitoring	Ongoing
1.15	Develop Construction standards	Ongoing
2.2	Evaluate integrity of sanitary sewer system	Ongoing
2.3	Televise storm sewers as needed	Ongoing
3.2	Maintain tracking system to evaluate effectiveness of the IDEP	Ongoing
3.3	Investigate ambient water quality monitoring	Ongoing
3.4	Continue procedure to identify, map & inspect outfalls from new construction	Ongoing
4.1	Update drainage map based on field observations	Ongoing
4.2	Inventory & identify ownership of storm water systems & address ownership of orphan drains	Ongoing
4.3	Maintain and improve process to record new outfalls	Ongoing
4.4	Use GPS during inspections and tracking	Ongoing
1.5	Coordinate with MDEQ	As set by MDEQ NPDES Permit
1.3	Trace Illicit Connections and Owner Notification	Continue until all illicit connections are traced
1.6	Provide training to appropriate Village staff	Every 5 years. 1st year for new hires
2.1	Provide training for staff	Every 5 years. 1st year for new hires
1.1	Develop drain/outfall inspection schedule	Complete every permit cycle (5 years)
1.2	Perform visual inspections and dry weather screening	Complete every permit cycle (5 years)
3.1	Perform visual inspections and dry weather screenings	Complete every permit cycle (5 years)

Measurable Goals of Tasks (Timeframe: Throughout Permit Period; Inspections every 5 yrs)

- Continue dry-weather screening once per permit cycle or every 5 years.
- Work to eliminate illicit dischargesor connections within 90 days of identification.
- Train staff once per permit cycle (5 years) and new hires within 1st year.
- Reduction in IDEP issue, hotline complains received by Village and county staff, and improved water quality of the Paint Creek Subwatershed.

VILLAGE OF LAKE ORION
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
CONSTRUCTION STORMWATER RUNOFF CONTROL PROCEDURE

1. **POLICY:**
   This policy is to establish the Village of Lake Orion procedures for construction site stormwater runoff control.

2. **BACKGROUND:**
   The EGLE NPDES Phase II Stormwater Discharge Permit Application requires a procedure for construction site runoff control that includes notification procedures and ensuring proper permits are obtained by those disturbing greater than one acre of soil within the jurisdiction.

3. **PROCEDURE:**
   The Village will track the receipt of complaints submitted by the public or noted by staff during regular course of business of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are being discharged into the Village Lake Orion MS4. The tracking will include:
   - Name of person providing the complaint
   - Location (address or nearest cross street)
   - Description of follow up (e.g., date referred to the Part 91 enforcing agency).

   The Village will notify the EGLE PEAS Hotline when soil, sediment, and other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are discharged into the MS4 in a quantity that could negatively impact surface waters of the state.
   {FOR NON-PART 91 AGENCIES}
   The Village of Lake Orion will notify the Part 91 Agency, the Oakland County Water Resources Commissioner (OCWRC), when soil or sediment are discharged into the Village's MS4 in a quantity that could negatively impact surface waters of the state.

   The Village of Lake Orion ensures that construction activity of one acre or greater in total earth disturbance, with the potential to discharge to the MS4, obtains a Part 91 Permit and State of Michigan Permit by Rule or is conducted by an approved Authorized Public Agency through the site plan review process. A full Soil Erosion and Sedimentation Control (SESC) Plan must be submitted as required in Section 151.02 of Chapter 151 Design and Construction Standards.

4. **OTHER:**
   Any questions on this policy and procedure should be directed to the Storm Water Manager.

5. **PROCESS FOR UPDATING/REVISING THIS PROCEDURE**
   This procedure shall be reviewed on an annual basis by the Stormwater Manager for any updates to streamline the requirements.

MEASURABLE GOALS (Timeframe: Immediately; Throughout Permit Period)
- Continue to work with the Oakland County Water Resources Commissioner (OCWRC) to address all SESC issues in the Village.
- A reduction in SESC failing inspections.

VILLAGE OF LAKE ORION
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
POST CONSTRUCTION STORMWATER RUNOFF CONTROL

1. **POLICY:**
   This policy is to establish the Village of Lake Orion procedures for post construction site runoff control.

2. **BACKGROUND:**
   The EGLE NPDES Phase II Stormwater Discharge Permit Application requires a procedure for post construction site runoff control that includes permit requirements for minimum treatment volume and channel protection.

   The Village adopted Ordinance 23.39 to amend the Village of Lake Orion Chapter 51 Sewage Disposal System, 51.60 Purpose, 51.61 Definitions, 51.71 Requirement to Prevent, Control, and Reduce Stormwater Pollutants using Best Management Practices.

3. **PROCEDURE:**
   The Village will adhere to the Oakland County "Post -Construction Storm Water Runoff Program" including the Oakland County Stormwater Engineering Design Standards as amended from time to time for the control and treatment of stormwater runoff.

   The Village will enforce that property owners, upon completion of construction, enter into a binding agreement with the Village to document, routinely monitor and maintain the stormwater quality BMP's in order that they continue to operate as designed. The agreement is set up that the Village may inspect BMP's, and if the property owner is determined to be nonresponsive to a notice of required maintenance actions, the Village may enter the property to perform the required maintenance. The agreement also allows the Village to track the transfer of the Operation and maintenance responsibility by imposing deed restrictions. The agreement must state that the property owner is to submit to the Village records of inspection, maintenance and repair of the storm water system.

   The Village will adhere to Site Plan review procedures to ensure that all development or redevelopment is consistent with requirements.

4. **OTHER:**
   Any questions on this policy and procedure should be directed to the Storm Water Manager.

5. **PROCESS FOR UPDATING/REVISING THIS PROCEDURE**
   This procedure shall be reviewed on an annual basis by the Stormwater Manager for any updates to streamline the requirements.

MEASURABLE GOALS ***(Timeframe: Immediately; Throughout Permit Period)***

- Site Plan Review as required by Ordinance
- Collect Drainage Data and participate and upload information to the SEMCOG Post Construction Storm water tracking tool
- Recorded Maintenance Agreements

VILLAGE OF LAKE ORION MUNICIPAL-OWNED STORM WATER SYSTEM
POLLUTION PREVENTION AND GOOD HOUSEKEEPING
MUNICIPAL FACILITY INVENTORY AND ASSESSMENT

1. **POLICY:**
   This policy is to establish procedures for identifying and assessing The Village of Lake Orion facilities.

2. **BACKGROUND:**
   The EGLE NPDES Phase II Stormwater Discharge Permit Application requires a procedure for identifying applicant-owned or operated facilities and stormwater structural controls with a discharge of stormwater to surface waters of the state. The inventory shall include the location of each facility and an estimate of the number of structure stormwater controls. This procedure also includes a process for updating and revising this inventory, a process for assessing each facility for the potential to discharge pollutants to surface waters of the state, and a prioritization of each facility based on the potential to discharge pollutants to surface waters of the state.

3. **MUNICIPAL INVENTORY AND ASSESSMENT**
   Identify all applicant-owned or operated facilities with a discharge of stormwater to surface waters of the state. Include the estimated number of stormwater structural controls (i.e. catch basins, detention basins, etc.) at each site, along with the priority level of potential discharge of pollutants to waters of the state.

Facility Name	Estimated # of Stormwater Structural Controls	Priority Level of Potential Discharge* (High, Med, Low)	Presence of Assessment Factors**	BMP's Implemented to reduce pollutant runoff at Med or Low priority facilities
Administration Building / Police Station	0	Low	0	Parking Lot sweeping
Eastlawn Cemetery	0	Low	0	Street sweeping
Evergreen Cemetery	0	Low	0	Street sweeping
Atwater Park	0	Low	0	Parking sweeping
Children's Park	1 CB	Low	4	Catch basin cleaning Street sweeping
Green's Park	0	Low	4	Sidewalk sweeping
Meeks Park	1 CB	Low	4	Catch basin cleaning Street sweeping
Village Owned Parking Lots in Downtown Area	3 CB's	Low	4	Catch basin cleaning Parking Lot sweeping

Public Works / Services Facility	1 CB	High	1, 3, 4	See PIPP

*For facilities that have a high potential to discharge pollutants to surface waters of the state, a standard operating procedure (SOP) must be developed for that facility identifying the controls put in place to reduce pollutant runoff. This SOP could be a Stormwater Pollution Prevention Plan (SWPPP) for municipal garage and/or Pollution Incident Prevention Plan (PIPP) for salt storage facilities. See separate SOP/SWPPP review document for more details.

**For facilities that have a medium or low potential for the discharge of pollutants to surface waters of the state, each facility was evaluated for the presence of the following factors:

0. Absence of any factors
1. Presence of urban pollutants stored at the site (i.e. sediment, nutrients, metals, hydrocarbons, pesticides, fertilizers, herbicides, chlorides, trash, bacteria, or other site-specific pollutants
2. Identification of improperly stored materials
3. Potential for polluting activities to be conducted outside (i.e. vehicle washing)
4. Proximity to waterbodies
5. Poor housekeeping practices
6. Discharge of pollutants of concern to impaired waters

This inventory will be updated within 30 days as facilities and structural stormwater controls are added, removed, or no longer owner or operated by the applicant. Priority level assessments will be revised within 30 days prior to discharging stormwater at a new facility, or when new the storage of materials, equipment, or vehicles changes at a facility.

Best Management Practices (BMPs) were identified for each facility with low or medium potential to discharge pollutants to surface waters of the state. For all low facilities where no assessment factors are present, catch basin cleaning and street sweeping will be performed as indicating in the applicable procedures for these activities. For all medium facilities, the appropriate BMPs were considered based on the assessment factor present to prevent or minimize the potential for pollutants from entering surface waters of the state.

MEASURABLE GOAL (Timeframe: Immediately; Throughout Permit Period)
Update inventory information in progress reports as appropriate (i.e. facilities are installed or changed ownership; BMP’s change, changes in priority level; etc.)

VILLAGE OF LAKE ORION
MUNICIPAL-OWNED STORMWATER SYSTEM
STRUCTURAL STORMWATER CONTROLS – INSPECTION AND MAINTENANCE POLICY

1. **POLICY:**
   This policy is to establish procedures for inspecting and maintaining Village of Lake Orion Structural Stormwater Controls.

2. **BACKGROUND:**
   The EGLE NPDES Phase II Stormwater Discharge Permit Application requires a procedure for inspecting and maintaining the structural stormwater controls identified in the Application. This procedure includes a description and schedule for inspecting and maintaining each structural stormwater control and the process for disposing of maintenance waste materials. All structural stormwater controls shall be maintained to reduce to the maximum extent practicable the contribution of pollutants to stormwater.

3. **STRUCTURAL CONTROLS & RECOMMENDED MINIMUM INSPECTION SCHEDULE**

Structural Control Type	Recommended Minimum Inspection Schedule
Catch Basins	Once every 5 years or as identified by specific facility operating procedures
Detention Basin*	Annually
Vegetated Swales*	Once every 5 years
Infiltration Basin/Trench*	Annually
Rain Gardens*	Annually

   * = The Village does not currently own or maintain these structural controls. They are provided should they be added/constructed in the future.

4. **PROCEDURE: *note – reference to work orders is in conjunction with asset management systems that have a tracking system for maintenance**

   a. Develop a schedule for inspecting each facility that has stormwater structure controls using the guide in Table 1. For roadways, develop a map or list that identifies areas containing structural stormwater controls for inspection each year, ensuring that all catch basins will be inspected at least once every five (5) years.
   b. At the time of inspection, print a Structural Stormwater Control Work Order for the facility (ies) and/or roadways.
   c. Print or have available electronically the inspection forms for each Structural Stormwater Control at the facility (ies) for inspection.
   d. Print a map (if available) or obtain as-built plans that show all stormwater utilities and appurtenances at the facility (ies).
   e. Visually inspect all Structural Stormwater Controls, including catch basins, manholes, outlet pipes, detention ponds and other types listed in Table 1 in accordance with each applicable inspection form.
      i. If community/county has GIS system, coordinate GPS location of each Structural Stormwater Controls with appropriate staff responsible for inputting utilities into the community's/county's GIS system.

ii. If necessary repairs or maintenance are required, create a separate work order for the activity. Attach scanned or electronic inspection forms and photos to the work order for required maintenance.
iii. If any Illicit Discharge is suspected, follow Tasks 1.2 and 1.4 of the Illicit Discharge Elimination Plan (IDEP). Notify the Stormwater Manager.

f. Complete repairs or maintenance.
g. Debris and maintenance wastes removed as part of the maintenance and/or repairs shall be disposed of in accordance with the Catch Basin Cleaning and Waste Disposal Standard Operating Procedure.
h. Work orders for inspection of all municipal-owned storm sewers will be generated automatically.

5. OTHER:

Any questions on this policy and procedure should be directed to the Storm Water Manager.

6. PROCESS FOR UPDATING/REVISING THIS PROCEDURE

This procedure shall be reviewed on an annual basis by the Stormwater Manager for any updates to streamline the requirements. Upon implementation of new type of stormwater structural control, the inspection and maintenance schedule must be updated within 30 days of its implementation.

MEASURABLE GOALS (Timeframe: Throughout the Permit Period)

- The number of catch basins and other BMP's inspected annually.
- The number of catch basins and other BMP's being repaired annually.
- The updating of the inspection schedule once new BMP's are installed/constructed.

VILLAGE OF LAKE ORION
CATCH BASIN CLEANING / WASTE DISPOSAL
STANDARD OPERATING PROCEDURE

Description

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff that may contain certain pollutants. Maintaining catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis will remove pollutants, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

Objectives

- Contain
- Educate
- Reduce/Minimize

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓

Approach

Catch Basins/Inlet Structures

- Municipal staff inspect all catch basins to ensure the following:
  - Immediate repair of any deterioration threatening structural integrity.
  - Cleaning before the sump is 50% full. Staff clean catch basins annually so that each catch basin is cleaned at least once every 5 years.
  - The EGLE Catch Basin Cleaning Activities Guidance Document is to be followed to ensure compliance.

- Catch basins, storm drain inlets, and other conveyance structures in high pollutant load areas are cleaned first to remove accumulated sediments and debris.

- Inspections are conducted more frequently during the wet season for problem areas where sediment or trash accumulates more often.

- Accurate logs of the number of catch basins cleaned and the amount of waste removed from those catch basins are kept.

- Catch basin wastes are hauled to the Wastewater Treatment Plant for storage classification and disposal.

- A vactor truck mechanical cleaner is utilized for waste collection.

Prioritization and Procedure

- The Village priority levels for Catch Basin cleaning are:

Priority 1 – Downtown Development Authority District (DDA) (downtown)
Priority 2 – The rest of the Village of Lake Orion

- Catch Basins in Priority 1 are to be inspected annually and cleaned as necessary, but at least once every 5 years. Catch Basins in Priority 2 are to be inspected and cleaned a minimum of once every 5 years.

- Priorities for catch basins or areas are to be updated/revised based on inspection findings, citizen complaints, etc.
- These priority levels and schedule are to be revised within 30 days of a necessary change.

VILLAGE OF LAKE ORION
CATCH BASIN CLEANING / WASTE DISPOSAL
STANDARD OPERATING PROCEDURE

Storm Drain Conveyance System

- We locate reaches of storm drain with deposition problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.
- Storm sewers are cleaned as needed.
- Wastes are hauled to the Wastewater Treatment Plant for storage classification and disposal.

Maintenance

- Two-person teams are typically required to clean catch basins with the vactor truck.
- Identifying illicit discharges requires teams of at least two people, plus administrative personnel.
- Arrangements are made for proper disposal of collected wastes.

Illicit Connections and Discharges

- During routine dry-weather screening investigations, staff looks for evidence of illegal discharges or illicit connections, as well as accumulation of sediments in the system.
- This information is then added to the priority list as needed.

Training

- Crews are trained in proper maintenance activities, including record keeping and disposal.
- Crews are trained regarding non-stormwater discharges.
- Only properly trained individuals are allowed to handle hazardous materials/wastes.
- All field staff are trained to recognize and report illegal dumping.
- All field staff receive good housekeeping and pollution prevention training at least once within the permit period.

Measurable Goals *(Timeframe: Throughout Permit Period)*

- Updates on the number of catch basins cleaned.
- Updates on the amount of waste removed from catch basins.
- Regular inspection of catch basins.

VILLAGE OF LAKE ORION
MUNICIPAL-OWNED STORMWATER SYSTEM
SALT APPLICATION AND STORAGE / SNOW REMOVAL

Description

The application and storage of deicing materials, most commonly salts such as sodium chloride, can lead to water quality problems for surrounding areas. Salts, gravel, sand, and other materials are applied to highways and roads to reduce the amount of ice during winter storm events. Salts lower the melting point of ice, allowing roadways to stay free of ice buildup during cold winters. Sand and gravel increase traction on the road, making travel safer.

Snow removal is accomplished according to the Village snow plowing and salting policy.

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment
Nutrients
Trash
Metals
Bacteria
Oil and Grease
Organics
Oxygen Demanding

Approach

During road salt application, certain best management practices can produce significant environmental benefits. The amount of road salt applied should be regulated to prevent over-salting of motorways and increasing runoff concentrations. The amount of salt applied should be varied to reflect site-specific characteristics, such as road width and design, traffic concentration, and proximity to surface waters. Calibration devices for spreaders in trucks aid maintenance workers in the proper application of road salts.

Snow is plowed with a strategy to not directly discharge to surface waters. If snow must be relocated, it is stored at Eastlawn Cemetery, where the snow infiltrates. There are no catch basins or other BMPs at Eastlawn.

Pollution Prevention Approach to Salt Applications

- The minimum amount of salt needed to get the job completed is used, while maintaining safety.
- “Low salt” areas are established near sensitive environments.
- Road temperatures are considered when determining volume of salt to apply.
- Equipment is calibrated regularly to better control the application volumes and rates.
- The storage areas (as well as the entire DPW facility) are inspected periodically by Village staff and bi-annually by a Certified Storm Water Operator.

Pollution Prevention Approach to Salt Storage

- Salt is stored in a covered salt storage structure, protected from wind and precipitation. The salt pile is not located within 50 feet of a wetland or waterway and is not located within the 100-year floodplain. There are no interior floor drains located inside the building, nor are there any exterior storm catch basins located within 20 feet of the salt storage building.
- Excess salt is swept up from the parking lot as needed.
- Salt is stored in accordance with Part 5 Rules.

Truck Washing

- Salt trucks are washed indoors where the wash water is connected to the sanitary sewer system.

Training

- Drivers are trained to improve loading of materials, application techniques, and reduce losses.

- Field staff receives good housekeeping and pollution prevention training at least once throughout the permit cycle.

Measurable Goals (Timeframe: Immediately; Throughout Permit Period)

- The salt storage area passes routine and comprehensive inspections.

- Only the amount of salt necessary to get the job done is used.

VILLAGE OF LAKE ORION
STREET AND PARKING LOT MAINTENANCE
STANDARD OPERATING PROCEDURE

Description

Streets, roads, and highways are significant sources of pollutants in stormwater discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. Stormwater pollution from roadway and bridge maintenance should be addressed on a site-specific basis. Use of the procedures outlined below, that address street sweeping and repair, bridge and structure maintenance, and unpaved roads will reduce pollutants in stormwater.

Objectives

- Contain
- Educate
- Reduce/Minimize

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓

Approach

- Materials are recycled whenever possible.
- The help of citizens are used to keep yard waste, used oil, and other waste out of the gutter.

Street & Parking Lot Sweeping and Cleaning

- The Village maintains a consistent sweeping schedule. The streets and parking lots are nots prioritized. All streets and public parking lots are swept monthly from April thru October.
- Street cleaning is performed during dry weather if possible.
- Wet cleaning or flushing of streets is avoided, and dry methods are utilized where possible.
- Cleaning equipment is maintained in good working condition.
- Vehicles and equipment are regularly inspected for leaks, and repaired immediately.
- Logs of the number of curb-miles swept and the amount of waste collected are maintained.
- Street sweeping debris and dirt are properly disposed at a landfill, once dried if necessary.

Street Repair and Maintenance

- Paints containing lead or tributyltin are considered a hazardous waste and are disposed of properly.
- Water based paints are used whenever possible. If using water based paints, the application equipment is cleaned in a sink that is connected to the sanitary sewer.
- Leftover paints are stored if they are to be kept for the next job, or disposed of properly.

Concrete installation and repair

- The amount of fresh concrete or cement mortar mixed is limited. Only what is needed for the job is mixed.

- Concrete materials are stored under cover, away from drainage areas. Bags of cement are secured after they are opened. Wind-blown cement powder is kept away from streets, gutters, storm drains, rainfall, and runoff.

- Sweepings from exposed aggregate concrete are not washed into the street or storm drain.

- When making saw cuts in pavement, little water as possible is used and is performed during dry weather. After the liquid drains or evaporates, the slurry residue is shoveled or vacuumed from the pavement or gutter and removed from the site. Alternatively, a small onsite vacuum may be used to pick up the slurry as this will prohibit slurry from reaching storm drain inlets.

Patching, resurfacing, and surface sealing

- Patching, resurfacing, and surface sealing is scheduled for dry weather.

- Materials are stockpiled away from streets, gutter areas, storm drain inlets, or watercourses.

- During wet weather, stockpiles are covered with plastic tarps or berm around them if necessary to prevent transport of materials in runoff.

- Excess material from exposed aggregate concrete or similar treatments is prevented from entering streets or storm drain inlets.

- Streets are swept, never hosed down, to clean up tracked dirt. A street sweeper or vacuum truck is used. Vacuumed liquids are never dumped in storm drains.

Equipment cleaning maintenance and storage

- Equipment is inspected regularly, and any leaks are repaired.

Training

- Employees are trained in proper street sweeping operations and street repair and maintenance. Employees and contractors are instructed to ensure that measures to reduce the stormwater impacts of roadway maintenance are being followed. Employees are trained in proper spill containment and clean up, and in identifying non-stormwater discharges.

Measurable Goals (Timeframe: Immediately; Throughout the Permit Period)

- Updates on the number of times Village streets and parking lots are swept.

- Updates on the amount of waste collected from street sweeping.

VILLAGE OF LAKE ORION
MUNICIPAL-OWNED STORMWATER SYSTEM
CONTRACTOR REQUIREMENTS AND OVERSIGHT

1. **POLICY**:
   This policy is to establish procedures for requiring Village of Lake Orion contractors to comply with pollution prevention and good housekeeping BMPs and providing oversight to ensure compliance.

2. **BACKGROUND:**
   The EGLE NPDES Phase II Stormwater Discharge Permit Application requires a procedure for requiring contractors hired by the applicant to perform municipal operation and maintenance activities comply with all pollution prevention and good housekeeping BMPs as appropriate. This procedure also identifies how the applicant provides oversight of contractor activities to ensure compliance.

3. **CONTRACTOR REQUIREMENTS AND OVERSIGHT**
   The contractors hired by Village of Lake Orion to perform municipal operations that potentially impact stormwater are required to follow appropriate pollution prevention BMPs and are listed in the following table:

Contractor	Activity	Stormwater BMP	Procedure	Oversight
TruGreen	Apply fertilizer and weed control to municipal properties	Maintain all fertilizer and weed control on vegetated areas and off paved areas. Maintain 15' buffer from all water bodies.	Contract language requiring contractor to follow BMPs	DPW staff provide spot checks of fertilizing/ weed control activities

MEASURABLE GOALS (Timeframe: Throughout Permit Period)
Continue to provide directives to outside contractors in contracts or bid documents. The directives concern good housekeeping and pollution prevention. Updates are to be provided in progress reports to EGLE.

VILLAGE OF LAKE ORION
SPILL PREVENTION, CONTROL & CLEANUP
STANDARD OPERATING PROCEDURE

Description

Spills and leaks, if not properly controlled, can adversely impact the storm drain system and receiving waters. Due to the type of work or the materials involved, many activities that occur either at a municipal facility or as a part of municipal field programs have the potential for accidental spills and leaks. Proper spill response planning and preparation can enable municipal employees to effectively respond to problems when they occur and minimize the discharge of pollutants to the environment. Since spill prevention is such a broad topic, many areas related to spill prevention and control is covered throughout the SOP.

Objectives

- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	
Nutrients	✓
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓

Approach

Pollution Prevention

- All indoor drains at the Department of Public Works Facility are piped to the sanitary sewer to avoid surface water contamination.

- All materials are stored indoors. Only small containers of cleaning supplies are stored in closed cabinets.

- Spill cleanup materials are readily available at all facilities with the potential to spill a liquid.

Protocols

- All material handling which takes place outdoors (i.e. bulk tank delivery of chemical at POTW) is handled using safety protocols, drip trays and spill clean-up equipment.

- Spill cleanup materials, such as absorbents are located at the stations where they are readily accessible (e.g. near storage and maintenance areas).

Spill Cleanup Procedures

- Small non-hazardous spills
  - Make sure area is safe for entry and the spill does not pose an immediate threat to health or safety of responder.
  - Stop source of spill (plug hole, upright the container, shut off valve).
  - Contact co-workers and Supervisor for assistance and to make them aware of the spill and potential dangers.
  - Use a rag, damp cloth or absorbent materials for general cleanup of liquids.
  - Use brooms or shovels for the general cleanup of dry materials.
  - If water is used, it must be collected and properly disposed of. The wash water cannot be allowed to enter the storm drain.
  - Dispose of any waste materials properly.
  - Clean or dispose of any equipment used to clean up the spill properly.

- Large non-hazardous spills
  - Make sure area is safe for entry and the spill does not pose an immediate threat to health or safety of responder.
  - Stop source of spill (plug hole, upright the container, shut off valve).

  - Contact co-workers and Supervisor for assistance and to make them aware of the spill and potential dangers.
  - Use absorbent materials for general cleanup of liquids
  - Use brooms, shovels or street sweepers for the general cleanup of dry materials.
  - If water is used, it must be collected and properly disposed of. The wash water cannot be allowed to enter the storm drain.
  - Dispose of any waste materials properly.
  - Clean or dispose of any equipment used to clean up the spill properly.

- Hazardous materials
  - If flammable liquid is spilled, turn off engines and nearby electrical equipment. If serious hazards are present leave the area and call 911. When in doubt consult the Material Safety Data Sheets for hazards.
  - For very large or hazardous spills, an outside contractor may be utilized.

Reporting

- Spills are reported in accordance with applicable reporting laws. Spills that pose an immediate threat to human health or the environment must be reported immediately to the EGLE Southeast Michigan District Office at 586-753-3700 and the Pollution Emergency Alerting System (PEAS) at 1-800-292-4706.

- Spills that pose an immediate threat to human health or the environment should also be reported to the local fire department and the Local Emergency Planning Committee (LEPC).

- After the spill has been contained and cleaned up, a written report must be submitted to the MDEQ Water Resources Division Supervisor for the Southeast Michigan District. The report must contain a full written explanation of the cause, discovery, clean-up, and recovery measures taken, preventative measures to be taken, and schedule of implementation.

- A copy of the detailed spill report about the incident should be kept on file. The incident may also be used in briefing staff about proper procedures.

Schedule for Response

- Spills within Village properties or on private/public land within the Village limits are to be investigated and addressed as soon as possible.
- Complaints of illegal dumping must be investigated within 24 hours or the next business day.

TOTAL MAXIMUM DAILY LOAD IMPLEMENTATION PLAN

Village of Lake Orion
21 E. Church Street
Lake Orion, MI 48362

December, 2023
Revised August, 2025

PURPOSE:

The purpose of this plan is to identify the Best Management Practices (BMP's) needed to address the pollutants associated with impaired water bodies with approved Total Maximum Daily Load (TMDL) assessments that are impacted by stormwater runoff from the Village of Lake Orion's storm sewer system. The Michigan Department of Environment, Great Lakes and Energy (EGLE) National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II Stormwater Discharge Permit Application requires that this Plan include for each BMP a measurable goal, a measure of assessment, a schedule for implementation and the implementation frequency as appropriate. This plan is one element of the Village's Stormwater Management Program (SMP).

APPLICABLE TMDL'S

MS4 permittees that discharge to a watershed with an approved TMDL for E. coli are required to develop a TMDL Implementation Plan to reduce the discharge of E. coli from the permittee's MS4 to make progress in meeting the E. coli Water Quality Standards (WQS). The TMDL Implementation Plan identifies prioritized Best Management Practices (BMP). The permittee is required to implement this plan during the permit term to make progress in achieving the pollutant load reduction requirement in the TMDL. MS4 permittees are also responsible for implementing a TMDL Monitoring Plan for assessing the effectiveness of the prioritized BMPs implemented to make progress toward achieving the TMDL pollutant load reduction requirement. A minimum approach to monitoring includes conducting E. coli monitoring of the MS4 during wet weather at the beginning of the permit term, generally in Year 1, to establish baseline E. coli levels. The monitoring is repeated in Year 4 of the permit cycle to determine if the implemented BMPs were effective at reducing E. coli concentrations. Additional interim monitoring may be helpful to ensure progress is on track.

Statewide E. coli: The Village of Lake Orion falls under Statewide E Coli TMDL, which requires a wet weather monitoring plan, where outfalls are monitored 2 times during the permit cycle and samples collected within 30-60 minutes of a rain event to E coli. An action level must be defined that will be used to trigger additional monitoring.

The Village maintains one beach – Greens Park Village Beach. The beach is monitored by the Oakland County Health Division (OCHD ID #114), and is monitored weekly during the swim season of Memorial Day through Labor Day. The beach observes Total Body Contact attainment and Partial Body Contact attainment.

BMP SELECTION

The BMP's were selected based on the suspected sources of E. coli as indicated in the TMDL – MS4 Guidance document. These possible sources include sanitary sewer overflows (SSO's), failing septic systems, illicit connections to storm sewers, improper garbage disposal, and wildlife and/or pet waste. The Village has not experienced SSO's, there are a limited number of septic systems, and garbage is collected weekly by GFL, which leaves illicit connections, wildlife and pet waste as potential E. coli sources. The selected BMP's focus on investigating potential illicit discharges and addressing nonpoint sources.

The BMP's that will be implemented following the issuance of the updated permit are described in Table 1. The Baseline Activities (A, B, C and D) will occur regardless of the status of the source investigations. The additional activities will be implemented as described in the following section on Monitoring.

Assuming that stormwater and / or wildlife are the most likely sources of E. coli, the BMP's that are proposed address education to reduce nonpoint sources, such as RV waste and pet waste and that address illicit discharges through outfall screenings and investigations.

The BMP's have been selected to make progress toward achieving the E.coli pollutant load

requirement established in the TMDL Each BMP includes a schedule for completion, measurement metric, and milestone.

MONITORING

Wet Weather Monitoring

The Village will collect a sample from all outfalls during year 1 of the permit using approved sampling bottles for *E. Coli*. Outfalls and discharge points will be grouped by proximity. Multiple storm events and/or multiple staff per event may be needed to sample all outfalls which discharge to *E. coli* TMDL watersheds. Trained staff from the Village will have sampling kits prepared and will be ready to mobilize at the beginning of a storm event. Once a storm event begins and stormwater begins to discharge at the outfall or point of discharge, a grab sample will be taken. All samples will be obtained within the first 30-60 minutes of the start of stormwater discharge to capture the "first flush." Samples will be transported to the lab and analyzed within six (6) hours of collection. A wet weather event is defined as a precipitation event that produces at least 0.25" of rain over a 24-hour period.

FIRST SAMPLING EVENT (within one (1) Year of the Permit Issuance)

1) Within one (1) year of permit issuance, the Village will complete wet weather sampling for *E. coli* at each outfall and point of discharge. For all outfalls that exceed 1,000 colony-forming units (CFU) /100 milliliters (mL) at the discharge point, additional BMPs need to be implemented to reduce pollutant loading in accordance with the TMDL.

    a. If the wet weather result is <1,000 cfu /100 ml, the Village will continue to implement their permit
    b. If the wet weather result is >1,000 cfu /1000 ml, the Village will implement activities A-D, plus activities E and F.

SECOND SAMPLING EVENT (Year 4 of the Permit term)

2) In year four (4) of the permit term, the Village will complete a second round of wet weather sampling at the outfalls that exceeded 1,000 CFU/100 mL. The results will be reviewed to determine if progress has been made in reducing the discharge of *E. coli* to the TMDL watershed. The results will be used to inform an update to the permittee's TMDL Implementation Plan to continue to make progress toward the *E. coli* TMDL goal.

Dry Weather Monitoring

The Village will collect a sample from two outfalls during years 1 and 4 of the permit. The samples will be collected from the outfalls identified in Figure 1.

FIRST SAMPLING EVENT (Year 1 of the Permit)

The Village will inspect the outfalls during dry weather. If the outfall is submerged, then it will be inspected at the first upstream manhole that does not contain standing water. If flow is present during dry weather, the Village will collect a sample and analyze for E.coli.

- If the dry weather sample result is >1,000 cfu /100 ml, the Village will implement Activities A-D at the appropriate outfall, with a focus on dry weather sources.

SECOND SAMPLING EVENT (Year 4 of the Permit)

The Village will repeat the first sampling at the same outfalls, under the same conditions.

**Dry weather samples will be collected after a minimum of 48-hours of no (or trace) precipitation.

PROCESS FOR REVISION

Any questions on this policy and procedure should be directed to the Village Manager. This procedure and the associated prioritized BMP's listed in Table 1 shall be reviewed once per permit cycle by the Village Manager for any updates based on field findings.

The procedure to be implemented for identifying and prioritizing BMPs that have an impact on the *E. coli* TMDL in Lake Orion is as follows:

1. Lake Orion will continue its involvement with the Clinton River Watershed Council (CRWC) for Stormwater Management and cooperate with those developing a collaborative plan to address the regional issue of the *E. coli* TMDL.

2. Lake Orion will also work with local stakeholder groups who are involved in the ongoing Watershed Management Plan and its associated work to identify and implement economically feasible BMPs.

3. Lake Orion will review the existing *E. coli* TMDL adopted by the EGLE in August of 2012 for recommended BMPs.

4. Lake Orion will cooperate with the WRC and CRWC and others, as necessary, to revise this TMDL procedure to assure it can be realistically implemented. This will be done at least once per permit cycle.

5. Once a BMP is implemented, it will be reviewed (this is not to be interpreted as an inspection) at least once per permit cycle to determine its effectiveness. If it is an administrative BMP such as a procedure, policy or operation standard, then updates or revisions will be implemented as necessary.

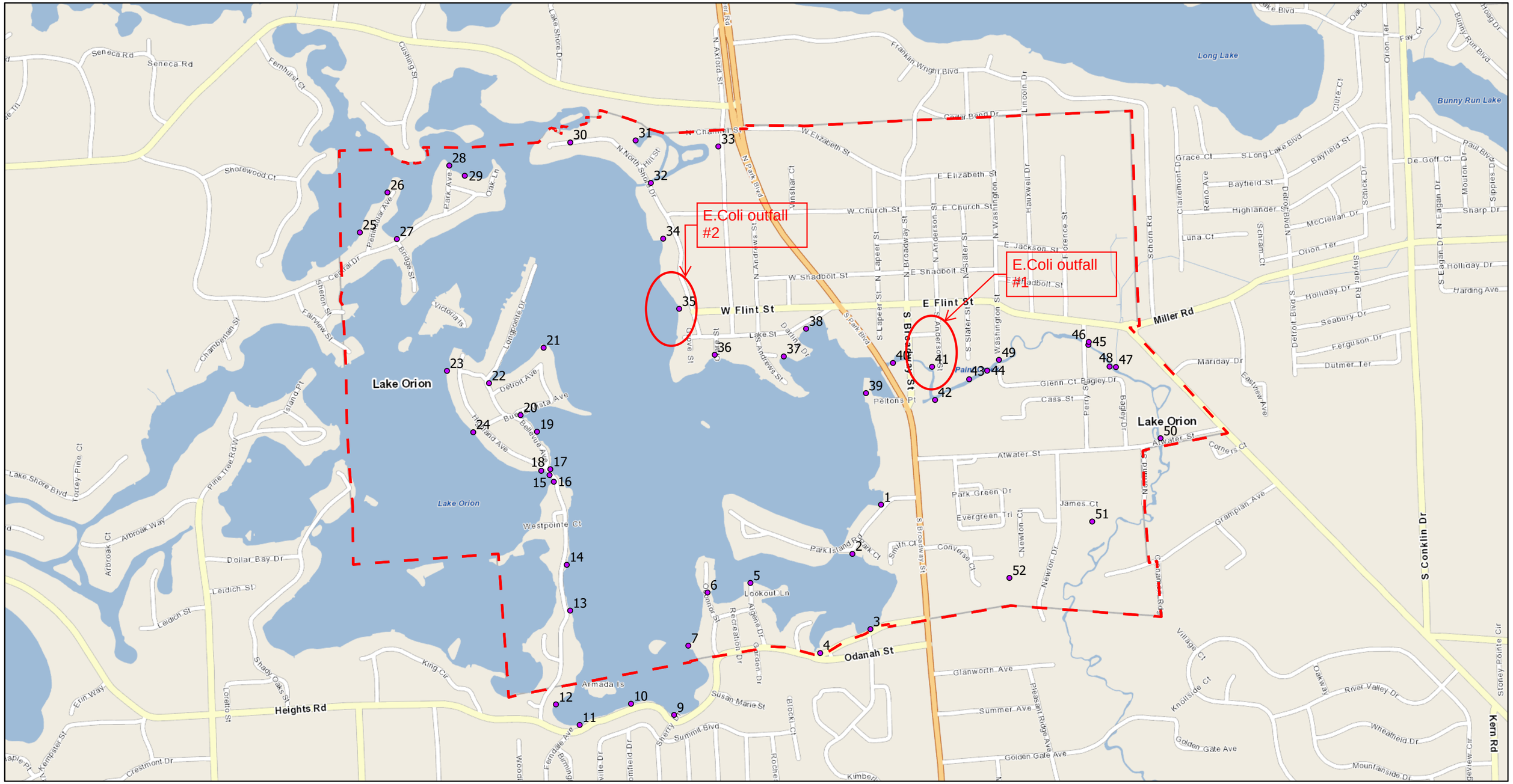
6. Criteria for review, updates, or revisions of a BMP will be completed during the permit cycle.

7. Any changes in identification of BMPs or prioritization of BMPs will be reported in a progress report during a permit cycle.

Table 1 BMP's selected to address the E. coli TMDL

Activity	Description of Action	SP SW Goals Addressed	Method of Implementation	Schedule	Methods of Measuring Progress	Milestones
A	Perform visual inspections and wet-weather screening of all Village-owned and or operated storm water conveyance outfalls.	3A, 3C, 3G IDEP 1.2, 3.1	• Conduct wet weather inspections / sampling	Year 1 and Year 4 of Permit cycle	• Documentation of findings and observations • Lab Reports	Sampling of 100% of outfalls
B	Encourage the use of the existing OCWRC complaint receipt and response system.	3A, 3C, 3G IDEP 1.9	• Village web link to OCWRC hotline (248) 855-0931	Ongoing throughout permit cycle	• Documentation of efforts and referrals	Respond to all complaints within 48 hours
C	Trace illicit connections and owner notification. Follow up enforcement for non-correction	3A, 3C, 3G IDEP 1.3, 1.4	• Trace suspected illicits found to their source •Follow-up with the owner to ensure the illicit connection has been eliminated	Ongoing; As-Needed	• # of illicit connections/discharges traced • Documentation of notification and elimination •Documentation of enforcement actions •# of illicit connections/discharges found vs. # eliminated	Begin investigation within two months of discovery of suspicious discharge
D	Education regarding waterfowl and pet waste management programs	2A, 3C, 3E, 7A PEP 1.7, 2.8, 3.8, 4.9, 5.13	• The Village will feature web links and information regarding pet waste, car care, fertilizers, HHW, etc. •Park area signage •Distribute SEMCOG pet care tip cards •Post information on the Village website	Ongoing	• # of website hits • Topics of information posted •# of tip cards distributed • # of signs installed	Website posting by year 5 of permit, one sign posted
Additional Activities						
E	Targeted IDEP Investigations	3A, 3C, 3G IDEP 1.3, 1.4	If the probable source of E. coli is related to storm water runoff, the Village will conduct targetd IDEP investigations in the storm drains located immediately tributary to the outfall with the goal of identifying illicit connections	Within 6 months of determining that storm water is likely source of E coli at outfall	Description of results of investigation, include in report	Complete by the end of year 4

Additional Activities (continued)						
F	Waterfowl Management Assessment	N/A	If the probable source of E. coli is avain in nature, the Village will investigate methods for deterring wildlife from congreating in parks along the creek.	Within 6 months of determining that waterfowl is a likely source of E.coli	Description of recommended improvements / methods	Complete by the end of year 4



N
W E
S

0.07 0.04 0 0.07 0.15 0.22 0.3
Miles

Village of Lake Orion Outfall Map

SAMPLING LOCATIONS
(Figure 1)

NF ENGINEERS

Village of Lake Orion

MUNICIPAL SEPARATE STORM SEWER SYSTEM

§ 51.60 PURPOSE.

The purpose of this subchapter is to provide for the health, safety, and general welfare of the citizens of the village through the regulation of stormwater and nonstormwater discharges to the storm drainage system to the maximum extent practicable as required by Federal and state law. This subchapter establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this subchapter are:

(A) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.

(B) To prohibit illicit connections and discharges to the municipal separate storm sewer system.

(C) To establish legal authority to carry out all inspection, surveillance, and monitoring procedures necessary to ensure compliance with this subchapter.

(D) As a requirement of the NPDES stormwater discharge permit and the village's municipal separate storm sewer system permit, the village accepts the following Oakland County Standards for Post-Construction Storm Water Runoff:

(1) The Oakland County Post-Construction Storm Water Runoff Program including the Oakland County Stormwater Engineering Design Standards as amended from time to time, is hereby adopted by the Village of Lake Orion in this section for the control and treatment of stormwater runoff with the exception that all developments subject to this section shall provide acceptable water quality treatment BMPs designed to achieve 80% removal efficiency of total suspended solids from the runoff produced by a one-inch rainfall event.

(2) The property owner, upon completion of construction, must enter into a binding long-term maintenance agreement with the village, at their own expense, to document, routinely monitor and maintain the stormwater quantity and quality BMPs so they continue to operate as designed. The agreement shall be set up that if the property owner should be determined to be non-responsive to a notice of required maintenance actions, that the village may enter the property to perform the maintenance required.

(3) These standards shall apply to address post-construction storm water runoff from new development and redevelopment projects that disturb one or more acres, including projects less than one acre that are part of a larger common plan of development or sale, and that discharge into the village's MS4.

(4) All permanent and temporary stormwater management BMPs, constructed as part of the requirements of this section, are subject to this section.

(5) This section also applies to any activities which may affect the quantity or quality of a private or stormwater conveyance system or any waterway within the village. Any person(s) engaged in activities that may result in excessive quantities or pollutants entering any stormwater conveyance systems or waterways may be subject to the remedies for violation of this section. Examples of such pollutants may include, but is not limited to, debris, concrete washings, deicing materials, fertilizers, heavy metals, automobile fluids, topsoil, yard wastes, and commercial or light industrial wastes.

(6) Natural swales and channels should be preserved, whenever possible. If channel modification must occur, the physical characteristics of the modified channel will meet the existing channel in length, cross-section, slope, sinuosity, and carrying capacity. Streams and channels will be expected to withstand all events up to the two-year storm without increased erosion.

(7) Channel Protection Volume Control (CPVC) must retain onsite the post-development runoff volume from a 1.3-inch rainfall event. Provide infiltration and/or storage/reuse BMPs to the Maximum Extent Possible (MEP).

(8) Channel Protection Rate Control (CPRC) must provide extended detention for the post-development runoff volume from a 1.9-inch rainfall event.

(9) All structural and vegetative BMPs must be installed and implemented to meet the performance standards shall be operated and maintained in perpetuity. The permittee shall implement and enforce the ordinance or regulatory mechanism program to ensure long-term operation and maintenance of BMPs.

(10) The regulatory mechanism and procedures for site plan approval and the Design and Construction Standards shall apply for projects that disturb one or more acres, including projects less than one acre that are part of a larger common plan of development or sale, and discharge to the permittee's MS4, including projects where the permittee is the developer. The final site plan review and approval shall demonstrate compliance with the performance standards and long-term operation and maintenance requirements stated in this subchapter.

(Ord. 23.35, passed 2-8-16; Am. Ord. 23.29, passed 4-25-22)

§ 51.61 DEFINITIONS.

For the purposes of this subchapter, the following shall mean:

AUTHORIZED ENFORCEMENT AGENCY. The Building Inspector or designees of the Village Manager for the Village of Lake Orion.

BEST MANAGEMENT PRACTICES (BMPS). Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. ***BMPs*** also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CHANNEL PROTECTION RATE CONTROL (CPRC). The volume of runoff under post-development conditions from a 1.9-inch rainfall event that requires extended detention be provided.

CHANNEL PROTECTION VOLUME CONTROL (CPVC). The volume of runoff under post-development conditions from a 1.3-inch rainfall event that is required to be retained on-site to the maximum extent practicable (MEP).

CLEAN WATER ACT. The Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), and any subsequent amendments thereto.

CONSTRUCTION ACTIVITY. Activities subject to NPDES construction permits or the village's grading ordinance. These include construction projects resulting in land disturbance of five acres or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

HAZARDOUS MATERIALS. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

ILLEGAL DISCHARGE. Any direct or indirect nonstormwater discharge to the storm drain system, except as exempted in § 51.65 of this subchapter.

ILLICIT CONNECTIONS. An illicit connection is defined as either of the following:

(1) Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including, but not limited to, any conveyances which allow any nonstormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by the authorized enforcement agency; or

(2) Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by the authorized enforcement agency.

INDUSTRIAL ACTIVITY. Activities subject to NPDES industrial permits as defined in 40 CFR § 122.26(b)(14).

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT. A permit issued by the EPA (or by a state under authority delegated pursuant to 33 USC 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

NONSTORMWATER DISCHARGE. Any discharge to the storm drain system that is not composed entirely of stormwater.

PERSON. Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner’s agent.

POLLUTANT. Anything which causes or contributes to pollution.***POLLUTANTS*** may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; nonhazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

PREMISES. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking areas.

STORM DRAINAGE SYSTEM. Publicly-owned or privately-owned facilities by which stormwater is collected and/or conveyed including, but not limited to, any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

STORMWATER. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

STORMWATER POLLUTION PREVENTION PLAN. A document which describes the best management practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

WASTEWATER. Any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

(Ord. 23.35, passed 2-8-16; Am. Ord. 23.29, passed 4-25-22)

§ 51.62 APPLICABILITY.

This subchapter shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by the authorized enforcement agency.

(Ord. 23.35, passed 2-8-16)

§ 51.63 RESPONSIBILITY FOR ADMINISTRATION.

The Village Manager or the Village Manager's designee(s), shall administer, implement, and enforce the provisions of this subchapter. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the Village Manager to persons or entities acting in the beneficial interest of or in the employ of the agency.

(Ord. 23.35, passed 2-8-16)

§ 51.64 ULTIMATE RESPONSIBILITY.

The standards set forth herein and promulgated pursuant to this subchapter are minimum standards; therefore this subchapter does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

(Ord. 23.35, passed 2-8-16)

§ 51.65 DISCHARGE PROHIBITIONS.

(A) No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater.

(B) The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

(1) The following discharges are exempt from discharge prohibitions established by this subchapter if they are identified as not being a significant source of pollutants and/or a significant contributor to violations of state quality standards: water line flushing and discharges from other potable water sources, landscape irrigation or lawn watering runoff, diverted stream flows, rising groundwater and springs, uncontaminated groundwater infiltration and seepage, uncontaminated pumped groundwater (except for groundwater cleanups specifically authorized by NPDES permits), foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, noncommercial washing of vehicles, natural riparian habitat or wetland flows, swimming pools from single, two or three family residences (if dechlorinated, typically less than one PPM chlorine), fire-fighting activities, and any other water source not containing pollutants.

(2) Discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.

(3) Dye testing is an allowable discharge, but requires authorization from the Michigan Department of Environmental Quality (Rule 97 certification of approval) and a verbal notification to the authorized enforcement agency prior to the time of the test.

(4) The prohibition shall not apply to any nonstormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

(Ord. 23.35, passed 2-8-16)

§ 51.66 PROHIBITION OF ILLICIT CONNECTIONS.

(A) The construction, use, maintenance, or continued existence of illicit connections to the storm drain system is prohibited.

(B) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(C) A person is considered to be in violation of this subchapter if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

(Ord. 23.35, passed 2-8-2016)

§ 51.67 RIGHT OF ENTRY FOR INSPECTION.

The Village Manager and other duly authorized employees of the village bearing proper credentials and identification shall be permitted to enter upon all properties for the purposes of inspection, observation, measurement, sampling, and testing of suspected illicit discharges or connections in accordance with the provisions of this subchapter.

(Ord. 23.35, passed 2-8-2016)

§ 51.68 SUSPENSION OF MS4 ACCESS.

(A) *Suspension due to illicit discharges in emergency situations.* The authorized enforcement agency may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary to prevent or minimize damage to the MS4 or waters of the United States, or to minimize danger to persons.

(B) *Suspension due to the detection of illicit discharge.* Any person discharging to the MS4 in violation of this subchapter may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this section, without the prior approval of the authorized enforcement agency.

(Ord. 23.35, passed 2-8-16)

§ 51.69 INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the authorized enforcement agency prior to the allowing of discharges to the MS4.

(Ord. 23.35, passed 2-8-16)

§ 51.70 MONITORING OF DISCHARGES.

(A) *Applicability.* This section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.

(B) *Access to facilities.*

(1) The authorized enforcement agency shall be permitted to enter and inspect facilities subject to regulation under this article as often as may be necessary to determine compliance with this subchapter. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.

(2) Facility operators shall allow the authorized enforcement agency ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and Federal law.

(3) The authorized enforcement agency shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's stormwater discharge.

(4) The authorized enforcement agency has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.

(5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the authorized enforcement agency and shall not be replaced. The costs of clearing such access shall be borne by the operator.

(6) Unreasonable delays in allowing the authorized enforcement agency access to a permitted facility are a violation of a stormwater discharge permit and of this subchapter. A person who is the operator of a facility with a NPDES permit to discharge stormwater associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this subchapter.

(7) If the authorized enforcement agency has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this subchapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this subchapter or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction.

(Ord. 23.35, passed 2-8-16)

§ 51.71 REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORMWATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.

All stormwater drainage and erosion control plans shall meet the standards adopted by the village and Oakland County for design and construction. Authorized enforcement agency may adopt requirements identifying best management practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of stormwater, the storm drain system, or waters of the U.S. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and nonstructural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and nonstructural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. These BMPs shall be part of a stormwater pollution prevention plan (SWPP) as necessary for compliance with requirements of the NPDES permit.

(Ord. 23.35, passed 2-8-16; Am. Ord. 23.29, passed 4-25-22)

§ 51.72 WATERCOURSE PROTECTION.

Every person owning property through which a watercourse passes, or such person’s lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

(Ord. 23.35, passed 2-8-16)

§ 51.73 NOTIFICATION OF SPILLS.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the storm drain system, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the authorized enforcement agency in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the authorized enforcement agency within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

(Ord. 23.35, passed 2-8-16)

§ 51.74 ENFORCEMENT, NOTICE OF VIOLATION.

(A) Whenever the authorized enforcement agency finds that a person has violated a prohibition or failed to meet a requirement of this subchapter, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

(1) The performance of monitoring, analyses, and reporting;

(2) The elimination of illicit connections or discharges;

(3) That violating discharges, practices, or operations shall cease and desist;

(4) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;

(5) The payment of a fine to cover administrative and remediation costs; and

(6) The implementation of source control or treatment BMPs.

(B) If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

(Ord. 23.35, passed 2-8-16)

§ 51.75 ENFORCEMENT MEASURES.

If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, then representatives of the authorized enforcement agency may enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property upon the issuance of an order from a court of competent jurisdiction. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

(Ord. 23.35, passed 2-8-16)

§ 51.76 COST OF ABATEMENT OF THE VIOLATION.

(A) Within 15 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

(B) Any person violating any of the provisions of this subchapter shall become liable to the village by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of 2% per annum shall be assessed on the balance beginning on the first day following discovery of the violation.

(Ord. 23.35, passed 2-8-16)

§ 51.77 INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this subchapter. If a person has violated or continues to violate the provisions of this subchapter, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

(Ord. 23.35, passed 2-8-16)

§ 51.78 COMPENSATORY ACTION.

In lieu of enforcement proceedings, penalties, and remedies authorized by this subchapter, the authorized enforcement agency may allow a violator to perform alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

(Ord. 23.35, passed 2-8-16)

§ 51.79 VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this subchapter is deemed a threat to public health, safety, and welfare, and is declared a nuisance, public nuisance and nuisance per se and may be summarily abated or restored at the violator’s expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

(Ord. 23.35, passed 2-8-16)

§ 51.80 VIOLATIONS.

(A) Any person, firm or corporation determined to have been in violation of the provisions of this subchapter shall be responsible for a municipal civil infraction and subject to the provisions of this code.

(B) The Village Council by way of the Building Inspector, in addition to other remedies, may institute any appropriate action or proceeding to prevent, abate or restrain the violation.

(C) Each day’s continuance of a violation shall be deemed a separate and distinct offense. Expenses in connection with such action shall be assessed as damages against the violation.

(Ord. 23.35, passed 2-8-16)

§ 51.81 REMEDIES NOT EXCLUSIVE.

The remedies listed in this subchapter are not exclusive of any other remedies available under any applicable Federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

(Ord. 23.35, passed 2-8-16)

§ 51.98 VIOLATIONS.

Any person, firm or corporation determined to have disposed of sewage in a manner contrary to the provisions of this chapter, failed to connect with the available public sewers provided herein, or to have in any other way violated the provisions of this chapter, shall be responsible for a municipal civil infraction and subject to the provisions of § 10.99(A)(2).

(Ord. 23.01, passed 9-28-70; Ord. 23.05, passed 3-12-73; Am. Ord. A-3, passed 1-13-97)

VILLAGE OF LAKE ORION

STORMWATER VIOLATION INVESTIGATION TRACKING

Date:	Name of Complainant: Contact Phone Number:
Property Owner: Address / Location to be Reviewed:	

Description of Violation (s)

Taken By:

Enforcement Response & Schedule for Returning to Compliance

Village Representative Signature:	Date:
Responsible Party Signature:	Date:

Viloation Resolution Confirmation

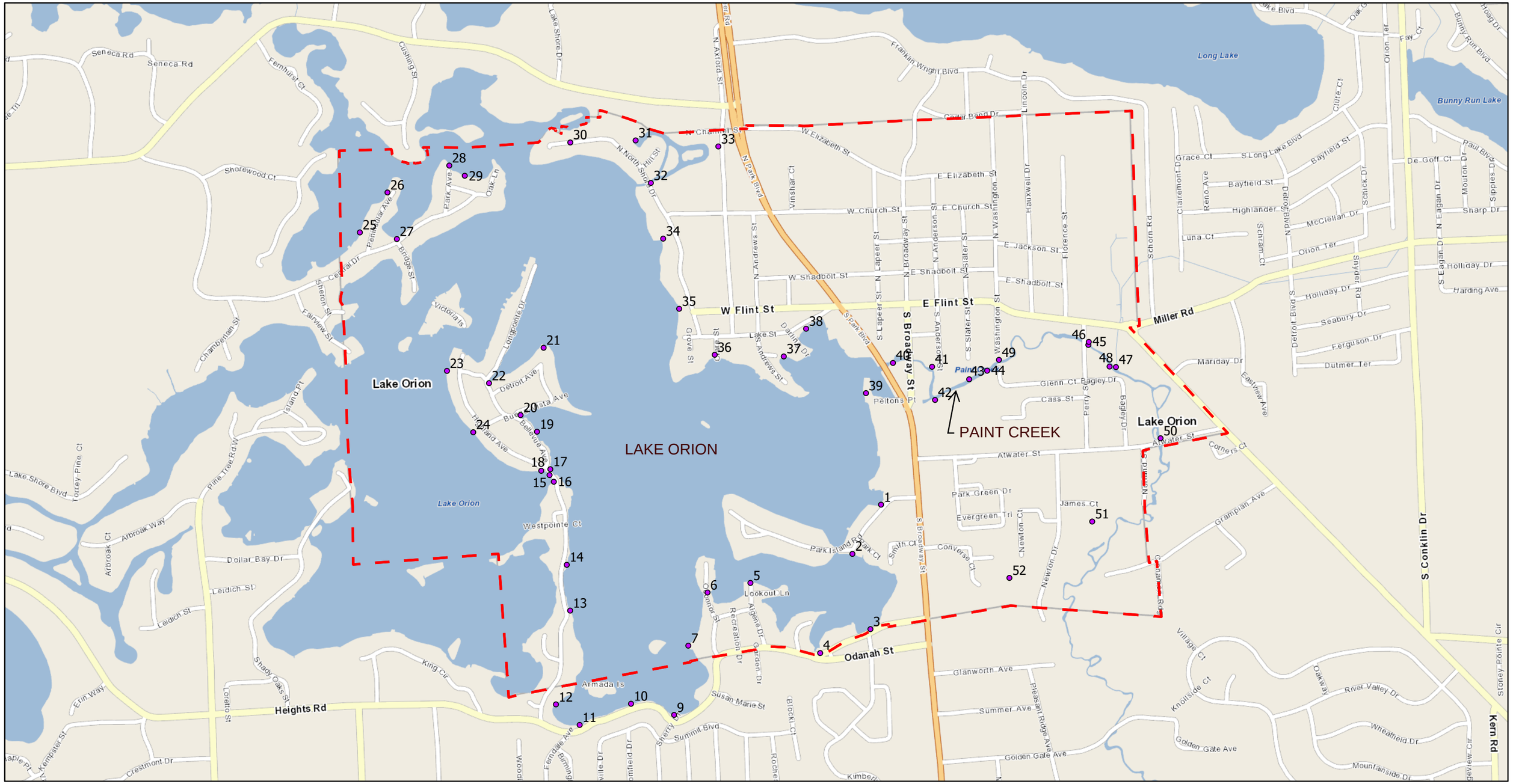
Pictures Taken:	
Written Observations:	
Performed by:	Date:

Clinton River Watershed
Anchor Bay
Lake St. Clair Direct Drainage

Collaborative Public Education Plan
March 20, 2025

https://static1.squarespace.com/static/6452a62c1226a7b4e5e5281/t/67e6e15d27b58d598d0ee089/1743184222843/Clinton+River+Watershed+Wide+Public+Education+Plan+2025.pdf

Submitted by the Clinton River Watershed Council on behalf of Macomb County, Oakland County, and the MS4 permit holders that participate in the Clinton River Watershed Council's Stormwater Education Plan



Village of Lake Orion Outfall Map

NF ENGINEERS

Village of Lake Orion

Oakland County Water Resources Commissioner

Stormwater Engineering Design Standards

https://www.oakgov.com/home/showpublisheddocument/26616/638786819027570000

POLLUTION INCIDENT PREVENTION PLAN (PIPP)

Village of Lake Orion
21 E. Church Street
Lake Orion, MI 48362

April, 2025

TABLE OF CONTENTS

INTRODUCTION:

The Pollution Incident Prevention (PIP) Plan provides a response plan as required by the State of Michigan's Part 5 Rules. This plan provides spill response procedures and is intended to provide guidance in the event of a release of polluting materials to air, soil, or surface water at the Village of Lake Orion Department of Public Works (DPW) Facility. The provisions of this plan must be carried out immediately in the event of the release of polluting materials that could threaten human health or the environment. The Part 5 Rules require facilities that receive, process, manufacture, store, or ship polluting materials above the threshold amounts to develop and implement a PIP Plan and to provide containment for potentially polluting materials. Michigan Part 5 Rules defines "polluting material' as oil, salt, and any material listed on the Polluting Materials list.

Updated Material Safety Data Sheets (MSDSs) are continually tracked and filed and made readily available for review by employees at the facility. These are located inside the DPW Garage.

EMERGENCY CONTACTS

POLICE DEPARTMENT / DISPATCH: 911

Michigan Department of Environment, Great Lakes and Energy (EGLE) Southeast Michigan District Office EGLE 24-Hour Pollution Emergency Alert System (PEAS)	27700 Donald Court Warren, MI 48092-2793 Phone: 586-753-3769 800-292-4706
OCWRC 24-Hour Pollution Prevention Hotline	248-858-0931
Oakland County Local Emergency Planning Committee	1200 N. Telegraph Road Building 47 West Pontiac, MI 48341-0410 248-858-5300
Detroit Water and Sewerage Department (DWSD) Great Lakes Water Authority (GLWA)	313-267-8000 313-267-6000
State Emergency Response Commission	517-373-8481
National Emergency Response Center	800-424-8802
US EPA Region 5 Office 24-Hour Number	312-353-2318
CHEMTREC (Chemicals, spills, fires information)	800-424-9300

Statement of Compliance: This facility is currently in compliance with the Part 5 PIPP Rules.

1.1 PIPP Distribution

The Department of Public Works Director and the Village Manager maintain a copy of this PIP Plan. The Plan is available to all personnel who are authorized to have access to it.

A letter certifying that the facility is in compliance with the Part 5 Rules will be sent to the EGLE – Water Resources Division within 30 days of finalizing the completion or updates to this Plan.

Copies of this Plan and future revised Plans will be available upon request to the list below:

1. US EPA Regional Administrator
2. EGLE Water Resources Division, SE Michigan District
3. Village of Lake Orion Police Department
4. Emergency Response Contractor
5. Oakland County Local Emergency Planning Committee (LEPC)
6. Oakland County Health Department
7. State of Michigan Emergency Response Commission-EGLE Waste Management Div.

1.2 PIPP Amendments

This Plan will be reviewed and updated as needed every three (3) years, or when facility personnel, processes, or procedures identified in the Plan change or as otherwise necessary to maintain compliance with the Part 5 Rules. Upon completion of the updated Plan, the owner shall recertify the Plan and notify EGLE, the local LEPC, and the local Health Department (with a letter) of compliance with the Part 5 Rules.

1.3 Facility Description

The DPW administrative offices are located in the village office complex at 21 East Church Street. The DPW Facility Complex is located at 362 Cass Street.

The DPW Facility has five employees.

The Cass Street site includes a 5,000 sq. ft. building with four overhead doors facing north. A smaller metal garage to the northeast is used for miscellaneous equipment storage, and an outside storage area inside a chain-link fence lies to the northeast of the main DPW building. The land area is 2.4 acres. The main building is metal, with a mildly sloped roof, approximately 20 feet high at its peak. The main building was constructed in 1974. The western half was added later. A new salt storage structure was constructed in December 2022.

The yard was asphalt covered at one time, but now is almost completely broken up. Erosion potential is very low, as the area is relatively flat. Surface runoff flows either onto the adjacent grassed area or onto the gravel/dirt drive. One (1) storm water catch basin is located on the northeast side of the property, approximately 250 feet from the salt dome and DPW Garage. In 2022, a portion of the gravel yards was paved with asphalt to facilitate truck movement and access to the salt storage building.

The salt storage building is located adjacent to the DPW Garage, to the northwest. Approximately 300 tons of salt are stored and applied annually.

1.3.1 Operations

The DPW Facility is utilized for the storage of salt, sand, gravel, and asphalt cold patch. Concrete containment structures are utilized for these materials.

Routine vehicle maintenance is carried out at the DPW site, including lubrication, oil changes, power washing, minor repairs, and tire changes. Heavy repairs are sent to the Bostick GMC dealership located in Pontiac.

Vehicles and equipment are now washed inside the garage, to eliminate storm water runoff.

The yard provides storage space for the various road maintenance equipment, materials and miscellaneous equipment.

A DPW Facility Site Map is included in Appendix C.

1.4 Past Pollution Incidents

There has not been a reportable oil spill or chemical release incident in the past 3 years.

1.5 Emergency Response Personnel

1.5.1 Emergency Response Coordinator Responsibilities

The Emergency Response Coordinator (ERC) has a wide range of responsibilities including employee training, conducting facilities inspections, and committing Village resources to respond to emergency situations. The ERC must be thoroughly familiar with facility operations and the Plan contents and must be either at the facility or on call and be able to respond to an emergency in a short period of time. Specific ERC responsibilities are outlined below. The ERC may delegate these responsibilities to an alternate ERC at his/her discretion.

A. Ensuring that emergency response equipment inspections are conducted quarterly.
B. Activating internal facility alarms or communication systems to notify all facility personnel of an emergency situation.
C. Assessing the nature and extent of emergency situations and committing the resources necessary for proper response.
D. Ensuring that injured personnel are given appropriate medical attention and/or arranging transportation to a hospital when necessary.
E. Maintaining adequate space for the movement of emergency response personnel and equipment.
F. Ensuring that waste materials generated from emergency response activities are handled, stored, and disposed of in accordance with state and federal regulations.
G. Notifying the appropriate local, state, and federal agencies of releases and emergencies.
H. Minimizing the likelihood of an emergency situation recurring by evaluating incidents, critiquing response, and implementing improved procedures as necessary.

1.5.2 Emergency Response Coordinator

Primary Coordinator: Wesley Sanchez
Title: Director, Department of Public Works
Telephone: (248) 693-8391, Ext. 106
Email: wsanchez@lakeorion.org

Alternate Coordinator: Darwin McClary
Telephone: (248) 693-8391, Ext. 106
Email: mclaryd@lakeorion.org

1.6 Emergency Response Equipment

1.6.1 Spill Control and Personal Protection Equipment

Village staff are trained to clean up small spills or releases in their work areas. In the event of an emergency, a spill contractor is on call to respond to spills and releases at the facility. Table lists the available emergency response equipment. The equipment is stored near areas of concern and is immediately available.

Table 1.1 Spill Control and Personal Protection Equipment

Equipment	Location	Intended Use
Shovels/brooms	Located in DPW Facility	Used to clean up spill absorbents and solid pollutants
First Aid Kits	Located in DPW Facility	Available for use and treatment of minor medical emergencies
Fire extinguishers	Located in DPW Facility – Various Locations	Available to assist in fire control
Spill kits/absorbents	Located in DPW Facility	Contain and clean up minor spills

1.7 Spill Prevention and Control

Material storage, spill training, and preventative maintenance practices will be the primary methods used at the DPW Facility to minimize the potential for spills of salt, oil, and other polluting materials.

Significant spills occurring at the facility property will be recorded on the EGLE Spill or Release Report form located in Appendix D. Section 1.4 of this Plan will be updated if a significant spill or leak occurs. In addition, the spill prevention and response procedures will be evaluated to determine if the planned response was adequate. If necessary, the spill prevention and response procedures will be modified to include additional or alternative practices to minimize future spills.

The following items outline some of the general spill prevention procedures and practices implemented at the DPW Facility:

1.7.1 Good Housekeeping

RETAP performed a facilities assessment in August 2008. In addition, Hubbell, Roth & Clark, Inc. (HRC), the Village's Engineering Consultant, performed an Environmental Assessment at

the DPW Facility in July 2010.

Most major repairs are handled by a commercial repair/maintenance station. Oil changing and greasing of vehicles and equipment are performed inside the DPW Garage. Specifically;

- Detailed maintenance logs are kept on all vehicles.
- Spare parts and some chemicals are located on shelving units.
- Solvents, cleaners, and miscellaneous chemicals are stored in designated cabinet or on the floor of the DPW Garage.
- Motor oil, power steering fluid, and other automotive fluids are stored in fifty-five (55) gallon drums along the wall. No secondary containment exists for spill control.
- Used antifreeze is placed in five (5) gallon pails and stored along the wall.
- Recyclable parts, materials, and fluids are recycled through a third party vendor.
- DPW Staff visually inspects all vehicles and equipment for leaks and maintenance issues at least monthly, and/or on rainy days when more time allows.
- Drip pans, containers, and 'quick-dry' agents are readily available for known leaks and repairs.
- Two (2) sanitary manholes, located inside the DPW Garage drain directly to the sanitary sewer system. The drains are vacuumed out by the Village Vactor Truck as needed.
- Most chemicals and miscellaneous fluids are located and stored on shelving units in the DPW Garage. Aerosol sprays and other hazardous materials are stored in a yellow cabinet along the wall.
- The Village increased their plowing practices to reduce salt use. The Village continues to look into salt brine, sugar beet juice, and other road salt alternatives.

1.7.2 Routine and Comprehensive Site Inspections (Preventative Maintenance)

The permit requires a description of a program for routine preventive maintenance which includes inspection and maintenance of storm water management and control devices (e.g. cleaning of oil/water separators and catch basins) as well as inspecting and testing equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters. A log of the inspection and corrective actions shall be maintained on file and shall be retained for three years. The inspections should consist of:

- Periodic vehicle and equipment inspections for leaking oil and fluids;
- Periodic inspection of the solid waste dumpster area;
- Use dry absorbents to clean-up spills and leaks;
- Segregate and label wastes; and
- Visual inspections of the DPW Garage and Salt Storage Area for potential problems

Routine inspections are to be conducted every two weeks by DPW staff. The comprehensive site inspection shall be conducted by a Certified Storm Water Operator biannually. The comprehensive inspections shall also include a review of the routine preventive maintenance reports, good housekeeping inspections reports, and any other paperwork associated with the PIPP. A report of the comprehensive site inspection results shall be prepared and retained for three years. The report shall identify any incidents of non-compliance with the PIPP or this permit. The Site Inspection Form is located in Appendix A. The Annual PIPP Review Form is in Appendix B.

1.7.3 Employee Training Program

Various DPW staff have attended training opportunities provided by SEMCOG and other

entities. The Phase II General MS4 Permit requires all DPW staff to attend periodic pollution prevention and good housekeeping training as it is provided. The Village will ensure that future training opportunities are participated by staff.

All new hires must complete training within one year of hire, and all staff must be trained once during the permit cycle.

1.7.4 Best Management Practices

Per EGLE's direction during the Village's MS4 Program Audit in October 2011, catch basin and street sweeping wastes are no longer collected at Eastlawn Cemetery, located at 1060 Orion Road. These materials are now hauled away to a landfill. This practice still stands.

Currently, no fertilizers are utilized on any of the Village-owned properties. The Village has a contract with Tru-Green ChemLawn for pesticide applications. Spot-treatments are encouraged.

All turf is mowed by Village staff and mowing heights are maintained at 3 inches.

Measurable Goals

- Conduct routine and comprehensive inspections and correct deficiencies as needed.
- Review the PIPP annually and update as appropriate.

1.8 Emergency Management Activities

1.8.1 Initial Response Procedures

In the event of a spill or the failure of a storage unit, the following steps should be immediately implemented:

A. **Ensure the safety of employees in the area.** If an employee is injured, immediately contact the Primary Emergency Response Coordinator or supervisor for further instructions.
B. If no danger to an employee exists, **attempt to stop the spill or leak at its source**.
C. **If possible, identify the spilled material**. It is important to identify the spilled material so that the MSDS can be used to identify health hazards, environmental warnings, and material compatibility.
D. **Notify the Primary Emergency Coordinator as soon as possible**. The Primary Emergency Response Coordinator will contact additional Emergency Response Coordinators whenever necessary.
E. Contain the material in the smallest possible area by using the emergency response equipment provided in this plan. If the spill is small, use a broom or shovel to clean up the spill. Dispose of materials appropriately. Prevent spills from entering the combined sewer system.
F. **Begin the Notification Procedure**. The Emergency Response Coordinator has authority to determine if outside contractors are needed to help clean a spill and will coordinate with management if agency reporting is required. If the Reportable Quantity of a particular material is released, agency notification must begin as soon as practicable (within 30 minutes of discovery of the incident).
G. **Recover or cleanup the spilled material**. Remove the spilled material through the use of a shovel or front end loader. As much material as possible should be recovered and reused where appropriate.

H. After the spill has been cleaned, the Emergency Response Coordinator will complete a report summarizing the details of the incident. This report shall be retained in Appendix B of this Plan.
I. Evaluate the PIP Plan and amend if necessary. Determine the cause of the incident and evaluate the emergency response procedures. Correct any deficiencies and amend the plan accordingly.

1.8.2 Emergency Notifications

This subsection is intended to help the Emergency Response Coordinator to determine whether a spill needs to be reported and to whom the reports must be made. **NOTE: Prior to notifying state or federal authorities, the Emergency Response Coordinator must try to make contact with management.**

PIPP (Michigan Part 5 Rules) Emergency Notifications – These Rules require immediate notification be made to PEAS, the SERC, 911, and the LEPC if oil, salt, or a Polluting Material (see attachment) has reached or has the potential to reach surface or ground waters of the State. This includes indirect discharges through storm or sanitary sewer systems. Note that the discharge of limited concentrations of oil, salt, or Polluting Materials to the waters of the State or to a sanitary sewer may be allowed if the MDEQ or local ordinance has approved the discharge and issued a permit.

If the Emergency Response Coordinator determines that a Polluting material has reached or has the potential to reach surface or groundwaters of the State, verbal notice shall be given as soon as practicable after detection of the release to the EGLE 24-Hour Pollution Emergency Alert System (PEAS) at (800) 292.4706 and to 911.

Within ten (10) days of the incident, the Emergency Response Coordinator must file a written report with the EGLE Southeast Michigan District Office (586.753.3769) and the Oakland County Health Department. The written report shall outline the cause of the incident, its discovery, and any procedures taken to remove the oil, salt, or Polluting Material(s) from the waters of the State.

Additional External Emergency Notifications:

Fire Department, Police Department, Ambulance Services – If a spill incident results in injuries to Village staff, emergency medical services will be contacted immediately. If a spill is the result of vandalism or if police assistance is needed, the Police Department will be contacted. If the spill results in a fire, explosion, or threat thereof, the Fire Department will be immediately notified. The Emergency Response Coordinator shall determine if the outside contractor is needed to help clean up a spill. If the facility has knowledge of any release of a hazardous substance in a quantity equal to or exceeding the reportable Quantity, the National Response Center, the SERC, and the LEPC shall be notified immediately.

Oakland County Local Emergency Planning Committee	248.858.5371
State Emergency Response Commission	517.373.8481 or 9807
National Response Center (NRC)	800.424.8802

Internal Notifications:

The following Village personnel shall be contacted in the event of a spill incident that requires state or federal agency notification or cleanup assistance from an outside contractor. This contact should normally be made after a spill incident has occurred and the appropriate response has taken place, but before outside agencies are notified. Note that requirements to contact outside agencies are time critical. The agency calls must be made quickly even if management cannot be reached.

Darwin McClary 248.693.8391 Ext 101

Table 1.2 Oil & Polluting Materials Storage

Material	Location	Container Material	Inside/ Outside	Safety Devices	Potential to Discharge	Secondary Containment	Storage Capacity	Secondary Containment Volume
Rock Salt	Salt Dome	Concrete / Covered	Outside w/ cover	N/A	High – Spillage during handling	Contained inside a building; no doors	300 tons	N/A
Gravel/Dirt Piles	West Side of Property	Concrete	Outside	N/A	High – Spillage during handling	Contained on gravel/dirt parking lot away from storm drains	90 yds	N/A
Misc. Materials Storage	West Side of Property	None	Outside	N/A	Medium – Erosion during rain events	Contained inside parking lot	N/A	N/A
Solid Waste Dumpster	West Side of Property	Metal	Outside	N/A	High – Spillage during loading and unloading	N/A	N/A	N/A
Hydraulic, Oil, Misc. Drums	Inside DPW Garage	Metal & Plastic Drums	Inside	Locked DPW Garage	Medium -	On shelves; pallets off the floor	55-gallon	N/A – Looking into
Waste Fuel & Oil Drums	Inside DPW Garage	Metal & Plastic Drums	Inside	Locked DPW Garage	Medium – Spillage while using	On Floor	55-gallon	N/A – Looking into
Hazardous/ Flammable Materials	Inside DPW Garage	Yellow, Labeled Cabinet	Inside	Locked DPW Garage	Medium – Spillage while using	Yellow, Labeled Cabinet	N/A	N/A

VILLAGE OF LAKE ORION

APPENDIX A - BI-ANNUAL PREVENTATIVE MAINTENANCE / ROUTINE HOUSEKEEPING INSPECTIONS FORM
Inspection Date: Inspector Name:

Material/Contents/Structural BMP	Location	Observation	Recommendations
Vehicles & Equipment	Indoors & Outdoors		
Solid Waste Dumpster	Outdoors		
Salt Storage Area	Outdoors / Covered		
Waste Storage	Indoors		
Storage Piles	Outdoors		
Chemicals/Fluids	Indoors		
Outdoor CB	Outdoors		
Sweeping	Indoors		
Outdoor Stockpile	Outdoors		

VILLAGE OF LAKE ORION

APPENDIX B - PIPP REVIEW FORM (EVERY 3 YEARS)

Facility Information		
Designated Name:	Certificate of Coverage No.:	
Facility Contact Information		
Name:	Telephone No.:	
Email Address:		Certification No:
Backup Facility Contact Information		
Name:	Telephone No.:	
Email Address:		Certification No:
Certified Operator Information (if applicable)		
Name:	Telephone No.:	
Email Address:		Certification No:

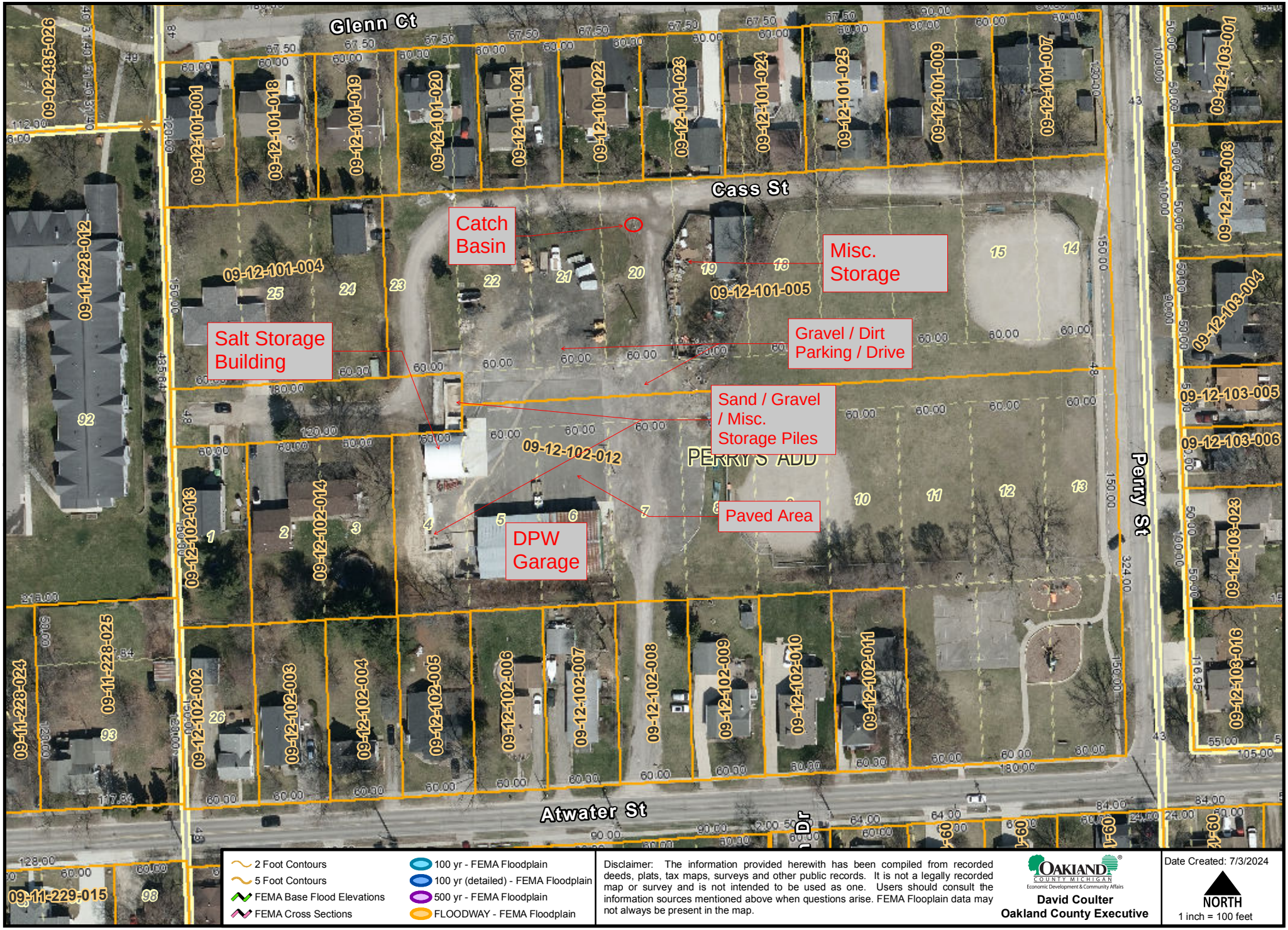
PIPP Review Checklist

1) Facility general information is current and accurate	Yes	No	
2) Site map is current and accurate	Yes	No	
3) Significant material inventory is current and accurate	Yes	No	
4) New exposures, processes and related controls have been documented appropriately in the PIPP	Yes	No	NA
5) Spills have been recorded and reported as appropriate	Yes	No	NA
6) Employee SWPPP/PIPP training was conducted and documented	Yes	No	
7) Records of routine preventative maintenance and housekeeping inspections are available in the PIPP file	Yes	No	
8) Comprehensive site inspections have been completed, certified and filed in the PIPP file	Yes	No	
9) Corrective actions noted in the inspection reports have been completed	Yes	No	
10) PIPP has been reviewed and signed by the Employee Response Coordinator	Yes	No	

Additional Comments (use additional sheets if necessary):

I certify that the above information is correct	
Name:	Signature / Date:

Appendix C - Village of Lake Orion DPW Facility



Disclaimer: The information provided herewith has been compiled from recorded deeds, plats, tax maps, surveys and other public records. It is not a legally recorded map or survey and is not intended to be used as one. Users should consult the information sources mentioned above when questions arise. FEMA Flooplain data may not always be present in the map.

OAKLAND COUNTY MICHIGAN
Economic Development & Community Affairs

David Coulter
Oakland County Executive

Date Created: 7/3/2024

NORTH

1 inch = 100 feet

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
ENVIRONMENTAL SUPPORT DIVISION

SPILL OR RELEASE REPORT

NOTE: Some State and Federal regulations require a specific form to use and procedures to follow when reporting a release. Those forms and procedures MUST be used and followed if reporting under those regulations. Please refer to the Michigan Reporting Requirements Tool to aid you in determining the proper form to use. This report form, although not required to be used, is designed to aid person to report releases under regulations. To report a release, some regulations require a facility to call the EGLE PEAS Hotline at 800-292-4706 (or the EGLE District Office that oversees the county where it occurred) and other agencies and provide information that is included in this form. This form may also be used for the written follow-up report to the department. If you prefer to submit this report electronically by FAX or e-mail, contact the regulating agency for the correct telephone number or e-mail address. Go to www.michigan.gov/chemrelease for more information.

Please print or type all information.

Name of Person Submitting Written Report	Title of Person Submitting Written Report	Telephone Number (provide area code)

Name of Business			Release Location (Provide address if different than business, if known, and give directions to the spill location. Include nearest highway, town, road intersection, etc.)
Street Address			
City	State	ZIP	
Business Telephone Number (provide area code)			

Site Identification Number and Other Identifying Numbers (if applicable)	County	Township	Tier/Range/Section (if known)

Release Data: Complete all applicable categories. Check all the boxes that apply to the release. Provide the best available information regarding the release and its impacts. Attach additional pages if necessary.

Date of Release (if known) **Time of Release** (if known)	**Date of Discovery** **Time of Discovery** ○am ○pm	**Duration of Release** (if known) ☐ days ☐ hours ☐ minutes	**Type of Incident** ☐Explosion ☐Loading/unloading release ☐Fire ☐Pipe/valve leak or rupture ☐Leaking container ☐Vehicle accident ☐Other ☐

Material Released (chemical or trade name) ☐Check here if additional materials listed on the attached page	**CAS Number or Hazardous Waste Code**	**Estimated Quantity Released** (indicate unit e.g. lbs, gals, cu ft or yds)	**Physical State Released** (indicate if solid, liquid, or gas)

Factors Contributing to Release

- ☐ Equipment failure
- ☐ Operator error
- ☐ Faulty process design
- ☐ Training deficiencies
- ☐ Unusual weather conditions
- ☐ Other

Source of Loss

- ☐ Container
- ☐ Railroad car
- ☐ Pipeline
- ☐ Ship
- ☐ Tanker
- ☐ Tank
- ☐ Truck
- ☐ Other

Type of Material Released

- ☐ Agricultural: manure, pesticide, fertilizer
- ☐ Chemicals
- ☐ Flammable or combustible liquid
- ☐ Hazardous waste
- ☐ Liquid industrial waste
- ☐ Oil/petroleum products or waste
- ☐ Salt
- ☐ Sewage
- ☐ Unknown
- ☐ Other

Material Listed on or Defined by

- ☐ CAA Section 112(r) list (40 CFR Part 68)
- ☐ CERCLA Table 302.4 (40 CFR Part 302)
- ☐ EPCRA Extremely Hazardous Substance (40 CFR Part 355)
- ☐ NREPA Part 31, Part 5 Rules polluting material
- ☐ NREPA Part 111 or RCRA hazardous waste
- ☐ NREPA Part 121 liquid industrial waste
- ☐ Unknown
- ☐ Other

Immediate Actions Taken

- ☐ Containment
- ☐ Diversion of release to treatment
- ☐ Dilution
- ☐ Evacuation
- ☐ Decontamination of persons or equipment
- ☐ Hazard removal
- ☐ Neutralization
- ☐ Monitoring
- ☐ System shut down
- ☐ Other

Release Reached

- ☐ Surface waters (include name of river, lake, drain involved)
- ☐ Distance from spill location to surface water, in feet
- ☐ Drain connected to sanitary sewer (include name of wastewater treatment plant and/or street drain, if known)
- ☐ Drain connected to storm sewer (include name of drain or water body it discharges into, if known)
- ☐ Groundwater:
  - Is it a known or suspected drinking water source? Yes ☐ No ☐
  - What is the name of aquifer, if known?
- ☐ Soils (include type e.g. clay, sand, loam, etc.)
- ☐ Ambient Air
- ☐ Spill contained on impervious surface

Extent of Injuries(if any)	Was Anyone Hospitalized? ☐Yes Number Hospitalized: ☐No	Number of Injuries Treated Onsite:

Describe the incident, the type of equipment involved in the release, how the volume of loss was determined, along with any resulting environmental damage caused by the release. Identify who immediately responded to the incident (own employees or contractor — include cleanup company name, contact person, and telephone number). Also identify who did further cleanup activities if performed or known when report submitted.
☐ **Check here if description or additional comments are included on attached page**

Estimated quantity of any recovered materials and a description of how those materials were managed (include disposal method if applicable)
☐ **Check here if description or additional comments are included on attached page**

Assessment of actual or potential hazards to human health (Include known acute or immediate and chronic or delayed effects, and where appropriate, advice regarding medical attention necessary for exposed individuals.)
☐ **Check here if description or additional comments are included on attached page**

Michigan Department of Environment, Great Lakes, and Energy Notified

Initial Contact by: ☐ Phone ☐ FAX ☐ Email ☐ Other

Date of Initial Contact

Time of Initial Contact

All EGLE Staff Contacted	Telephone Number

Name of Person Making Initial Report

Title of Person Making Initial Report

Contact made by calling EGLE Pollution Emergency Alerting System (PEAS): 800-292-4706

Log Number Assigned

EGLE District or Field Office:

☐ Bay City ☐ Cadillac ☐ Calumet
☐ Crystal Falls ☐ Detroit ☐ Gaylord
☐ Grand Rapids ☐ Jackson ☐ Kalamazoo
☐ Lansing ☐ Marquette ☐ Newberry
☐ Warren

Note: EGLE Office locations are subject to change

Divisions or Offices Contacted

☐ Air Quality Division
☐ Drinking Water and Environmental Health Division
☐ Environmental Support Division
☐ Materials Management Division
☐ Office of Climate and Energy
☐ Office of the Clean Water Public Advocate
☐ Office of the Environmental Justice Public Advocate
☐ Office of the Great Lakes
☐ Oil, Gas, and Minerals Division
☐ Remediation and Redevelopment Division
☐ Water Resources Division

Other Entities Notified

	Date:	Time:
☐ National Response Center (NRC): 800-424-8802		
☐ US Coast Guard Office: ☐Detroit ☐ Grand Haven ☐ Sault Ste. Marie		
☐ US Department of Transportation		
☐ US Environmental Protection Agency		
☐ 911 (or primary public safety answering point)		
☐ Local Fire Department		
☐ Local Police/State Police/Sheriff Dept		
☐ Local Emergency Planning Committee		
☐ State Emergency Response Commission via MI SARA Title III Pgm		
☐Wastewater Treatment Plant Authority		
☐ Hazmat Team		
☐ Local Health Department		
☐ MIOSHA		
☐ Bureau of Fire Services Fire Marshal Division		
☐ MI Dept of Agriculture & Rural Development: 800-405-0101		
☐Other		

Person Contacted:

Telephone Number:

Date Written Report Submitted	**Signature of Person Submitting Written Report**

For information or assistance on this publication, please contact the Environmental Support Division, through EGLE Environmental Assistance Center at 800-662-9278. This publication is available in alternative formats upon request.

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