Melvindale-Northern Allen Park Public Schools
Stormwater Management Program Plan

Municipal Separate Storm Sewer System (MS4)
National Pollutant Discharge Elimination System (NPDES)
Stormwater Discharge Permit

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Stormwater Management Program Plan

1.0 Introduction

Melvindale-Northern Allen Park Public Schools (MNAPPS) is a public school district based in Michigan that owns or operates a regulated Municipal Separate Storm Sewer System (MS4). This Stormwater Management Plan (SWMP) has been developed to retain authorization to discharge stormwater to surface waters and reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable and protect water quality. Melvindale-Northern Allen Park Public Schools will implement and enforce this SWMP to the Maximum Extent Practicable.

This Stormwater Management Plan commits to actions throughout the permit cycle. This SWMP includes measurable goals for Best Management Practices (BMP), focusing on the six minimum measures. Measurable goals describe the actions Melvindale-Northern Allen Park Public Schools will take to implement each BMP and allow Melvindale-Northern Allen Park Public Schools to evaluate progress toward meeting key objectives outlined in the following sections.

MNAPPS owns and operates four (4) public properties within the boundaries of the "Detroit Urbanized Area". All of MNAPPS properties are within the urbanized area based off of the 2010 Census data, and the properties include:

1. Allendale Elementary School
2. Melvindale High School, Central Office, and Transportation Complex
3. Strong Middle School
4. Rogers Early Elementary School

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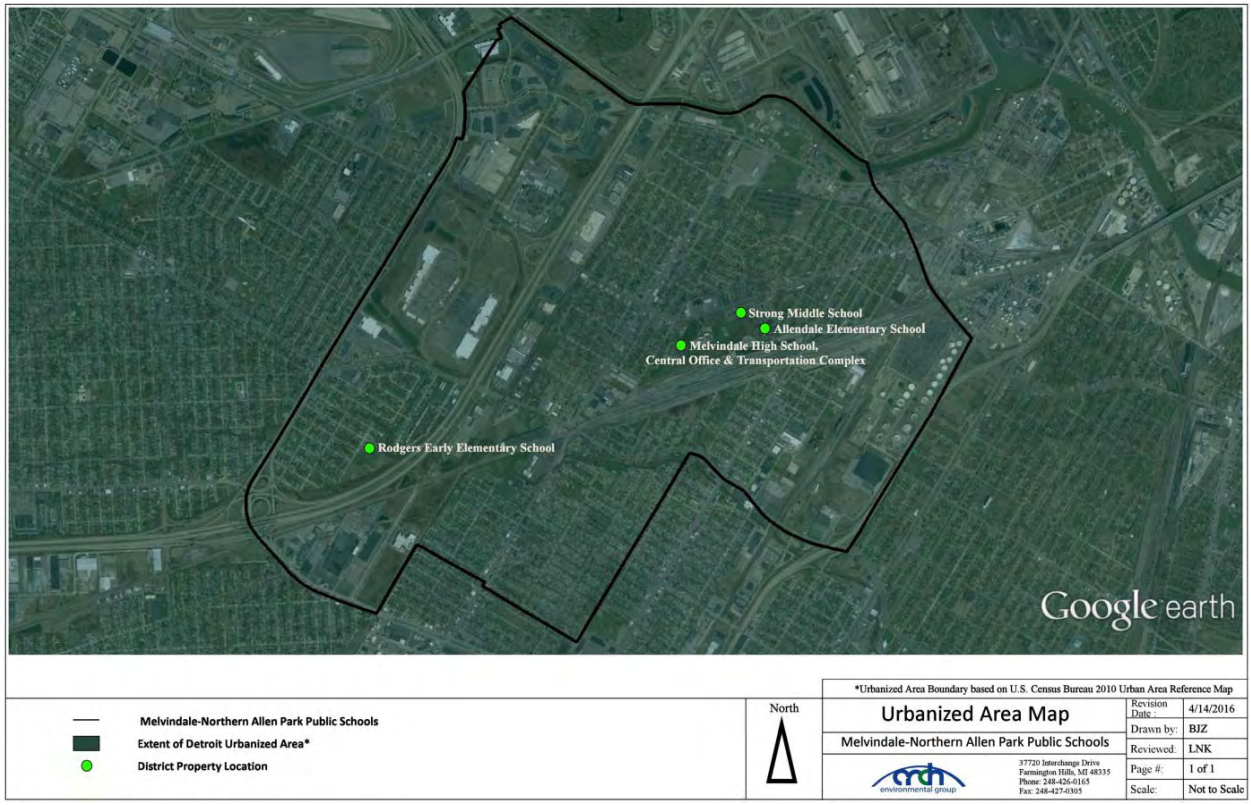
1.1 Regulated Area

A map identifying the urbanized area within the MNAPPS urbanized area as defined by the 2010 Census is provided below in Map 1.

Map 1 – District Jurisdictional Boundary Map – Urbanized Area[1]



1.2 Outfalls & Discharge Points/ Receiving Waters

The general permit authorizes the discharge of stormwater from municipal separate stormwater drainage systems to waters of the state from all existing outfalls or points of discharge.

MNAPPS has identified outfalls that discharge directly into surface waters of the state and discharge points that discharge into other MS4 drainage systems. MNAPPS' drainage system discharges directly or indirectly into the Ecorse River Watershed and the Rouge River Watershed as detailed in Map 2 below.

MNAPPS will complete site specific storm sewer system maps which identify outfall and discharge point locations, discharge point source identification numbers, and receiving waters. A receiving water table and any site-specific storm sewer system maps that have been completed so far are provided in Appendix "A". Any changes to the MNAPPS storm sewer system will be reflected on the storm sewer system maps and reported provided to EGLE during progress reporting. The district watershed boundary map is provided in below in the map listed as "Map 2".

Map 2 – District Watershed Map[2]

[1] Urbanized area boundary based on U.S. Census Bureau 2010 Urban Area Reference Maps.

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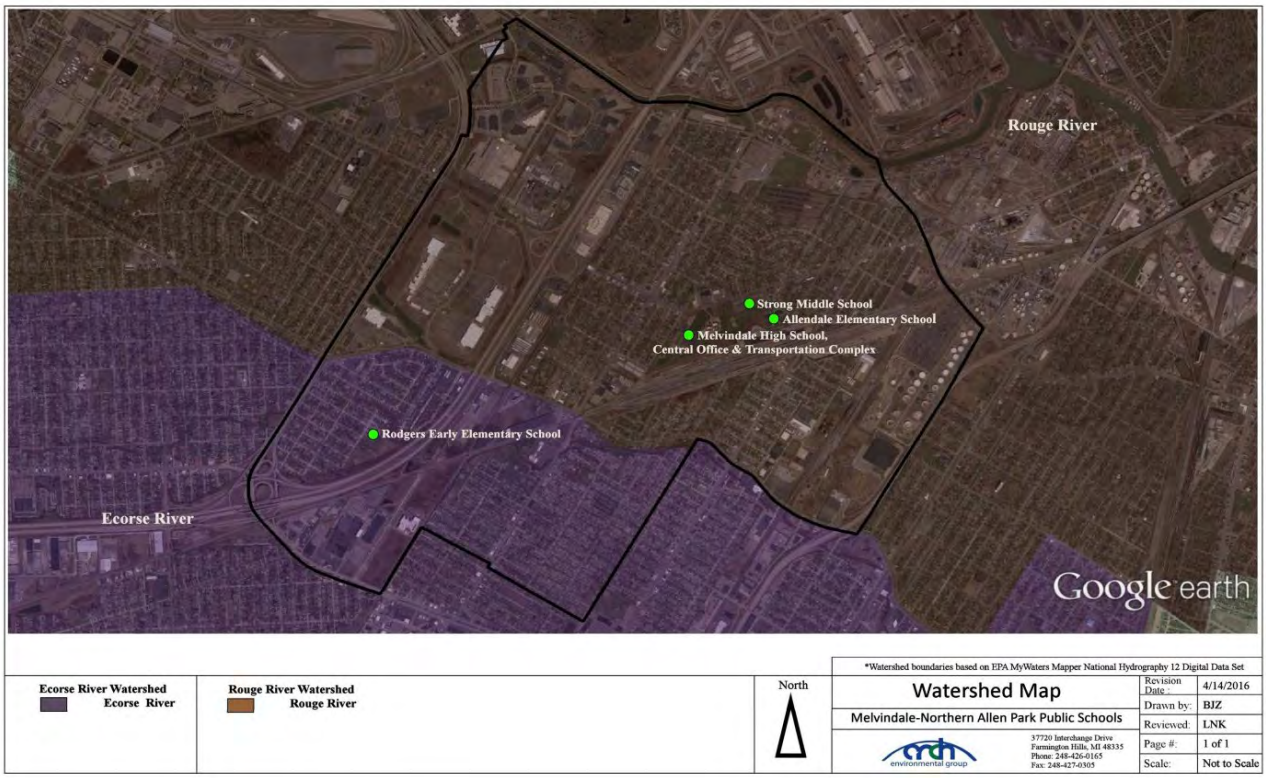

1.3 Enforcement Response Procedures

MNAPPS is committed to practicing sound stormwater management practices; including observance and adherence to all local, state, and federal stormwater statutes, rules, and regulations. Enforcement of the policies, procedures, and best management practices (BMPs) outlined in this SWMP is the responsibility of the district Superintendent or their designee. MNAPPS had developed and passed a School Board Resolution requiring the district comply with the requirements of the Michigan National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit. Any questions regarding this policy and procedure will be directed to the Stormwater Manager. This procedure will be reviewed on an annual basis by the Stormwater Manager for any updates. 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
- Date Violation was Resolved

[2] Watershed boundaries based on Environmental Protection Agency MiWaters Mapper National Hydrography Dataset Mapper 12-Digit Watersheds.

A copy of the resolution is included with and an example of the Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking Sheet in Appendix "B".

2.0 Stormwater Management Program Plan (SWMP) Minimum Control Measures

This SWMP has been developed to describe the Best Management Practices (BMPs) MNAPPS will implement to meet the six minimum control measures and water quality requirements. The six minimum control measures include:

- **Public Participation/Involvement Program (PPP)**
- **Public Education Program (PEP)**
- **Illicit Discharge Elimination Program (IDEP)**
- **Construction Stormwater Runoff Control Program**
- **Post Construction Stormwater Runoff Program**
- **Pollution Prevention/Good Housekeeping Program**

Each BMP includes a measurable goal, implementation schedule, and measure of assessment.

2.1 Public Involvement/Participation Program (PPP)

Engaging and empowering the public in the effort to reduce the impacts of stormwater runoff is a key element of the public involvement/participation program.

2.1.1 Public Involvement/Participation Program Objectives

1. Process for making the Stormwater Management Plan available for public inspection and comment.
2. Process for inviting public involvement and participation in the implementation of SWMP best management practices and periodic review of the SWMP.

2.1.2 Public Involvement& Participation Procedure

1. The SWMP will be posted on the MNAPPS webpage for review and comment when it is approved by EGLE. The stormwater webpages will include the contact information to forward comments.
2. The public will be notified through announcements or newsletters that a copy of the SWMP is available on the MNAPPS stormwater webpage.
3. A public survey has been developed and placed on the MNAPPS stormwater webpage in an effort to provide input into stormwater implementation.
4. A link to a stormwater blog "Cleanwater Chronicles" has been added to the MNAPPS stormwater webpage. The stormwater blog explains water quality issues and promotes opportunities for public involvement.
5. Cooperation with local watershed protection groups.

2.1.3 Public Involvement& Participation Assessment

1. MNAPPS will review the public involvement & participation BMPs as part of annual SWMP review to determine level of district involvement and identify areas of improvement.

2.1.4 Public Involvement & Participation Program (PPP) BMP Table

BMP	Implementation of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.1.4.1 Public Notice of SWMP	Make SWMP available for public review through stormwater webpage.	Annually Throughout Permit Cycle	Public notice published in annual district wide newsletter announcing the availability of the SWMP for review, including contact information for comments.	Verify SWMP available on stormwater webpage, and track changes webpage posting of SWMP.	MNAPPS
	Notification in annual district newsletter to publicize updated SWMP and locations for review.			Keep copies of official SWMP posting notifications.	
	Contact information will be available on the stormwater webpages to forward comments regarding the SWMP.			Compile and track comments from the public.	
BMP #2.1.4.2 Stormwater Blog	Post link to stormwater blog on district website.	Ongoing Throughout Permit Cycle	A link to a stormwater blog established and maintained on the district stormwater webpage to assist in distributing information and updating the public on the watershed and activities.	Copies of monthly stormwater blog postings for reporting period.	MNAPPS
BMP #2.1.4.3 Stormwater Education Program Survey	Post survey on district website.	Ongoing Throughout Permit Cycle	Survey posted on the stormwater webpages and link maintained throughout the permit term to assess community knowledge and provide input into stormwater implementation.	Results of completed surveys.	MNAPPS
BMP #2.1.4.4 Participation Activities	Engage in environmental education activities.	Ongoing Throughout Permit Cycle	Increase in public participation in environmental activities and outreach events. Participation activities include water quality issues, stormwater management initiatives, home toxics, recycling, compost, and disposal.	Reports of participation.	MNAPPS

BMP	Implementation of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.1.4.5 Public Involvement & Participation Program Assessment	Evaluate the effectiveness of the public involvement program.	Annually Throughout Permit Cycle	Complete as part of annual SWMP review to determine level of district involvement and identify areas of improvement. Program activities may be adjusted based on the results of the assessment.	Copies of annual SWMP review noting any areas of needed improvement.	MNAPPS

2.2 Public Education Program (PEP)

MNAPPS's "Public Education Program (PEP)" is designed to promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants into the MNAPPS separate storm sewer system.

The term "Public" as referred in to in this program is defined to include all persons who could potentially affect the quality of stormwater discharges from MNAPPS properties including but not limited to MNAPPS faculty, staff, contractors, and students of MNAPPS, as well as area residents, visitors, public employees, local businesses, industries, construction contractors and property developers. This PEP will include a variety of mechanisms and venues to provide watershed awareness and pollution prevention education throughout the MNAPPS jurisdiction.

2.2.1 Public Education Program Objectives

1. Responsibility and stewardship in their 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 the 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 the MS4.
7. Identify and promote the availability, location, and requirements of properties 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. Promote methods for managing riparian lands to protect water quality.
10. Identify and educate commercial, industrial, and institutional properties about good housekeeping.
11. Provide training for staff.

2.2.2 Public Education Program Procedure

MNAPPS is targeting all community wide issues as high priority. No prioritization will be needed since educational activities are distributed to ensure that all community wide issues are reached to the public. It is anticipated that during the course of this permit a combination of educational approaches will be used to convey the individual components of the PEP. Educational mechanisms will include tracking of watershed specific education topics in various science curriculums, cooperation with the distribution or posting of community newsletters and other watershed partner literature, and event notices. MNAPPS has developed and will implement a comprehensive "Stormwater Management" webpage on the district's website. Additionally, program posters, are strategically placed throughout school properties. Copies of SEMCOG posters are provided in Appendix "C".

2.2.3 Public Education Program BMP Table

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.1 Promote public responsibility and stewardship in watershed.	Watershed website. Watershed specific website hosted by district; featuring watershed map, description of watershed, and links to watershed groups.	Ongoing Throughout Permit Cycle	Supply watershed information and promote watershed membership information. Educate the public on local water body health.	Update webpages as necessary. Confirm posting & track webpage reviews. Provide watershed membership information.	Students, faculty, and community	MNAPPS
	Place SEMCOG "7 Simple Steps to Clean Water" information on stormwater webpages.		SEMCOG "7 Simple Steps to Clean Water" information and links.	Update webpages as necessary. Confirm posting & track webpage reviews.		
	Review K-12 Science Curriculum to highlight items applicable to this program plan.	Curriculum Annually Throughout Permit Cycle	Review and update curriculum table, detailing number of students/grades level participating within each identified curriculum topic.	Updated curriculum table.	Faculty & students	
			Communicate with faculty regarding the resources available to reach the student audience.	Documentation of communication with faculty.		
	Publicize environmental related events through email, newsletters, or social media.	Ongoing Throughout Permit Cycle	Promote public awareness on environmental issues and increase district environmental participation.	Date, time location and name of event attended.	Students, faculty, and community	
				Maintain copies of e-mail notices (watershed announcement) of educational materials provided to district staff.		

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BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.2 Educate the public about the connection of the MS4 to the area waterbodies and the potential impacts discharges could have on surface waters of the state.	Posting of the training video "When it Rains, it Drains…The Stormwater Question" on the district webpage.	Ongoing Throughout Permit Cycle	Educate the public on local water bodies, water quality issues, and impacts of discharges on surface waters through visual media.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	MNAPPS
	Include information and links to USEPA and EGLE Stormwater information on district stormwater webpage.		Provide resources to water quality issues and impacts of discharges on surface waters.	Update webpages as necessary. Confirm posting of links & track webpage reviews.		
	SEMCOG posters placed strategically throughout the district.		Maintain three (3) various SEMCOG posters at each property. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		
	General Stormwater Awareness Training **(Level I Training further described in Sec. 3.0 of this SWMP)**	Once per permit cycle or during the 1st year of employment Throughout Permit Cycle	Provide training to teachers, administrative and support staff not conducting level II, Illicit discharge/pollution prevention training.	Copy of sign-in sheets and Agenda (if available).	Faculty	
		Ongoing Throughout Permit Cycle	Post stormwater training video on stormwater webpage.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	

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BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.3 Educate the Public on Illicit Discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.	Publicize 24-hour environmental hot-line phone numbers and instructions for reporting spills, illicit discharges, or connections.	Ongoing Throughout Permit Cycle	Track # of calls received on hotline per year. All calls to be addressed-outcome of calls. Goal of an overall decrease in number of illicit discharges in improper disposal of materials into MS4s.	Number of calls to the Stormwater Manager.	Students, faculty, and community	MNAPPS
			Place 24-hour environmental hot-line posters throughout the district.	Promotion/ publicizing efforts; number of posters placed throughout district.		
	Pollutants & Illicit Discharges webpage; featuring information regarding sources of pollution, how pollutants cause damage, illicit discharges. How to Report/Hotline Numbers poster; describing illicit discharges and how to report illicit discharges.		Maintain illicit discharge webpage.	Update webpages as necessary. Confirm posting & track webpage reviews.		
			Place "How to spot illicit discharge/ How to Report-Hotline Numbers" posters placed in Receiving Rooms at each MNAPPS property. Goal is to have one poster at each property.	Annual review of postings. Number of posters placed throughout district.		
	SEMCOG posters placed strategically throughout the district.		Goal to maintain three (3) various SEMCOG posters at each property. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		
	The district implements an active storm drain labeling/ marking program.	Ongoing Throughout Permit Cycle	Visually making a connection of storm drains to local waterways and the impacts of dumping pollutants into these drains, increase number of staff, students and visitors who can identify the connection. Mark all drains on pervious surfaces.	Annual inventory of stenciled basins.		

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BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.4 Promote preferred cleaning materials and procedures for car, pavement, and power washing.	SEMCOG posters placed strategically throughout the district.	Ongoing Throughout Permit Cycle	Goal to maintain three (3) various SEMCOG posters at each property. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.	Students, faculty, and community	MNAPPS
	Discontinue practice of allowing school or other private groups from holding car wash fund raising project on school property.	Annually Throughout Permit Cycle	Send notice to all school principals, athletic department informing them of the new policy.	Copy of annual notice.	Faculty & students	
BMP #2.2.3.5 Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.	Maintain a district "Good Housekeeping" informational page on stormwater management webpages.	Ongoing Throughout Permit Cycle	Address the environmental (including water quality) and resulting from improper handling and disposal of pesticides, herbicides, and fertilizers.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	MNAPPS
	SEMCOG posters placed strategically throughout the district.		Goal to maintain three (3) various SEMCOG posters at each property. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		
BMP #2.2.3.6 Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.	SEMCOG posters placed strategically throughout the district.	Ongoing Throughout Permit Cycle	Goal to maintain three (3) various SEMCOG posters at each property. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.	Students, faculty, and community	MNAPPS

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.7 Identify and promote the availability, location, and requirements of properties for collection and disposal of household hazardous wastes, travel trailer wastes, chemicals, and motor vehicle fluids.	Maintain a district "Household Hazardous Waste" informational page on stormwater management webpages.	Ongoing Throughout Permit Cycle	Address the environmental (including water quality) and public health effects resulting from improper handling and disposal of household hazardous waste, reduce the use of home toxics, keep citizens informed about the choices and responsibilities associated with purchasing, handling, and disposing of toxic substances. Increase the number of residents using the program to dispose of home toxics.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	MNAPPS
BMP #2.2.3.8 Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.	Maintain a district "Sewer Overflows and Septic Systems" informational page on stormwater management webpages.	Ongoing Throughout Permit Cycle	Educate why sewer overflows and septic systems are pollution issues. Promote proper and consistent maintenance of septic systems.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	MNAPPS
BMP #2.2.3.10 Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff.	Require contractors or vendors whose activities have potential to impact water quality to train applicable staff and follow the requirements of the SWMP. Direct contractors to online training. **[All Stormwater Training is outlined in Section 3.0 Training].**	Ongoing Throughout Permit Cycle	Contractors training and informed of pollution prevention and good housekeeping techniques.	Copy of sign-in sheets, pre-project meeting notes or inspections.	Contractors & vendors	MNAPPS & Contractors/ Vendors
BMP #2.2.3.11 Stormwater Education Program Effectiveness Survey	Post survey on district website	Annually Throughout Permit Cycle	A survey has been posted on the stormwater webpages, and will be posted throughout the permit term to ascertain behavioral changes.	Annual results of survey.	Students, faculty, and community	MNAPPS
BMP #2.2.3.12 Public Education Program Assessment	Summary of annual public education activities for the "Public Education" component to evaluate the effectiveness.	Annually Throughout Permit Cycle	Determine the level of education provided and identify areas of improvement.	Annual SWMP review. Summary of public education activities.	Students, faculty, and community	MNAPPS

2.2.4 Curriculum

MNAPPS has conducted a review of the current State of Michigan K-12 science curriculum to determine which topics and grade levels have applicability toward the goals of the SWMP. The MNAPPS K-12 science curriculum has been developed as required under Michigan Department of Education "Grade Level Content Expectations". MNAPPS encourages schools to incorporate watershed awareness, pollution prevention, recycling, ecology, and energy conservation into the core curriculum throughout the district.

The current K-12th grade Earth Science curriculum provides students with a wide range of topics specifically related to this permit. A listing of current K-12 grade level curriculum topics including grade level, curriculum code, description, and any additional activities included in the specific course work is provided in the table below.

Stormwater Program Related Science Curriculum K-12th Grade

Grade	Code	Description
K	K-ESS3-3	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
2	2-ESS1-1	Use information from several sources to provide evidence that Earth events can occur quickly or slowly
2	2-ESS2-2	Develop a model to represent the shapes and kinds of land and bodies of water in an area.
2	2-ESS2-3	Obtain information to identify where water is found on Earth and that it can be solid or liquid.
4	4-ESS2-1	Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation
5	5-ESS2-2	Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
5	5-ESS3-1	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.
6-8	MS-ESS2-4	Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.
6-8	MS-ESS3-1	Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the

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		result of past and current geoscience processes.
6-8	MS-ESS3-3	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.
6-8	MS-ESS3-4	Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.
9-12	HS-ESS2-5	Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
9-12	HS-ESS3-1	Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity
9-12	HS-ESS3-6	Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

2.2.5 Public Education Program Effectiveness

The effectiveness of the public education program will be evaluated based on progress made towards meeting the BMP objectives described above.

MNAPPS will implement a "Watershed Awareness Survey" to be used as an evaluation. The purpose of these surveys is to provide an assessment of public understanding of issues in the watershed related to pollution from stormwater runoff. The watershed survey is posted on the stormwater webpage and is distributed during internal stormwater training events. Results would be used to guide MNAPPS in identifying opportunities for enhancement of the PEP. Additionally, MNAPPS will conduct an annual review of the public education activities to determine the level of education provided and identify areas of improvement.

2.3 Illicit Discharge Elimination Program (IDEP)

The following MNAPPS Illicit Discharge Elimination Program is designed to identify, locate, prohibit, and effectively eliminate illicit discharges, including discharges of sanitary wastewaters, to the permitted separate stormwater drainage systems.

2.3.1 Illicit Discharge Elimination Program (IDEP) Program Objectives

1. Establish authority to investigate, inspect and monitor suspected illicit discharges.
2. Maintain maps of the MS4, points of discharge, and outfalls.
3. Prohibit non-stormwater discharge into the MS4.

4. Provide regular training to staff.
5. Instruct contractors to prevent dumping into the MS4.
6. Conduct routine dry weather screening.
    a. Conduct source investigations if the source of an illicit discharge/connection is not identified by field screening.
7. Illicit discharge identification and elimination program performance & effectiveness.

2.3.2 Property Site Storm Sewer System Maps and Lists

MNAPPS and consultants are currently completing storm sewer system mapping at each of the owner operated properties identified in Section 1.0 of this Stormwater Management Plan. Storm sewer system maps include detailed information of the storm sewer system, including the locations of outfalls, points of discharge, and waters of the State that receive the discharges. The maps include a unique identification number for each storm sewer location identified on the map. Latitude and longitude are also noted for outfall and points of discharge location. Storm sewer system information will be maintained and updated and reported in Progress Reports.

Outfalls are discharge points where stormwater is discharged directly to surface waters of the state. Surface waters of the state include streams, lakes, ponds, county drains, and wetlands. Outfalls can be pipes, ditches, or even sheet flow from the property. Some properties will have an outfall where they can manually control the discharge.

Points of Discharge are discharge points where stormwater is discharged to a municipal or private separate storm sewer system. The visual assessment will be conducted as close to the point of discharge as possible before the storm water enters the municipal or private separate storm sewer system. Points of discharge include on-site catch basins and trench drains, in-street catch basins, and conveyances to roadside ditches.

Copies of the current property storm sewer system maps are available at the Melvindale High School, Central Office, and Transportation Complex, 18656 Prospect, Melvindale, Michigan, 48122. Additionally, copies of the storm sewer system maps and a list of the outfalls and points of discharge are provided in Appendix “A”.

2.3.3 Illicit Discharge Identification & Investigation Procedure – Field Observations

MNAPPS will conduct field observations for 100% of all outfalls and points of discharge locations during dry weather or more expeditiously if MNAPPS becomes aware of a non-stormwater discharge. Outfalls and points of discharge will be inspected by personnel trained to recognize all signs of possible illicit discharges. Dry weather screening will occur at least once per permit cycle. Preferably, each outfall and point of discharge will be inspected and evaluated following a period of at least 48-72 hours of dry weather.

The field observations will focus on visual inspection for the following:

- Outfall/point of discharge number
- Date/name of inspector
- Date of last rainfall
- Presence or absence of flow
- Presence or absence of standing water
- Water clarity and color
- Presence of oil sheen, trash and or other floatable materials

- Presence of bacterial sheen or slimes
- Excessive vegetative growth
- Odor
- Suds
- Presence of oil

❖ These characteristics are documented even if no flow is observed at the time of the inspection.

All field observations are detailed on a "Screening Inspection Log". A copy of this log is provided in Appendix "D".

During field observations, in instances where the storm sewer outfalls and points of discharge are submerged or are connected to another enclosed sewer, the inspector will observe the nearest upstream storm sewer location or access point. Additionally, if dry weather flow is observed and it is obvious that an illicit discharge is present and the source of the discharge is obvious, MNAPPS will document the observations and the source and follow-up with applicable parties. Once a potential discharge is indicated at an outfall or point of discharge, additional inspection, field screening and source investigation activities are conducted.

2.3.4 Illicit Discharge Identification & Investigation Procedure – Field Screening & Source Investigation

At the time of the outfall or discharge point inspection, if dry weather flow is observed and the source is not obvious, the inspector who identified the discharge shall continue and conduct an upstream source investigation to determine the origin of the flow. The initial investigation includes visual and olfactory observations upstream from the outfall/point of discharge. If necessary, relevant indicator field screening or dye tracing will be conducted.

If the origin of the flow is not identified during the visual upstream investigation, a grab sample is collected from the discharge for indicator field screening analysis. Indicator monitoring/field screening is the secondary tool utilized for dry weather flow without obvious indicators such as very high turbidity, strong odors, or visible discharge. Screening may include some or all of the indicator parameters:

- Temperature
- pH
- Detergents (i.e., surfactants)
- Chlorine
- Ammonia
- Turbidity
- Conductivity

Indicator parameters used to assess the dry weather flow shall be determined by the visual and olfactory observations and upstream source investigation.

Additional grab samples may be collected and delivered for external laboratory analysis, only if additional test parameters are required for the source investigation. The laboratory analysis parameters for grab samples are determined by the type of contamination suspected at the time of the source investigation.

Laboratory indicator parameters are based on EGLE guidance and as specified in the reference sources identified above. The selected laboratory parameters are:

- Fluoride

- Coliform
- E-coli
- Potassium
- Color
- Ammonia

The exact procedure for tracking the illicit discharge will depend on the particular facts of each incident. At the time of the identification of the observed dry weather flow, the flow will be tracked upstream until the source is isolated. Once the source has been isolated down to a specific site location, the work will become source confirmation. If the source is not confirmed, additional fieldwork, building evaluation, or dye testing may be necessary. Additional source investigations will be conducted within 30 days of the original observed dry weather flow.

Once the elimination of an illicit connection or illicit discharge has occurred, an elimination report detailing the corrective actions with attached work orders, photos or dye tracing results will be compiled for documentation purposes. Field inspections will continue until it can be reported that no illicit connection or discharge is present at that outfall/point of discharge.

2.3.5 Illicit Discharge/Connection Elimination Procedure

Illicit discharges and connections are identified through reporting, routine storm sewer system inspections and dry weather screening inspections. A "How to Spot Illicit Discharges" poster along with a "How to Report/Hotline Numbers" posters are placed in the receiving/custodial areas in each property to report concerns. MNAPPS goal is to evaluate all potential unauthorized or suspected illicit discharge to the municipal separate storm sewer system (MS4) and perform any necessary notifications and reporting to the applicable agencies (i.e., EGLE, local drain commission, etc.) within the required time period(s).

MNAPPS will evaluate and conduct the following actions regarding reported or observed illicit discharges/illegal dumping spills into the storm drainage system:

- If, in the opinion of MNAPPS, immediate action to address the suspected discharge is indicated, MNAPPS will ensure that the site is investigated within 7 days.
- Conduct source investigations, including applicable field screening to trace the origin of the materials within 30 days of the reported/observed illicit discharge.
    - MNAPPS will follow existing spill response procedures outlined in Section 2.3.10, under Spill Response, Policy & Procedures, if required.
- Once the source has been isolated down to a specific site location, the work will become source confirmation
- If the responsible party is identified, educate the party on the impacts of their actions, explain the stormwater requirements, and provide information regarding Best Management Practices.
- Evidence of illicit discharges traced to other MS4 jurisdictions will be provided to the responsible MS4 operator along with any collected data to assist that MS4 operator in completing their investigations to correct the illicit discharge or connection.
- MNAPPS will cooperate with the MS4 operator in determining the source or type of illicit discharge and/or connection and will follow-up to ensure that appropriate action has been completed by the MS4 operator to eliminate the discharge.

- Continue inspection and follow-up activities until the illicit discharge activity has ceased.
- Document all activities utilizing the Illicit Discharge/Illegal Dumping Reporting form.

A copy of the Illicit Discharge/Illegal Dumping Reporting form is located in Appendix "E".

Once an illicit discharge has been confirmed from a MNAPPS property, the discharge will be corrected using the most expedient method possible based on the type and configuration of the discharge or connections. Other illicit discharges or releases of polluting materials will be corrected through administrative measures including employee training, placement of signs or markings, policy revisions, or any other steps necessary to eliminate the continued release of polluting materials to the MS4.

Within 60 days of a confirmed illicit connection from a MNAPPS property, MNAPPS will take steps to fix or eliminate the illicit connection. These steps include a review of corrective methods to be used to repair or eliminate the connection, determine the length of time the repair or elimination will take to complete, the cost of the elimination, the pollution potential and consider how the removal of the illicit connection will be confirmed. Corrective methods include capping, closing, or re-routing illicit connections to the sanitary sewer or other collection systems.

2.3.6 Illicit Discharge Elimination Program Policy

Prevention of pollution from storm water runoff and the protection of the quality of the waters of the State of Michigan are of utmost importance to MNAPPS. MNAPPS does not have regulatory authority to create or enforce ordinances. MNAPPS has developed a board policy resolution to direct compliance with these requirements. The MNAPPS School Board Resolution was passed in March 2017. Additionally, the district developed a "Stormwater Management – Illicit Discharge Regulatory Policy". A copy of the Illicit Discharge Regulatory Policy" Is located in Appendix "E" and a copy of the School Board Policy Resolution is provided in Appendix "B".

The MNAPPS Stormwater Manager or designee will be provided full access to all MNAPPS properties and properties owned and operated by the district as required to inspect, investigate, and monitor suspected or confirmed illicit discharges or connections to the MS4.

Illicit Discharge means any discharge to, or seepage into the separate stormwater drainage system that is not composed entirely of stormwater or uncontaminated groundwater except discharges pursuant to an NPDES permit. Illicit discharges include but are not limited to the following:

- Dumping of motor vehicle fluids
- Improper disposal of household hazardous wastes
- Grass clippings
- Leaf litter
- Pet & other animal wastes
- Unauthorized discharges of sewage
- Industrial wastes
- Restaurant wastes
- Vehicle & equipment wash waters
- Any non-stormwater waste

All activities are documented utilizing the Illicit Discharge/Illegal Dumping Reporting form

Illicit Connection means a physical connection to the MS4 separate stormwater system that primarily conveys non-stormwater discharges other than uncontaminated groundwater into the MS4 separate storm sewer system; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

MNAPPS's policy is to eliminate all illicit connections or discharges from their properties and restrict the discharge of polluting substances to the separate storm sewer system. The process to achieve these goals will consist of the inspection and screening of all storm sewer systems and elimination of any improper connection from any MNAPPS property to any waterway or the municipally owned separate storm sewer system (MS4).

Discharge Prohibitions

1. Prohibition of Illicit Discharges:
    a. MNAPPS prohibits the discharge of non-stormwater discharges into the storm drain system, including but not limited to pollutants or waters containing any pollutants.
2. The following discharge is not prohibited:
    a. This policy excludes prohibitions from the discharge or flows from firefighting activities to the MNAPPS MS4. Discharge or flows from firefighting activities will be addressed only if they are identified as significant sources of pollutants to surface waters of the state.
    b. The following activities are not prohibited under this policy unless they are determined to be significant sources of pollutants to surface waters of the state:
        - Water line flushing and discharges from potable water sources.
        - Landscape irrigation runoff, lawn water runoff, and irrigation waters.
        - Diverted stream flows and flows from riparian habitats and wetlands.
        - Rising groundwater and springs.
        - Uncontaminated groundwater infiltration and seepage.
        - Uncontaminated pumped groundwater, except groundwater cleanups specifically authorized by NPDES permits.
        - Foundation drains, water from crawl space pumps, footing drains, and basement sump pumps.
        - Air conditioning condensation.
        - Waters from noncommercial car washing (runoff from family home).
        - Street wash water.
        - Dechlorinated swimming pool water from single, two, or three family residences. (A swimming pool operated by the permittee shall not be discharged to a separate storm sewer or to surface waters of the state without NPDES permit authorization from EGLE.)

Prohibition of Illicit Connections

1. Improper connections in violation of this regulatory mechanism must be disconnected and redirected.
2. Illicit discharge and connections will be eliminated.
3. The construction, use, maintenance, or continued existence of illicit connections to the storm drain system is prohibited by MNAPPS. 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.

2.3.7 Illicit Discharge Elimination Training

A training program is an important component of to an effective IDEP. Training is required for all employees whose job responsibilities involve illicit discharge related activities, or indicate a potential to cause, witness, or report and illicit discharge or connection. Training is discussed in detail in Section 3.0 of this SWMP.

2.3.8 Illicit Discharge Elimination Program Effectiveness

MNAPPS is required to track implementation of the illicit discharge elimination program stormwater management items and evaluate its effectiveness. Documentation of these items includes documentations of actions taken to eliminate illicit discharges. The following are examples of the types of performance measures and effectiveness measures that may be used to evaluate the effectiveness of the IDEP program. The following information will be reviewed annually, and will be used to focus and modify activities to maximize environmental benefits of the plan:

- Verify the distribution of public education posters.
- Number of outfalls/discharge points screened.
- Number of illicit connections found.
- Number of illicit connections eliminated.
- Number and type of discharges that are investigated.
- Actions conducted to follow-up discharges that are identified or reported.
- Number of scheduled clean-outs and routine maintenance work conducted.

2.3.9 Illicit Discharge Elimination Program – BMP Table

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.3.9.1 Property Storm Sewer System Maps	Provide an up-to-date storm sewer system map. The maps shall identify the storm sewer system, location of outfalls and points of discharge, and names and locations of the surface waters of the state receive the discharge.	Maps completed in 2016 - 2017 Updates ongoing as needed. Within 30 days of new outfalls, discharge points, structures, and conveyances. Throughout Permit Cycle	100% of properties mapped, and 100% of storm sewer system updates mapped.	Maintain property site maps at Property Operations Building.	MNAPPS
				Update property map with sewer system updates. Maintain maps for progress report submittal.	MNAPPS
BMP#2.3.9.2 Enforcement	Written policy to enforce elimination of illicit discharges into MS4 owned by the Permittee.	Board Resolution and Policy passed March 2017	Updated Board Policy Resolution approved.	Copy of Board Policy Resolution.	MNAPPS
	Written policy to enforce elimination of illicit discharges into MS4 owned by the Permittee.	Illicit Discharge Regulatory Policy Developed and Implemented	Illicit Discharge Regulatory Policy developed and implemented.	Copy of the Illicit Discharge Regulatory Policy and distribution to staff.	
BMP #2.3.9.3 Dry Weather Screening	Dry Weather Screening conducted every 5 years. Dry weather screening will be conducted by personnel trained to recognize all signs of possible illicit discharges.	DWS Scheduled for 2020-2021	100% of outfalls and point of discharges inspected and evaluated following a period of 48-72 hours of dry weather. Outfalls/points of discharges re-inspected if necessary.	Maintain dry weather screening inspection logs/reports.	MNAPPS

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.3.9.4 Illicit Discharge Reporting	Eliminate illicit discharges and connections through reporting, routine storm sewer system inspections and dry weather screening inspections.	Ongoing Throughout Permit Cycle	Place "How to spot illicit discharge/ How to Report-Hotline Numbers" posters placed in Receiving Rooms at each MNAPPS property. Goal is to have one poster at each property.	Annually verify number of posters in place throughout the district.	MNAPPS
			Advertise reporting hotline on district webpage.	Track number of calls and document calls onto Illicit Discharge/Illegal Dumping Reporting form. (Appendix "E").	
BMP #2.3.9.5 Unauthorized Discharge/ Illicit Discharge Complaint Response	MNAPPS will immediately evaluate any potential unauthorized or suspected illicit discharge to the municipal separate storm sewer system (MS4) and perform any necessary notifications and reporting to the applicable agencies (i.e., EGLE, local drain commission, etc.) within the required time period(s). This procedure is outlined in Section 2.3.10 Polluting Materials Emergency and Spill Response Policy & Procedures.	If, in the opinion of MNAPPS, immediate action to address the suspected discharge is indicated, MNAPPS will follow up within 7 days.	100% of unauthorized or suspected illicit discharges evaluated (field observation, field screening, and source investigation) and eliminated.	Documentation of relevant field observations, field screening or source investigations.	MNAPPS
		Within 30 days of reported suspected discharge.			
BMP #2.3.9.6 Illicit Connections	Reroute, repair, or disconnect any illicit connections.	Within 60 days of identified illicit connection	Take steps to eliminate 100% of identified illicit connections.	Work order, receipt or report detailing the illicit connection correction activities.	MNAPPS
BMP #2.3.9.7 Illicit Discharge Elimination Training	Train staff on the identification and reporting of illicit discharges or improper connections and the cleanup/notification procedures for spills of polluting materials.	Once per permit cycle or during the 1st year of employment Throughout Permit Cycle	Goal of providing illicit discharge elimination training to all maintenance, transportation, custodial and skilled trade staff who work for MNAPPS. **[All Stormwater Training is outlined in Section 3.0 Training]**	Copy of sign-in sheets and Agenda (if available).	MNAPPS

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.3.9.8 Notice of Intent to Discharge Tracer Dyes	Maintain approval from EGLE for authorization to discharge tracer dyes in surface waters per General Rule 97 to conduct source investigations.	As needed Throughout Permit Cycle	EGLE approval to discharge tracer dyes.	Documentation of EGLE approval.	MNAPPS
BMP #2.3.9.9 IDEP program Performance & Effectiveness	Review performance measures to evaluate the effectiveness of the IDEP program. Items include; posting of IDEP public education posters, number of outfalls/discharge points screened, number of illicit connections found, number of illicit connections eliminated, number and type of violations investigated, and number of scheduled clean-outs and routine maintenance work conducted.	Annually Throughout Permit Cycle	Annual review of SWMP IDEP program performed.	Maintain copy of SWMP annual review and evaluation information for progress reporting.	MNAPPS

2.3.10 Polluting Materials Emergency and Spill Response Policy and Procedures

Purpose

This policy and associated procedures have been developed to define appropriate and safe response procedures for spill or accidental releases of hazardous materials or substances at all MNAPPS's properties.

Policy

MNAPPS will comply with all Federal, State, and local regulatory requirements for the management and reporting of all hazardous materials and/or waste releases.

The Maintenance & Operations Department will maintain responsibility for monitoring any changes in regulatory requirements regarding hazardous materials and waste spills or accidental releases. This policy will be revised as necessary based upon any changes in the regulatory requirements or internal experiences. All hazardous materials spills or releases will be thoroughly investigated by the Director of Operations.

The Director of Operations will immediately report any release of any polluting materials from the MS4 to surface waters or groundwater of the state, unless a determination is made that the release is not in excess of the threshold reporting quantities in the Part 5 Rules.

If it is determined that the release poses a threat to the safety or the environment outside the property, the Director of Operations will report the release during regular working hours to EGLE **District Office at (586)-753-3700**, or after hours to the 24-hour **Michigan Pollution Emergency Alerting System (PEAS) at 1-800-292-4706** immediately or within 24 hours of knowledge of the release. Any release of oil (includes gasoline, diesel fuel, used oil and mineral spirits) to navigable waters or adjoin shorelines will be reported to the 24-hour **National Response Center (NRC) at 1-800-424-8802** immediately or within 24 hours of knowledge of the release. In the event the spill takes place after working hours, site personnel will contact the assigned coordinator to notify the Director of Operations that an incident has occurred.

The Director of Operations is responsible for notifying EGLE and/or other local, state, or federal regulatory agencies in the event that a release to the MS4 or surface waters occurs at levels above the threshold reporting quantities referenced in the PA 451 Part 5 rules.

Emergency Spill Response Procedures

Each property having the potential for the release of a hazardous material or substance shall have trained and knowledgeable staff members to respond and/or implement spill response procedures for that property. Spill containment materials such as absorbent pigs, pads, booms, diking materials, storm drain covers, etc. are to be stored and maintained at all properties for use by trained employees in the event of a spill or accidental release.
The following general guidelines are to be implemented as applicable in managing spills and accidental releases:

1) For spills in which there is no immediate dangers to employees, students, or the general public and does not represent a danger of contamination to a sanitary sewer, storm sewer, or the ground:

A. Contain spill to the smallest area possible.
B. Review the Material Safety Data Sheet/Safety Data Sheet for determination of proper spill handling, and appropriate personal protective equipment selection.
C. Place compatible absorbent material or spill pads on the area.

D. Clean up and containerize the absorbent materials.
E. Contact the Maintenance and Operations Department for waste disposal instructions and additional cleaning requirements.

2) For a spill that represents an immediate danger to employees, students, or the general public and/or has the potential to impact the sanitary sewer, storm sewer, or the ground:

A. Notify the Maintenance and Operations Department.
B. If there is the treat of fire, explosion, or if any person(s) exhibits severe symptoms of exposure, contact 911 to initiate local emergency services.
C. Alert anyone in the area and begin evacuation procedures.
D. Use absorbent socks, booms, or other absorbents to dike the spill area if safe to do so and secure the area from unauthorized personnel. Refer to the Material Safety Data Sheet to determine the proper personal protective equipment.
E. Remove all sources of ignition for releases of flammable or combustible materials.
F. The Maintenance and Operations Department will initiate all notification procedures and contact the contracted emergency response contractor to mitigate and remediate the release.
G. Complete the "Hazardous Material or Waste Spill Exposure Form" for all exposed persons.
H. The Director of Operations will assess the spill and notify all agencies as required.

3) Spills of Elemental Mercury

A. Contact the Maintenance and Operations Department immediately.
B. Remove all personnel from the immediate spill area without traveling through the spill area, and if possible, close the door and lower the thermostat in the affected room.
C. Keep all potential contaminated persons in a close area to the spill but outside of the affected area to minimize additional exposure to mercury vapors.
D. Remove and containerize any potentially contaminated clothing or other articles from affected persons.
E. The Director of Operations will contact the appropriate emergency response contractor to clean-up the spill and properly decontaminate and/or dispose of all contaminated articles.

Refer to sections **2.3.4 Illicit Discharge Identification & Investigation Procedure – Field Screening & Source Investigation** and **2.3.5 Illicit Discharge/Connection Elimination Procedure** for implementation timeframes.

This guidance has been developed in anticipation of potential releases of hazardous materials and substances. The procedures outlined in this guidance will only be implemented by those persons who have received sufficient training and are competent in the handling of the released material.

As appropriate, illicit discharges or releases of polluting materials will be corrected through administrative measures including employee training, placement of signs or markings, policy revisions, or any other steps necessary to eliminate the continued release of polluting materials to the MS4. MNAPPS will conduct follow-up inspections and sampling as needed to ensure that appropriate action has been completed.

2.4 Construction Site Stormwater Runoff Control Program

MNAPPS's goal is to establish procedures for construction stormwater runoff control to meet minimum measure requirements to maximum extent practicable.

Construction refers to actions that result in a disturbance of the land, including clearing, grading, excavating, and other similar activities.

Construction-related activities are activities that support the construction project such as stockpiles, borrow areas, concrete truck washouts, fueling areas, material storage areas and equipment storage areas.

2.4.1 Construction Site Stormwater Management Program Objectives

A. Process for notify the Part 91 Agency appropriate staff when soil or sediment is discharged to the MS4 from a construction activity.
    - The procedure shall allow for the receipt and consideration of complaints or other information submitted by the public or identified internally as it relates to construction stormwater runoff control.
B. Procedure for when to notify EGLE when soil, sediment, or other pollutants are discharged to the MS4.
    - Other pollutants include pesticides, petroleum derivatives, construction chemicals, and solid wastes that may become mobilized when land surfaces are disturbed.
C. Procedure for ensuring that construction activity one acre or greater in total land disturbance obtains a Part 91 Permit.

2.4.2 Construction Notification Procedure

EGLE certified construction stormwater operator inspector conducting site inspections will normally detect any soil or sediment entering the MS4.

In the event an inspector identified a discharge during an inspection:

1. The inspector shall document all details of the soil erosion and sedimentation control deficiency and report to the Director of Operations/MNAPPS Stormwater Manager.
2. The Director of Operations/MNAPPS Stormwater Manager (or designee) is responsible for assessing any suspected or confirmed discharge and notifying the appropriate agency.
3. MNAPPS will notify the local Part 91 agency and EGLE when significant runoff of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, or solid wastes from the construction site discharges to the MS4 or surface waters of the state within 24 hours of discovery or as otherwise required by the issuing agency.

In the event of a public complaint:

MNAPPS 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 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).

MNAPPS will notify the Part 91 Agency, when soil, sediment, and other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are discharged into MS4.

MNAPPS ensures that construction activity one acre of greater in total earth disturbance with the potential to discharge to the MS4 does obtain a Part 91 Permit and State of Michigan Permit by Rule.

2.4.3 Part 91 Permit

MNAPPS will obtain a Part 91 Permit through the site plan review process with the appropriate county or municipal permitting agency when any construction activity that results in a land disturbance meets the following criteria:

- Greater than or equal to one (1) acre, or
- Disturb less than one (1) acre that is part of a common plan of development or sale.

2.4.4 Permit by Rule Compliance

MNAPPS shall comply with the State of Michigan Permit by Rule (Rule 323.2190) for stormwater discharge from construction activity. Sites disturbing one (1) to five (5) acres with a point source discharge to the waters of the state receive automatic storm water coverage upon securing a SESC permit from the appropriate Part 91 recognized County Enforcing Agency, Municipal Enforcing Agency, or Authorized Public Agency (APA) under the authority of Part 91.

1. Construction sites with at least one (1) acre but less than five (5) acres of soil disturbance with a surface water discharge, must obtain a county or municipal SESC permit, and are required to follow the provisions of the Permit by Rule, but do not need to notify EGLE of the construction activity.
2. Construction sites disturbing over five (5) acres with a point source discharge to the waters of the state must obtain a county or municipal SESC permit and submit a Notice of Coverage (NOC) and other pertinent documents and the appropriate fee to EGLE.

Requirements of Permit by Rule include, but are not limited to:

- Weekly site inspections conducted by a Certified Construction Stormwater Operator.
- Inspection within 24 hours of a precipitation event that results in a discharge from the site by a Certified Construction Stormwater Operator.

2.4.5 Construction Site Stormwater Management-BMP Table

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.4.5.1 Notification of Deposit During Inspection	MNAPPS will notify the local part 91 agencies and EGLE when runoff from the construction site discharges significant pollutants to the MS4 or surface waters of the state within 24 hours of discovery or as otherwise required by the issuing agency. The MNAPPS Stormwater Manager (or designee) is responsible for assessing any suspected or confirmed discharge and notifying the appropriate agency. (Refer to section 2.4.2)	As necessary Throughout Permit Cycle	100% discharges identified and appropriate agencies notified. Control of potential system failure.	Documentation of Construction Stormwater Operator site inspection.	MNAPPS
	Track 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 MS4.			Documentation of public complaint (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]).	MNAPPS
BMP #2.4.5.2 Part 91 Permit	MNAPPS will ensure that any construction activity that result in a land disturbance greater than or equal to one (1) acre or disturb less than one (1) acre that is part of a common plan of development or sale will obtain a Part 91 Permit through the site plan review process.	As necessary Throughout Permit Cycle	100% of permits obtained.	Copy of permit and associated soil erosion and sedimentation control plans.	MNAPPS

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.4.5.3 Permit by Rule	Construction sites between (1) acre and five (5) acres of soil disturbance follow the provisions of the Permit by Rule, but do not need to notify EGLE of the construction activity.	As necessary Throughout Permit Cycle	Goal of 100% of weekly and precipitation event inspections completed by certified Construction Stormwater Operator.	Copy of inspections.	MNAPPS
	Construction sites disturbing over five (5) acres with a point source discharge to the waters of the state must follow provisions of the Permit by Rule and submit a Notice of Coverage (NOC) and other pertinent documents and the appropriate fee to EGLE.		Goal of 100% of weekly and precipitation event inspections completed by certified Construction Stormwater Operator.	Copy of inspections.	MNAPPS
			100% NOC obtained.	Copy of NOC	

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2.5 Post Construction Stormwater Controls for New Developments & Redevelopments

The following MNAPPS Illicit Discharge Elimination Program is designed to identify, locate, prohibit, and effectively eliminate illicit discharges, including discharges of sanitary wastewaters, to the permitted separate stormwater drainage systems.

2.5.1 Post Construction Stormwater Management Program Objectives

The post-construction stormwater run-off controls are necessary to maintain or restore stable hydrology in receiving waters by limiting surface runoff rates and volumes and reducing pollutant loadings from sites that undergo development or significant redevelopment.

The objects of this program and associated procedures are to:

a. Develop and implement regulatory mechanisms to address post-construction stormwater runoff for new development and redevelopment projects, including preventing or minimizing water quality impacts.
b. Develop and implement regulatory mechanisms for projects that disturb one or more acre, including projects less than an acre that are part of a larger common plan of development or sale and discharge into the applicants MS4.
c. Ensure post construction controls to minimize water quality impacts by following water quality treatment standards.
d. Require that BMPs be designed on a site-specific basis to reduce post-development total suspended solids loading.
e. Procedure to meet water quality treatment and channel protection standards of new development or redevelopment projects.
f. Address “hot spots”.
g. Submit site development plans for review and approval.
h. Require adequate long-term O&M of BMPs by ordinance or other regulatory mean.

MNAPPS has developed a Board Policy Resolution, passed in March 2017, to direct compliance with these requirements. Additionally, the district has developed a “Stormwater Management - Post-Construction Policy & Procedure” to direct compliance with these requirements. The Board Policy Resolution and “Stormwater Management - Post-Construction Policy & Procedure” are located in Appendix “B”.

2.5.2 Water Quality Treatment Standard

MNAPPS goal is to include water quality treatment volume standards for each new construction or redevelopment of projects where the area of disturbance exceeds one (1) acre. One or more of the following treatment standards will be included as part:

1) Treat the first one inch of runoff from the entire site.
2) Treat the runoff generated from ninety percent (90%) of all runoff-producing storms for the project site.

The source of the rainfall data for the water quality treatment standard of requiring the treatment of the runoff generated from the ninety percent (90%) of all runoff-producing storms is:

- EGLE memo dated March 24, 2006, which is available via the internet https://www.michigan.gov/documents/deq/wrd-hsu-ninety-percent_557709_7.pdf.

Treatment methods shall be designed on a site-specific basis to achieve the following:

1. A minimum of eighty percent (80%) removal of total suspended solids (TSS), as compared with uncontrolled runoff, or
2. Discharge concentrations of TSS not to exceed 80 milligrams per liter (80mg/L).

A minimum treatment volume standard is not required where site conditions are such that TSS concentrations in storm water discharges will not exceed 80mg/L.

Treatment methods shall be designed on a site-specific basis to reduce the discharge of sedimentation or TSS from the site. Such methods may include:

1. Stand pipe filters in storm water detention basins
2. Sediment filter tanks
3. Catch basin sumps
4. Aqua-Swirls®
5. Treatment trains
6. Rain Gardens
7. Pervious pavement systems

2.5.3 Channel Protection Performance Standard

MNAPPS understands that channel protection criteria are necessary to maintain post-development stormwater runoff volumes and peak flow rates at or below existing levels for all storms up to the 2-year, 24-hour event. "Existing Levels" means the runoff volume and peak flow rate for the last land use prior to the planned new development or redevelopment. More restrictive channel protection criteria may be utilized on a case-by-case basis, as appropriate.

Rainfall Data
The rainfall data for calculating runoff volume and peak flow rate shall be the Rainfall Frequency Atlas of the Midwest, 1992 [National Oceanic & Atmospheric Administration (NOAA) - Huff & Angel].

A post-construction stormwater runoff program compliance assistance document is available via the internet at http://www.michigan.gov/documents/deq/lwm-hsu-nps-ninety-percent_198401_7.pdf.

2.5.4 Site –Specific Requirements

Because each site has its' own special circumstances and conditions, the following BMPs will be considered as appropriate according to site conditions:

- Reduce runoff from the site to greatest extent possible (provide holding basins, divert water through grassed swales).
- Prevent spills and discharges.
- Control waste such as building materials, concrete washout, chemicals, litter, and sanitary waste.
- Phasing will be considered to limit amount of exposed soils.
- Interim soils stabilization methods are to be considered (temporary seeding, mulching etc.).
- Buffer preservation (avoid exposing soils to property limits).
- Inspection staff will be trained in the proper maintenance and operation of Soil Erosion and Silt Prevention measures.

Construction plans will be reviewed for sites with known soil and/or groundwater contamination, including potential "hot spots" and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria to ensure that infiltration BMPs do not exacerbate existing conditions. Hot spots include areas with the potential for significant pollutant loading such as vehicle service and maintenance properties, vehicle equipment cleaning properties, fleet storage areas for buses, and outdoor liquid container storage.

Additional water quality standards or pretreatment measures may be required in addition to those included in the water quality criteria in order to remove potential pollutant loadings from entering either groundwater of surface water systems.

Pretreatment measures include:

Stormwater Hot Spots	Minimum Pre-Treatment Options
Vehicle service and maintenance properties	1. Oil/Water Separators/Hydrodynamic Devices 2. Use of Drip Pans and/or Dry Sweep Material under Vehicles/Equipment 3. Use of Absorbent Devices to Reduce Liquid Releases 4. Spill Prevention Response Program
Fleet storage areas for buses	BMPs that are part of a Stormwater Pollution Prevention Plan (SWPPP)
Vehicle Fueling Stations	1. Oil/Water Separators/Hydrodynamic Devices 2. Water Quality Inserts for Inlets 3. Spill Prevention Response Program
Vehicle equipment cleaning properties	BMPs that are part of a Stormwater Pollution Prevention Plan (SWPPP)
Outdoor liquid container storage	Spill Prevention Response Program

2.5.5 Site Plan Review

This policy is to establish requirements to submit a site plan for review as required by EGLE NPDES Phase II Stormwater Discharge Permit. MNAPPS will prepare and submit a written application, including a site plan for review and approval of post-construction stormwater runoff BMPs, for all new construction or redevelopment projects where the area of disturbance exceeds one (1) acre. The application will be completed in a form and manner as prescribed by the local municipality or governing unit in which the property is located. The site plan will be reviewed by the appropriate local municipal, county, state, or other governmental agency. The review of the stormwater site plan will provide local municipal, county, state, or other governmental agency with the ability to ensure that water quality objectives, erosion and sediment control requirements, and BMP maintenance are adequately considered.

The goal of the site plan review is to:

- Minimize clearing and grading.

- Protect waterways.
- Limit soil exposure.
- Protect steep slopes and cuts.

2.5.6 Long-term Operation & Maintenance of Stormwater Controls

MNAPPS will identify all stormwater controls and mechanisms for all new construction or redevelopment projects where the area of disturbance exceeds one (1) or more acres. MNAPPS will conduct the following:

- Develop a map of each property identifying the location and type of structural controls, if any exist.
- Stormwater runoff properties, after construction and approval, shall be maintained in good condition, in accordance with the approved storm water plan.
- Update and revise the stormwater structural controls on property site diagrams as identified during scheduled inspections or within 30 days following the completion a new property or reconstruction/redevelopment site project.

The Director of Operations will ensure that local work instructions are developed based on BMPs. MNAPPS trained staff or certified contractors will conduct routine inspection of all identified structural controls and complete maintenance, repair, or replacement as necessary.

2.5.7 Post Construction Stormwater Management-BMP Table

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.5.7.1 Regulatory Mechanism	Develop and implement regulatory mechanisms to address post-construction stormwater runoff for new development and redevelopment projects, including preventing or minimizing water quality impact.	Board Policy Resolution passed March 2017.	Board Policy Resolution passed.	Copy of 2016-2017 Board Resolution Policy when passed.	MNAPPS
	Develop and implement regulatory mechanisms for projects that disturb one or more acre, including projects less than an acre that are part of a larger common plan of development or sale and discharge into the applicants MS4.	Post-Construction Policy & Procedure Developed & Implemented	Post-Construction Policy & Procedure adopted by the district.	Copy of the Post-Construction Policy and Procedure.	
BMP #2.5.7.2 Post Construction Standards	Ensure post-construction channel protection standards and water quality treatment standards are met.	As necessary Throughout Permit Cycle	All applicable site plans are reviewed by the appropriate local municipal, county, state, or other governmental agency.	Copy of site plan.	MNAPPS
BMP #2.5.7.3 Site Specific	MNAPPS will review construction plans for sites with known soil and/or groundwater contamination, including potential "hot spots" and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria.	As necessary Throughout Permit Cycle	Reduce or eliminate discharge of pollutants during construction on contaminated sites.	Documentation of additional stormwater controls.	MNAPPS
BMP #2.5.7.4 Site Plan Review	Prepare and submit a written application, including site plan for construction of storm water management systems for all new construction or redevelopment projects where the area of disturbance meets or exceeds one (1) acre.	As necessary Throughout Permit Cycle	All applicable site plans are reviewed by the appropriate local municipal, county, state, or other governmental agency.	Copy of reviewed plans.	MNAPPS

2.6 Pollution Prevention & Good Housekeeping Program

Develop, implement, and ensure compliance through a program of operation & maintenance of BMPs, with the ultimate goal of preventing or reducing pollutant runoff to the maximum extent practicable from operation that discharge stormwater to surface waters of the state.

2.6.1 Pollution Prevention & Good Housekeeping Program Objectives

a. Maintain an up-to-date inventory of owned properties and stormwater structural controls.
b. Procedure for updating and revising inventory of stormwater structural controls.
c. Procedure for assessing each property for the potential to discharge pollutants.
d. Develop an SOP (SWPPP) for all properties with a high potential for pollutant runoff.
e. Procedure identifying BMPs currently implemented or to be implemented to prevent or reduce pollutant runoff at each property with medium and lower potential to discharge.
f. Procedure for prioritizing of catch basins/manholes for maintenance and cleaning.
g. Schedule for routine catch basin/manhole inspection, maintenance, and cleaning.
h. Provide the geographic location of stormwater structures.
i. Procedure for dewatering, storage and disposal of materials extracted from storm sewer cleaning.
j. Procedure for inspecting and maintaining storm water controls.
k. Procedure for new structural controls to be designed and implemented in accordance with post-construction stormwater runoff control performance standards.
l. Best management practices for operation and maintenance activities.
m. Procedure for street sweeping.
n. Procedure for pesticide application.
o. Training.
p. Contractor requirements and oversight.

It is the ultimate goal of MNAPPS to prevent and reduce pollutant/contaminant runoff from MNAPPS properties to the maximum extent practicable. All BMPs are implemented at all low, medium, and high priority properties.

2.6.2 Structural Control Inventory & Schedule Table

No prioritization will be needed, as all structures are to be inspected and maintained equally. All structural controls will have routine inspection, maintenance schedules, and long-term procedures which adequately control, to the maximum extent practicable, pollution removal and control. Structural control effectiveness will be determined based on the results of these inspections and repaired, upgraded, or replaced as indicated.

The structural Control Inventory and Schedule Table for each property are in Appendix F.

2.6.3 Property Assessment & Prioritization

MNAPPS has identified all applicant owned properties with a discharge of stormwater to surface waters of the state, and during mapping of each property, inventoried the number of stormwater structural controls (i.e. catch basins, detention basins, etc.) at each site. Each location was assessed to determine high, medium, or low potential to discharge pollutants to surface waters of the state.

MNAPPS considered the following when assessing each property:

- Absence of any factors,
- 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,
- Identification of improperly stored materials,
- Potential for polluting activities to be conducted outside (i.e., vehicle washing),
- Proximity to water bodies,
- Poor housekeeping practices,
- Discharge of pollutants of concern to impaired waters.

For properties that have a high potential to discharge pollutants to surface waters of the state, a Stormwater Pollution Prevention Plan (SWPPP) will be implemented. MNAPPS has developed a SWPPP for the Transportation Facility.

BMPs currently implemented by MNAPPS at properties with medium or lower potential for the discharge of pollutants to surface waters of the state include:

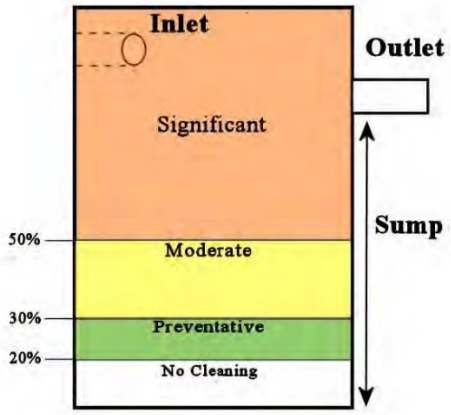
1. Good housekeeping practices,
2. Employee training,
3. Routine visual inspections,
4. Spill prevention and response.

This inventory will be updated as properties and structural stormwater controls are added, removed, or no longer owned or operated by the applicant following routine inspections or following new construction or redevelopment projects. Priority level assessments will be revised within 30 days following the completion a new property or reconstruction/redevelopment.

2.6.4 Storm Sewer Structure Controls Inspection & Maintenance Policy & Procedure

MNAPPS will take the following steps to prioritize maintenance to be conducted on the storm sewer structures:

1. Develop a schedule for inspecting and maintaining catch basins and stormwater controls at each property, for the reduction of pollutant runoff. A schedule is included in Appendix "F".
2. Visually inspect all stormwater controls identified on facility maps. Inspection includes:
    - Structural integrity of the structure.
        - Areas of significant cracking or sinkholes.
    - Sediment build-up.
        - Areas with high amounts of build-up sediment. A build-up of accumulated solid material that is greater than or equal to the one-third guideline established by the EPA or between 30 and 50% of the total sump depth, as established by the EGLE[3].



    - Color, odor, sheen, and flow.
    - Overall functionality and presence of erosion.
    - Pond evaluation.
3. Note inspection information on the inspection form. A copy of the inspection form "Structural BMP Table" is located in Appendix "D".
4. When inspecting stormwater controls, review the site for BMPs currently implemented to prevent or reduce pollutant runoff at each property. BMPs include:
    - Review of "No Dumping" stencils at storm drains.
    - Review of catch basins/manholes cleaned.
    - Dumpster good housekeeping practices.
    - Garden, green space and signage inventories.
    - "SEMCOG" poster placement at properties.
    - Illicit discharge reporting numbers poster placement at properties.
    - "How to spot illicit discharge/ How to Report-Hotline Numbers" poster placement at properties.
    - Spill kit availability at properties.
5. Following the inspection, the stormwater controls will be prioritized for cleaning and maintenance in a timely manner. Prioritize locations based on the following:
    - Drainage structures that are designated as consistently generating the highest volumes of trash and/or debris.
    - Areas with high amounts of build-up sediment. Refer to number 2 (b) above.
    - Areas of significant erosion.
    - Areas of significant cracking or sinkholes.

[3] Michigan Department of Environment, Great Lakes, and Energy EGLE NPS BMP Manual – Catch Basins

6. Once the inspection is complete, the stormwater manager or designated person will review the report and determine if a work order or other item is needed to work with relevant departments or contractors to fix any problems.
7. If an illicit discharge is suspected, follow the procedure outlined in Section 2.3 Illicit Discharge Elimination Program.
8. Retain inspection forms for each stormwater structural control inspected.
9. Retain documentation regarding the scheduling or completion of the repair/maintenance if completed.
10. Debris and maintenance waste removed as part of the maintenance and/or repairs shall be disposed of in accordance with the Structural BMP Operation & Maintenance Waste Disposal procedures.

Furthermore, staff members conducting maintenance and grounds activities are provided IDEP and pollution prevention/good housekeeping training. All structural controls will have routine inspection, maintenance schedules, and long-term procedures which adequately control, to the maximum extent practicable, pollution removal and control. Structural control effectiveness will be determined based on the results of these inspections and repaired, upgraded, or replaced as indicated. This procedure will be reviewed on an annual basis and updated as needed or 30 days following the implementation of a new stormwater structural control.

2.6.5 Structural BMP Operation & Maintenance Waste Disposal Procedures

Waste materials generated from operation, maintenance, and cleaning activities associated with storm sewer systems cannot be discharged back into the storm sewer system per Water Resources Protection (Part 31) of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended, and is therefore illegal. The combined solid and liquid waste stream (solid/liquid waste) from cleaning storm sewer systems is legally defined as “Liquid Industrial By-Product” pursuant to Part 121 of NREPA.

MNAPPS will ensure that all waste materials generated during operation and maintenance of structural stormwater controls are properly characterized, transported, and disposed as required under State of Michigan PA 451 Part 111 (hazardous wastes), Part 121 (liquid industrial by-products), and Part 115 (solid wastes). At a minimum, the following procedures will be implemented for wastes generated from cleaning or maintaining storm sewer structural controls.

Structural BMP Operation & Maintenance Waste Characterization

Prior to conducting cleaning or maintenance to storm sewer structural controls, a certified stormwater operator will complete a waste generation determination. This determination will include a visual inspection of the structure and identification of any waste materials to be generated during the cleaning or maintenance process. The certified operator will document a description of materials currently in the structure and other observations used to determine if potential contaminants are present. Visual observations and physical characteristics to be examined and documented as part of the waste characterization protocols include identification or the presence of:

- Oil or petroleum sheens
- Sedimentation or solids
- Odors
- Color
- Staining
- Vegetation conditions
- Floatables

- Other damage to the structure or observations identifying potential contaminants

Visual observations will be recorded, and an assessment completed determining if additional evaluation or testing will be required prior to removal of the wastes. Contaminated materials will be characterized using physical & chemical analysis as required to determine if the resulting wastes are hazardous wastes regulated under part 111 of PA 451 (NREPA). Non-hazardous contaminated materials will be removed and managed as "Liquid Industrial By-Product" as required under part 121 of PA 451 (NREPA).

Waste Disposal Methods for Non-Contaminated Materials

Non-contaminated waste materials generated during cleaning or maintenance of storm sewer structures will be properly disposed using one of the following methods:

1. Have the waste transported to drying beds to separate the solid/liquid waste. This is usually performed at a publicly owned treatment plant or at a privately owned permitted property where the liquid portion of the waste stream is separated from the solids and treated.
2. Request permission from the local wastewater treatment plant operator to discharge the combined solid/liquid waste into the sanitary system. Most treatment plants will require pre-treatment prior to the discharge. All applicable local ordinance provisions must be followed.
3. When conducting catch basin maintenance activities where the above options are not available, the following methods can be used as long as there are no discharges to surface waters during dry weather conditions:

    - Conduct visual inspection to ensure the water in the sump has not been contaminated. If necessary, collect a grab sample of the water and look for signs of contamination such as visible sheen, discoloration, obvious odor, etc. If there is any doubt of the quality of the water, it will be collected into a vacuum truck and treated as waste under Part 121 or Part 115 of PA 451 (NREPA).
    - Using a sump pump, or any other pumping mechanism, remove the majority of water in the sump of the basin without disturbing the solid material below. Do not use pumps connected to the vacuum truck's holding tank.
    - The clear water may then be directly discharged to one of the following:
        - Sanitary system (with prior approval from local sewer authority).
        - Curb and gutter.
        - Back into the storm sewer system as long as it is contained within the system during dry weather condition to ensure no discharge into surface water.
        - Applied to the ground adjacent to the catch basin (evenly distributed at a maximum rate of 250 gallons/acre/year).
    - The remaining liquid/solid in the sump will be collected with a vacuum truck and disposed of off-site in accordance with MI P.A. 451 Parts 115 or 121.

MNAPPS does not currently own or operate storm sewer cleaning or transportation equipment. If MNAPPS contracts with a private contractor to transport liquids generated from cleaning of catch basins or other structures, that contractor must be registered and permitted as a Uniform Liquid Industrial By-Product Hauler under the provisions of the Hazardous Materials Transportation Act (HMTA).

Waste Disposal Methods for Contaminated Materials

Waste materials generated during operation and maintenance of storm sewer systems found or suspected to be contaminated with pollutants or hazardous substances will be characterized, packaged, marked, labeled, stored, transported, and disposed as a regulated waste under Part 121 or Part 115 of PA 451 (NREPA).

2.6.6 Pollution Prevention/Good Housekeeping – Municipal Operations & Maintenance Activities

MNAPPS recognizes the importance of reducing pollutant runoff from maintenance activities. The following procedure will include an assessment of the potential activities for the potential to discharge pollutants. The assessment shall identify the pollutants that could be discharged from the applicable operation and maintenance activity and the BMPs implemented or to be implemented to prevent or reduce pollutant runoff.

PROCEDURE

Applicable operations and maintenance activities include parking lot and sidewalk maintenance, cold weather operations, vehicle washing, maintenance of vehicles, land disturbance and landscape. Bridge maintenance, right-of-way maintenance and unpaved road maintenance do not apply to MNAPPS.

Roadways/Parking Lots

Maintenance: Pothole, sidewalk, curb, and gutter repair.

Possible Pollutants: Fuel, oil, sediment, concrete.

BMPs to address Pollutants:

1. Contractors and in-house staff contracted to complete for these jobs are informed of stormwater management practices to reduce pollution in stormwater.
2. Avoid mixing excess amounts of fresh concrete or cement.
3. Never dispose of washout into the street, storm drains, ditches, or creeks.
4. Stencil storm drains to prevent disposal of wash water.
5. Schedule patching, resurfacing and surface sealing during dry weather.
6. If it rains unexpectedly, take appropriate action to prevent pollution of stormwater runoff (e.g., divert runoff around work areas, cover materials).
7. Maintain pollution prevention/good housekeeping practices, which is to remove stockpiles (asphalt materials, sand, etc.) by the end of the day to a covered location. Alternatively, cover the piles if they cannot be moved.

Process for updating assessment: Contractor or project is assessed on an ongoing basis, and problems are addressed when found.

Cold Weather Operations

Maintenance: Plowing, sanding, de-icing, snow pile disposal.

Possible Pollutants: Sodium, magnesium, calcium, potassium, chloride, turbidity.

BMPs to address Pollutants:

1. Keep all deicing material covered or in waterproof containers.
2. Prevent deicer drainage to storm sewers.
3. Mechanical removal of as much snow or ice as possible prior to applying deicing chemicals.
4. Proper salt storage management.
5. Maintain application equipment in good working condition.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Vehicle Washing

Maintenance: Washing of buses, staff vehicles and maintenance equipment.

Possible Pollutants: Petroleum-based wastes, metals, and nutrients.

BMPs to address Pollutants:

1. All vehicle washing and maintenance is to be performed indoors where drains connecting to the sanitary system can receive all wastes.
2. Alternatively, vehicle washing can be performed at a commercial auto wash property.
3. Alternatively, rinse grass from lawn care equipment on permeable (grassed) areas.
4. School car wash fundraising events will not be permitted on school grounds.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Vehicle Maintenance

Possible Pollutants: Petroleum-based wastes, metals, and nutrients.

BMPs to address Pollutants:

1. Oil-water separators will be inspected routinely and serviced as necessary to maintain efficiency.
2. All vehicle or equipment maintenance will take place inside or away from storm drains where drains connecting to the sanitary system can receive all wastes.
3. All drains within maintenance garages will be dye tested to assure that no drains flow into the separate storm sewer system.
4. Recycle used motor oil, diesel oil, other vehicle fluids, and vehicle parts whenever possible.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Landscaping

Possible Pollutants: Wood chips, sediment, sand, and compost.

BMPs to address Pollutants:

1. Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain. Alternatively, place stockpiles on permeable (grassed) areas.
2. Conduct annual stream back inspections.
3. Provide adequate buffer areas at stream banks.
4. Proper Storage, handling, and use of pesticides, herbicides, and fertilizers.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Land Disturbance

Possible Pollutants: Sediment runoff.

BMPs to address Pollutants:

1. Plan land clearing so soil is not exposed for long periods of time.
2. Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain.
3. Protect against sediment flowing into drains.
4. Install sediment barriers.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

ASSESSMENT

Pollution prevention inspections ensure that these BMPs are carried out properly. Any issues identified during the inspections will be reviewed and addressed by the Stormwater Manager.

2.6.7 Street Sweeping Procedure, Prioritization & Schedule

PRIORITIZATION

EGLE NPDES Phase II Stormwater Discharge Permit requires a procedure for prioritizing owned streets, parking lots, and other impervious infrastructure for street sweeping based on the potential to discharge pollutants. MNAPPS evaluated each property for the presence of the following factors:

- Potential for polluting activities to be conducted outside
- Proximity to water bodies
- Traffic volume
- Land use
- Absence of any factors

PROCEDURE

MNAPPS does not own or operate sweeping equipment. However, MNAPPS will be proactive and undertake the following activities to reduce the potential to discharge pollutants to surface waters of the state from parking lots and other impervious infrastructures.

1. Conduct seasonal efforts to remove leaves.
2. Inspect parking lot and street areas.
3. Conduct hand sweeping of debris to prevent accumulated wastes in the spring and the fall.
4. Waste disposal areas will be kept free of litter and debris.
5. Analyze sediment, removed from an inlet cleaning if it is suspected of being contaminated with a hazardous material, prior to disposal. Sediment or materials determined to be hazardous waste will be disposed of in accordance with the Structural BMP Operation & Maintenance Waste Disposal procedures.
6. Contract out street cleaning when appropriate.

This prioritization will be updated as properties and structural stormwater controls are added, removed, or no longer owned or operated by the applicant following routine inspections, or as traffic volume, land use or sediment and trash accumulation increases.

PRIORITIZATION LEVELS & SCHEDULE

All low, medium, and high prioritized parking lots and streets are inspected in an effort to reduce pollutants.

Property Name	Priority Level of Potential Discharge* (High, Med, Low)	Street Sweeping Schedule
Allendale Elementary School	Low	Hand Sweeping, Spring and Fall

Property Name	Priority Level of Potential Discharge* (High, Med, Low)	Street Sweeping Schedule
Melvindale High School, Central Office, Transportation Complex	High	Monthly Inspections, Hand Sweeping, Spring and Fall
Rogers Early Elementary School	Low	Hand Sweeping, Spring and Fall
Strong Middle School	Low	Hand Sweeping, Spring and Fall

DISPOSAL

If a commercial street sweeper is contracted to clean a parking lot and street areas for MNAPPS, the street sweeping activities are subject to the solid waste requirements. Solid waste must be managed under Part 115 requirements. Dispose of the solid waste in a licensed landfill. The contractor hired to do the street sweeping is responsible for proper disposal of the waste material. The contracted sweeping will not be completed when streets are wet, so dewatering of the collected debris will not be required.

2.6.8 Managing Vegetated Properties

MNAPPS has established this policy to prevent or reduce pollutant runoff from vegetated land:

1. MNAPPS requires all contracted personnel who participate in the application of pesticides, to be trained and licensed by the State of Michigan under the Commercial Pesticide Application Certification Program for relevant categories as applicable, to prevent or reduce pollutant runoff from vegetated land.
2. Whenever practicable, an integrated pest management technique will be implemented.

2.6.9 Contractor Requirements & Oversight

MNAPPS requires contractors to comply with pollution prevention and good housekeeping BMPs. MNAPPS will perform the following activities for applicable contractors and projects to comply with all pollution prevention and good housekeeping BMPs as appropriate and comply with pollution as well as provide oversight to ensure compliance:

- Contractor Notification
- Contractor Training
- Pre-project Meeting/Review
- Periodic Inspections

Prior to conducting work, contractors shall be provided a “Stormwater Contractor Oversight Record” form. This will allow the district to review stormwater compliance with contractors hired to perform municipal operation and maintenance activities and to obtain signatures. Periodic inspections will be conducted. The “Stormwater Contractor Oversight Record” form is located in Appendix “E”.

2.6.10 Pollution Prevention/Good House Keeping Training

A training program is an important component to effective pollution prevention. Training is required for all employees whose job responsibilities involve municipal or maintenance activities. Training is discussed in detail in Section 3.0 of this SWMP.

2.6.11 Pollution Prevention/Good Housekeeping –BMP Table

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.6.11.1 Structural Control Inventory	Provide an up-to-date inventory of the number of stormwater structural controls for each property (i.e., catch basins, detention ponds). Update properties potential to discharge pollutants (high, medium, low) following the update.	Initial inventory being completed, further updates as needed, within 30 days following the completion a new property or reconstruction/ redevelopment. Ongoing Throughout Permit Cycle	100% of stormwater structural controls inventoried.	Maintain list of inventory and potential to discharge priority level. Submit updated list with progress report, noting if priority levels have changed.	MNAPPS
BMP #2.6.11.2 SWPPP development & implementation (SOP)	Develop a "Stormwater Pollution Prevention Plan (SWPPP)" for maintenance, transportation, and storage properties/Implement policies & procedures.	Developed & Implemented May 2016 Ongoing Throughout Permit Cycle	SWPPP completed and 100% of inspections implemented.	Copy of SWPPP and copy of inspections.	MNAPPS
BMP #2.6.11.3 Stormwater Structural Control Inspections	Visually inspect stormwater controls identified on property maps.	Annually Throughout Permit Cycle	Routine schedule implemented and inspections reviewed by stormwater manager.	Maintain inspection forms/reports.	MNAPPS
BMP #2.6.11.4 Review for BMP's Implemented	While inspecting stormwater controls, review the site for BMPs currently implemented to prevent or reduce pollutant runoff at each property; such as storm drain stencils, garden areas, areas cleaned, areas repaired, SEMCOG poster placement, Illicit discharge education posters, and spill kits.	Annually Throughout Permit Cycle	Annual inspections completed and reviewed by stormwater manager.	Documentation of inspection findings (number of posters, number of spill kits, inventory of gardens, pictures of stencils, pictures of spill kits).	MNAPPS

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.6.11.5 Prioritization of Storm Sewer Locations for Maintenance & Cleaning	Following the inspection, the stormwater controls will be prioritized for cleaning and maintenance. Prioritize locations based on: (1) drainage structures that are designated as consistently generating the highest volumes of trash and/or debris, (2) areas with high amounts of build-up sediment, (3) areas of significant cracking or sinkholes.	Annually Throughout Permit Cycle	Prioritization locations identified.	Copy of prioritization.	MNAPPS
BMP #2.6.11.6 Cleaning & Maintenance (Catch Basin/ Manhole Cleaning)	MNAPPS will ensure that all waste materials generated during operation and maintenance of structural stormwater controls are properly characterized, transported, and disposed as required under State of Michigan PA 451 Part 111 (hazardous wastes), Part 121 (liquid industrial by-products), and Part 115 (solid wastes).	As needed or once per permit cycle Throughout Permit Cycle	Prioritized locations cleaned once per permit cycle. All waste disposed as required.	Copies of Waste Manifests.	MNAPPS
BMP #2.6.11.7 Roadways & Parking Lots	Storm drains stenciled to prevent disposal of wash water into storm drains.	As needed Throughout Permit Cycle	Storm drain stencils inspected and maintained as need.	Copy of work order. Photos of stenciling.	MNAPPS
BMP #2.6.11.8 Cold Weather Operations	Proper salt storage management. Maintain storage bags and equipment in good working condition.	Ongoing Throughout Permit Cycle	Continue proper salt storage and management as previously implemented.	Copy of SWPPP comprehensive inspection report.	MNAPPS
BMP #2.6.11.9 Vehicle Washing	All vehicle washing and maintenance is to be performed indoors where drains connecting to the sanitary system can receive all wastes.	Ongoing Throughout Permit Cycle	100 % of applicable staff trained on where to wash vehicles.	Copy of sign-in sheets and Agenda (if available).	MNAPPS
	Alternatively, rinse grass from lawn care equipment on permeable (grassed) areas.		100 % of applicable staff trained on were to wash vehicles.	Copy of sign-in sheets and Agenda (if available).	
	School car wash fundraising events will not be permitted on school grounds.		Notice sent to staff regarding policy.	Copy of e-mail or policy.	

Created: May 31, 2016
Revised: May 17, 2021
July 1, 2021
August 24, 2021

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.6.11.10 Vehicle Maintenance	All drains within maintenance garages will be dye tested to assure that no drains flow into the separate storm sewer system.	Completed in May 2016, additional testing as needed Throughout Permit Cycle	100% of floor drains inspected.	Copy of inspection report.	MNAPPS
	Recycle used motor oil, diesel oil, other vehicle fluids, and vehicle parts whenever possible.	As needed Throughout Permit Cycle	Reduction in amount of disposed material and amount of material shipped for off-site disposal.	Copy of invoices or shipping papers.	
BMP #2.6.11.11 Stream Bank Inspection	Conduct stream bank inspections. Inspect banks along properties to identify erosion or potential erosion problems and check for water clarity conditions. Properly maintain buffer areas.	Annually Throughout Permit Cycle	100% of bank inspections completed.	Copy of inspection sheets/reports.	MNAPPS
BMP #2.6.11.12 Land Disturbance	Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain. Protect against sediment flowing into drains.	As needed Throughout Permit Cycle	100 % of applicable staff trained.	Copy of sign-in sheets and Agenda (if available).	MNAPPS
BMP #2.6.11.13 Street Sweeping	Bi-monthly inspections of streets and parking lots; clean as needed.	Bi-monthly Throughout Permit Cycle	Inspections completed.	Copy of work order or schedule.	MNAPPS
	Street sweeping conducted by a professional sweeping company.	As needed Throughout Permit Cycle		Copy of invoice or disposal documentation.	
BMP #2.6.11.15 Vegetated Properties (Pesticides)	MNAPPS requires all contracted personnel who participate in the application of pesticides will be trained and licensed by the State of Michigan under the Commercial Pesticide Application Certification Program for relevant categories as applicable, to prevent or reduce pollutant runoff from vegetated land.	Ongoing Throughout Permit Cycle	Application of pesticides will only be completed by trained and licensed applicators.	Documentation of in-house staff license or copy of contractor receipt.	MNAPPS

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #2.6.11.16 Contractor Oversight	MNAPPS requires contractors to comply with pollution prevention and good housekeeping BMPs. MNAPPS will complete contractor notification, pre-project meeting and periodic inspections to provide oversight to ensure compliance. Prior to conducting work, contractors shall be provided a "Stormwater Contractor Oversight Record" form.	As needed Throughout Permit Cycle	Contractors trained and informed of pollution prevention and good housekeeping techniques.	Copy of sign-in sheets, pre-project meeting notes or inspections.	MNAPPS & Contractors/ Vendors
BMP #2.6.11.17 Training	Pollution prevention and good housekeeping training.	Once per permit cycle or during the 1st year of employment Throughout Permit Cycle	Goal of providing training to maintenance staff who work for MNAPPS. **[All Stormwater Training is outlined in Section 3.0 Training]**	Copy of sign-in sheets and Agenda (if available).	MNAPPS
BMP #2.6.11.18 Pollution Prevention & Good Housekeeping Activities Review	Summary of annual activities for the "Pollution Prevention and Good Housekeeping".	Annually Throughout Permit Cycle	Annual review of SWMP performed. Maintain copy of SWMP annual review. Determine the level of district involvement and identify areas of improvement.	Maintain copy of SWMP annual review and evaluation information for progress reporting.	MNAPPS

3.0 Training

MNAPPS will provide education and training for applicable employees and contractors using a variety of methods depending on their specific job function. At a minimum, all applicable <DISTRICT> employees will be required to have general awareness training on the topics included in the PEP. All applicable <DISTRICT> employees will be required to attend or otherwise obtain general awareness training at least once per permit cycle or during the 1st year of employment.

MNAPPS has implemented a comprehensive staff training program based on each employee's participation and responsibilities under this program. The employee training program is categorized in three (3) separate levels summarized as follows:

LEVEL I TRAINING-General Awareness Training

Level I training is encouraged for all district employees, parents, and students. General Awareness training is provided in the form of an 11-minute video produced by Arch Environmental Group titled, **"When it Rains, It Drains…The Stormwater Question".** This video is also available on the stormwater webpage.

LEVEL II TRAINING-General Awareness, Pollution Prevention & Good Housekeeping, and Illicit Discharge Reporting

Level II training is required for all employees whose job responsibilities involve illicit discharge related activities, or indicate a potential to cause, witness, or report and illicit discharge or connection. This training includes the previously described video as well as a review of the districts Stormwater Management Program Plan and instruction on identification and notification of illicit discharges or connections. This training is provided to applicable transportation, maintenance, custodial, and food service employees.

LEVEL III TRAINING-Maintenance and Storage Facility Stormwater Pollution Prevention Plans, Lawn Maintenance, and Structural Control Inspection, Maintenance, and Repair Training

Level III training is provided in the form of videos, PowerPoint presentations, and hands-on training. This training is provided to district supervisors, maintenance, and lawn service staff.

LEVEL IV (CONTRACTORS) – Contractor Training/Oversight

Contractors employed by MNAPPS to conduct activities with a potential to impact water quality. Prior to conducting work, contractors shall be provided a "Stormwater Contractor Oversight Record" form.

3.1 Training Table

BMP	Description	Measurable Goal	Target Audience	Timeframe
I **General Awareness Training**	Encourage teachers, administrative and support staff to watch the General Awareness Stormwater Video "When it Rains it Drains".	Maintain on district website and Record attendance with sign-in sheets. MNAPPS will retain records of trainings for future review regarding SWMP.	Teachers, administrative and support staff.	Ongoing Throughout Permit Cycle
II **IDEP & PPGH Training**	General Awareness, Pollution Prevention & Good Housekeeping, and Illicit Discharge Reporting	Record attendance with sign-in sheets for each training session. MNAPPS will retain records of trainings for future review with regard to SWMP.	In-house custodial, maintenance, transportation, and food service employees.	Once during permit cycle current employees and during the 1st year of employment for new employees. Throughout Permit Cycle
III **Routine Storm Sewer Inspection Training**	Train appropriate employees how to conduct a storm sewer system inspection.	Record attendance with sign-in sheets for each training session. MNAPPS will retain records of trainings for future review with regard to SWMP.	District supervisors, in-house maintenance, and lawn service staff.	As Needed Throughout Permit Cycle

BMP	Description	Measurable Goal	Target Audience	Timeframe
IV **Contractor Training/ Oversight**	Stormwater specific training for on-site contractors.	Utilize a "Stormwater Contractor Oversight Record" form to review stormwater compliance with contractors hired to perform municipal operation and maintenance activities and to obtain signatures.	Contractors employed by MNAPPS to conduct activities with a potential to impact water quality.	At the time of employment. Throughout Permit Cycle

4.0 Total Maximum Daily Load (TMDL) Restrictions

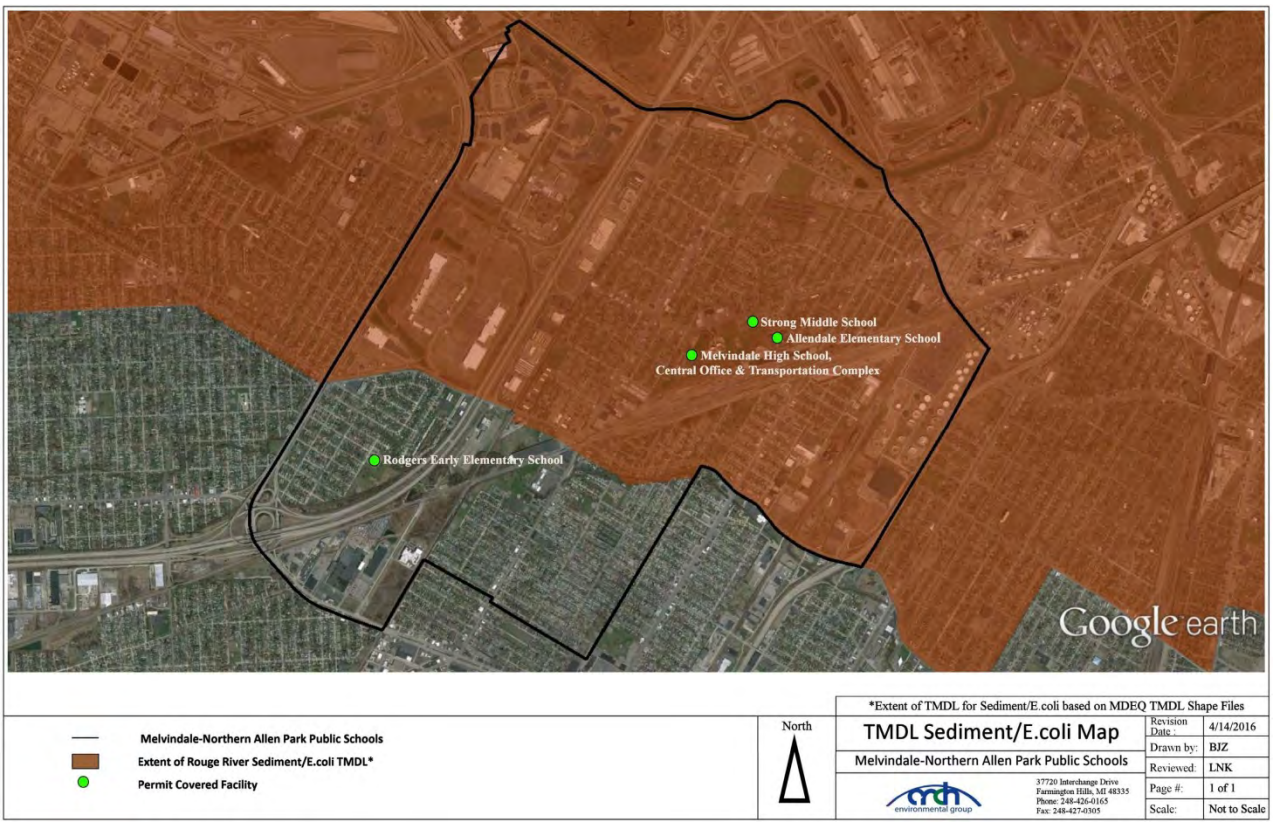
4.1 What are TMDLs

When a lake or stream fails to meet federal water quality standards, the Clean Water Act requires that a "Total Maximum Daily Load (TMDL)" limit be developed. Studies are completed to determine the sources impacting the water body and to develop goals so that the water body can meet the applicable standards.

A TMDL describes the process used to determine how much of a particular pollutant a lake or stream can assimilate and sets pollution reduction targets for the water body.

MNAPPS will review and prioritize BMPs currently implemented or to be implemented during the permit cycle to make progress toward achieving the pollutant load reduction requirement in each TMDL identified. TMDLs assigned the discharges for MNAPPS are described below.

Map 3 – Total Maximum Daily Load Map[4] - Rouge River Watershed



[4] Total maximum daily load boundaries based on Michigan Department of Environmental Quality Water Quality Standards Shapefiles.

Map 4 – Total Maximum Daily Load Map[5] – Ecorse River Watershed

4.2 Rouge River & Ecorse River TMDL

Rouge River TMDL

The Rouge River was placed on the Section 303(b) list for both **E. coli & Biota (sedimentation/siltation).** The Rouge River was placed on the list for biota due to poor macroinvertebrate and fish community levels. Surveys conducted indicated that lack of habitat along with siltation/sedimentation were the predominant issues. Additionally, the Rouge River was placed on the Section 303(d) list due to impairment of recreational uses as indicated by the presence of elevated levels of E. coli.

The following MNAPPS properties discharge stormwater either directly or indirectly within the Rouge River TMDL boundaries as identified in Map 3 above:

1. Allendale Elementary School
2. Melvindale High School, Central Office, and Transportation Complex
3. Strong Middle School

Ecorse River TMDL

The Ecorse River was placed on the Section 303(b) list for both **E. coli & Biota (sedimentation/siltation).** The Ecorse River was placed on the list for biota due to poor macroinvertebrate and fish community levels. Surveys

[5] Total maximum daily load boundaries based on Michigan Department of Environmental Quality Water Quality Standards Shapefiles.

conducted indicated that lack of habitat along with siltation/sedimentation were the predominant issues. Additionally, the Ecorse River was placed on the Section 303(d) list due to impairment of recreational uses as indicated by the presence of elevated levels of E. coli.

The following MNAPPS properties discharge stormwater either directly or indirectly within the Ecorse River TMDL boundaries as identified in Map 4 above:

1. Rogers Early Elementary School

4.3 TMDL Implementation – Monitoring Plan

4.3.1 Prioritized TMDL Best Management Practices

Both the Rouge River and the Ecorse River have the same TMDLs. Therefore, MNAPPS will practice the same best management practices at all district properties. The lists below outline stormwater BMPs that MNAPPS will target to improve water quality impairments associated by the TMDLs.

E. COLI & BIOTA

1. MNAPPS will use its website to provide the public with information regarding pet waste (SEMCOG links). Additionally, SEMCOG pet waste posters are placed at various school buildings.
2. MNAPPS will prohibit illicit discharges, inspect, and monitor for suspected illicit discharges, and enforce elimination of the illicit discharges and/or connections.
3. MNAPPS has reviewed all properties for cross-connections between the sanitary and storm sewer systems and will repair any illicit connections within the permit period.
4. MNAPPS will conduct bimonthly and monthly inspections of parking lot and curb areas and hand clean as needed.
5. MNAPPS has established programs for soil erosion and sediment control from new or redevelopment construction. Such developments require permits and inspections for practices to keep exposed soils on site or controlled from runoff.
6. MNAPPS has implemented routine visual inspections of stormwater structural controls.
7. MNAPPS will remove excessive sediments from structural sediment removal systems to maintain the maximum designed performance. Sediments will be disposed of offsite in accordance with Parts 115 and/or 121.

ALL TMDLs

1. MNAPPS will continue to use its website to provide the public information regarding local TMDL issues (E.coli and biota TMDL Best Management Practice).
2. MNAPPS will continue to educate staff, faculty, and students using various venues including the **"Seven Simple Steps to Clean Water"** program educational materials developed by the various watershed groups specifically related to these issues on the stormwater management webpage.
3. MNAPPS will pass a post-construction stormwater board resolution to require implementation of the stormwater standards for construction.
4. MNAPPS will adequately maintain vegetation around stormwater properties, ditches, and ponds.

5. MNAPPS will provide training to applicable staff and confirm training from contractors including restrictions on the use of phosphorous containing fertilizers, soaps, cleaners, and other chemicals that could impact the separate storm drain system.

Procedure

Prioritization of BMPs is based on MNAPPS targeted TMDL pollutants. Priority is given to BMPs that reduce E. coli loads, and address water quality for biota.

Assessment

EGLE Phase II Stormwater Discharge Permit Application requires a monitoring plan for assessing the effectiveness of the BMPs currently being implemented, or to be implemented, in making progress toward achieving the TMDL pollutant load reduction requirement. Monitoring shall be specifically for the pollutant identified in the TMDL. Monitoring may include wet weather outfall/discharge point monitoring and dry-weather screening. A summary of the monitoring results and conclusions related to TMDLs will be provided during progress reporting.

MNAPPS will conduct the following for applicable TMDLs:

1. Samples will be collected at least twice during the permit cycle. The goal is to collect samples from at least 50% of the outfall/discharge points at properties associated with the TMDL. An effort will be made to sample water quality parameters during a representative (i.e., >0.25" and <1.5") wet weather event. TMDL Sample locations are located in Appendix "G".
2. The results of the sampling will be assessed and summarized in a brief report to be shared with the public via the stormwater webpage at least once during the permit cycle.
3. Based on a review of the sampling results, BMP implementation will be reviewed and BMPs may be updated or revised to ensure progress toward achieving TMDL pollutant load reductions.

4.3.2 TMDL - BMP Table

BMP	Description of BMP	Timeframe	Measureable Goal	Measure of Assessment	Responsible Party
BMP #4.3.2.1 Webpage	MNAPPS will use its website to provide the public with information regarding pet waste (SEMCOG links). Additionally, SEMCOG pet waste posters are placed at various school buildings.	Ongoing Throughout Permit Cycle	Posters placed throughout MNAPPS properties.	Maintain links on webpage. Maintain copies of webpage review.	MNAPPS
	MNAPPS will continue to use its website to provide the public information regarding local TMDL issues (E.coli and biota TMDL best Management Practice).		Material available on webpages.		
BMP #4.3.2.2 Sampling	Samples will be collected outfall/discharge points at properties associated with the TMDL. An effort will be made to sample water quality parameters during a representative (i.e., >0.25" and <1.5") wet weather event.	Twice per Permit Cycle Throughout Permit Cycle	The goal is to collect samples from at least 50% of the outfall/points of discharge at properties associated with the TMDL.	Copy of inspection paperwork and sample results.	MNAPPS
BMP #4.3.2.3 Sample Summary	The results of the sampling will be assessed and summarized in a brief report to be shared with the public via the stormwater webpage at least once during the permit cycle.	Once per Permit Cycle Throughout Permit Cycle	Report available for public review.	Report completed and available on webpage.	MNAPPS

Appendix "A"

Outfall/Discharge Point Receiving Water Table

&

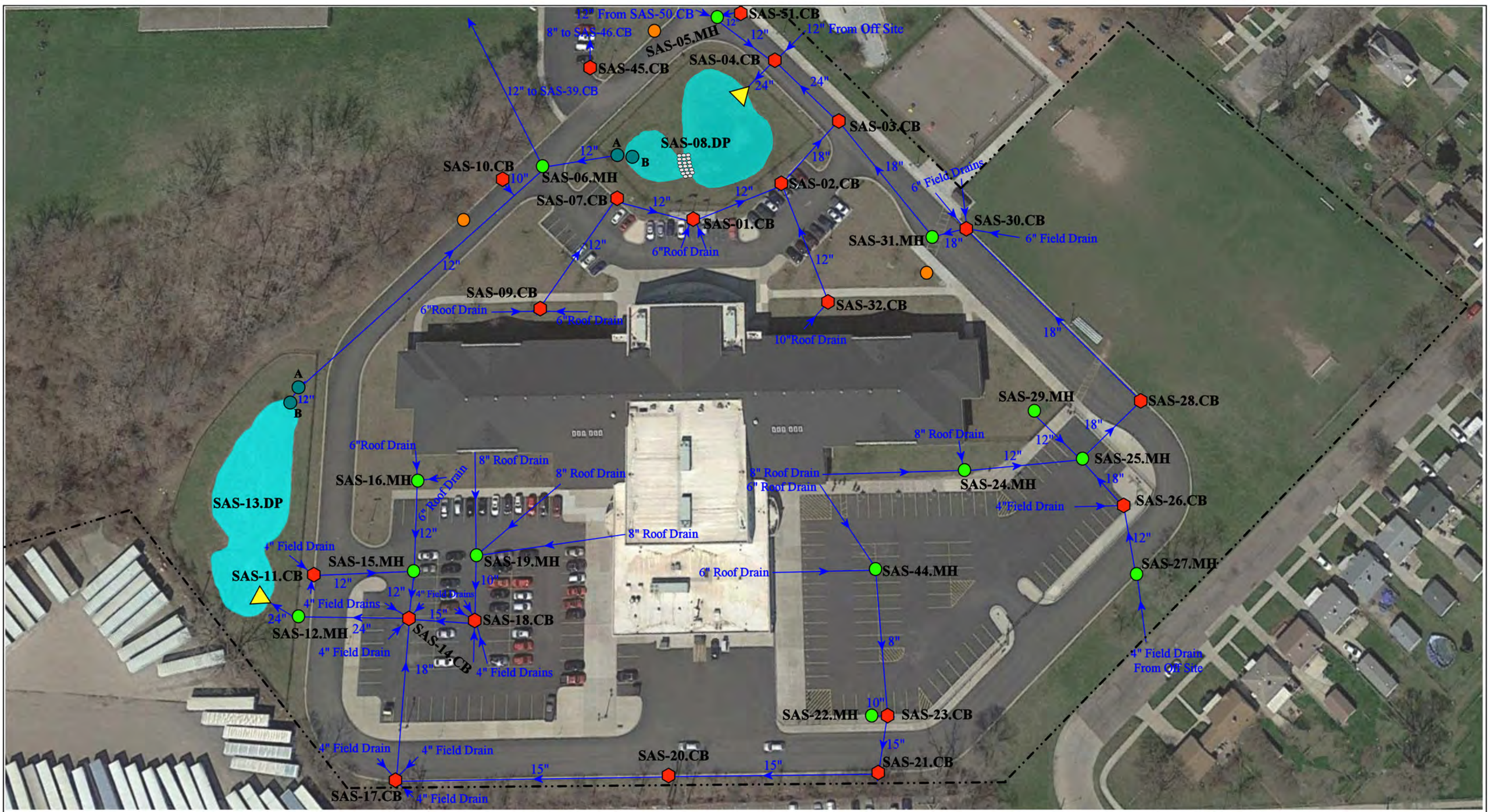
Site Stormwater Structure Maps

Created: May 31, 2016
Revised: May 17, 2021
July 1, 2021
August 24, 2021

Receiving Waters

Melvindale-Northern Allen Park Public Schools			
Facility	Point of Discharge	Receiving Waters	Watershed
Melvindale High School (Includes Central Office & Transportation)	MTH-08.CB.DP	Rouge River	Rouge River Watershed
Rodgers Early Elementary School	RES-04.OP.OF	Ecorse River	Ecorse River Watershed
	RES-06.SCC.DP	Ecorse River	
Strong Middle School & Allendale Elementary School Complex	SAS-38.MH.DP	Rouge River	Rouge River Watershed
	SAS-39.MH.DP	Rouge River	
	SAS-46.CB.DP	Rouge River	

Revised 4/7/2021



= Catch Basin
= Manhole
= Stabilized Outlet
= Open Pipe Outlet
= Sanitary
= Detention Pond
= Rip Rap
= Property Boundary

North

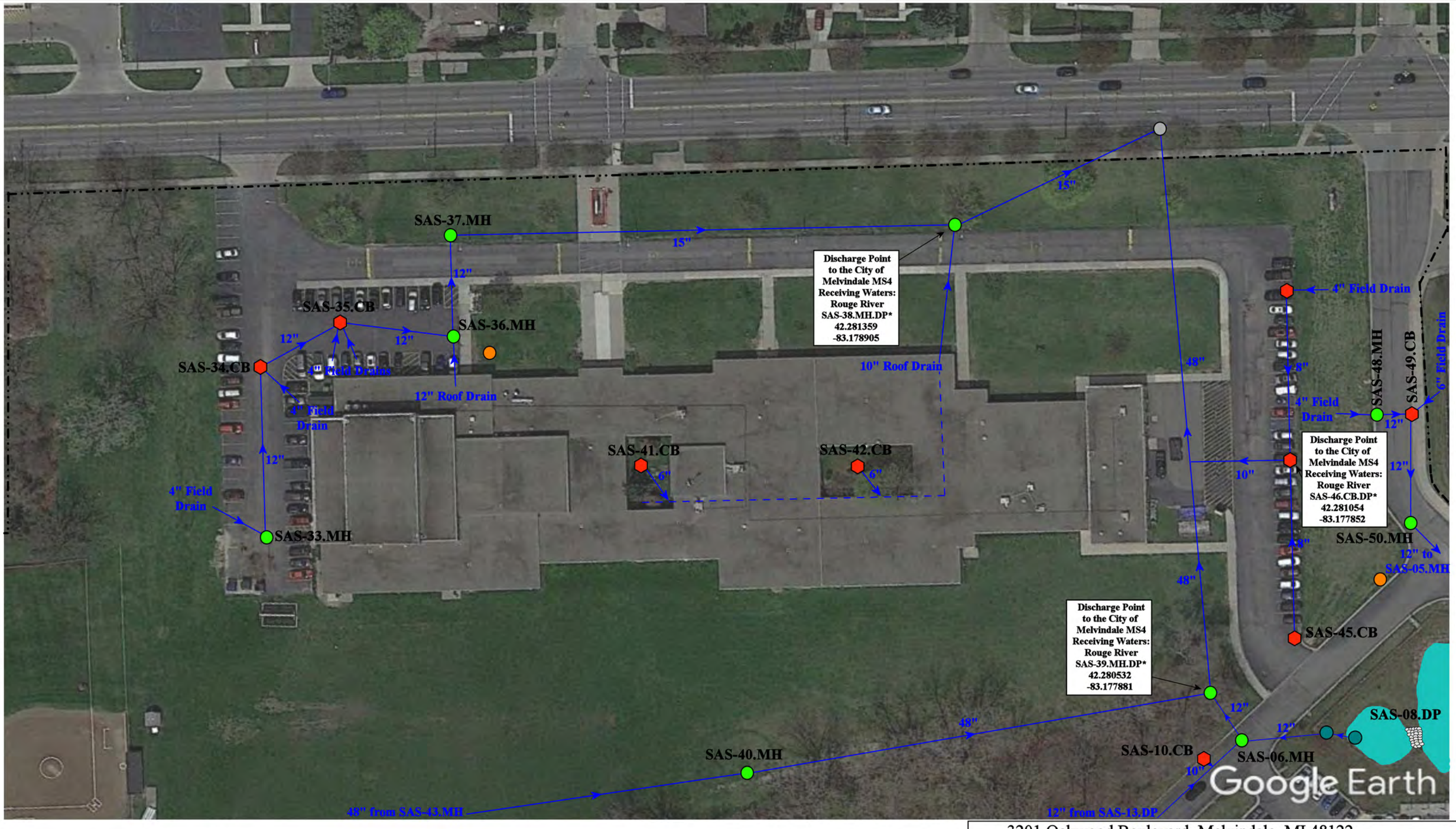
3201 Oakwood Boulevard Melvindale, MI 48122

Allendale Elementary, Strong Middle School Complex

Melvindale Northern Allen Park Public Schools

environmental group
37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	08/20/2020
Drawn by:	SB
Reviewed:	CC
Page #:	1 of 3
Scale:	Not to Scale



● = Manhole
● = Catch Basin
● = Sanitary
● = Stabilized Outlet
● = Offsite MS4
= Pond
= Rip Rap
* = TMDL Sampling Location

North

3201 Oakwood Boulevard, Melvindale, MI 48122

Allendale Elementary, Strong Middle School Complex

Melvindale Northern Allen Park Public Schools

environmental group
37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	08/24/2020
Drawn by:	KD
Reviewed:	LK
Page #:	2 of 3
Scale:	Not to Scale

= Manhole

= MS4

= Property Boundary

North

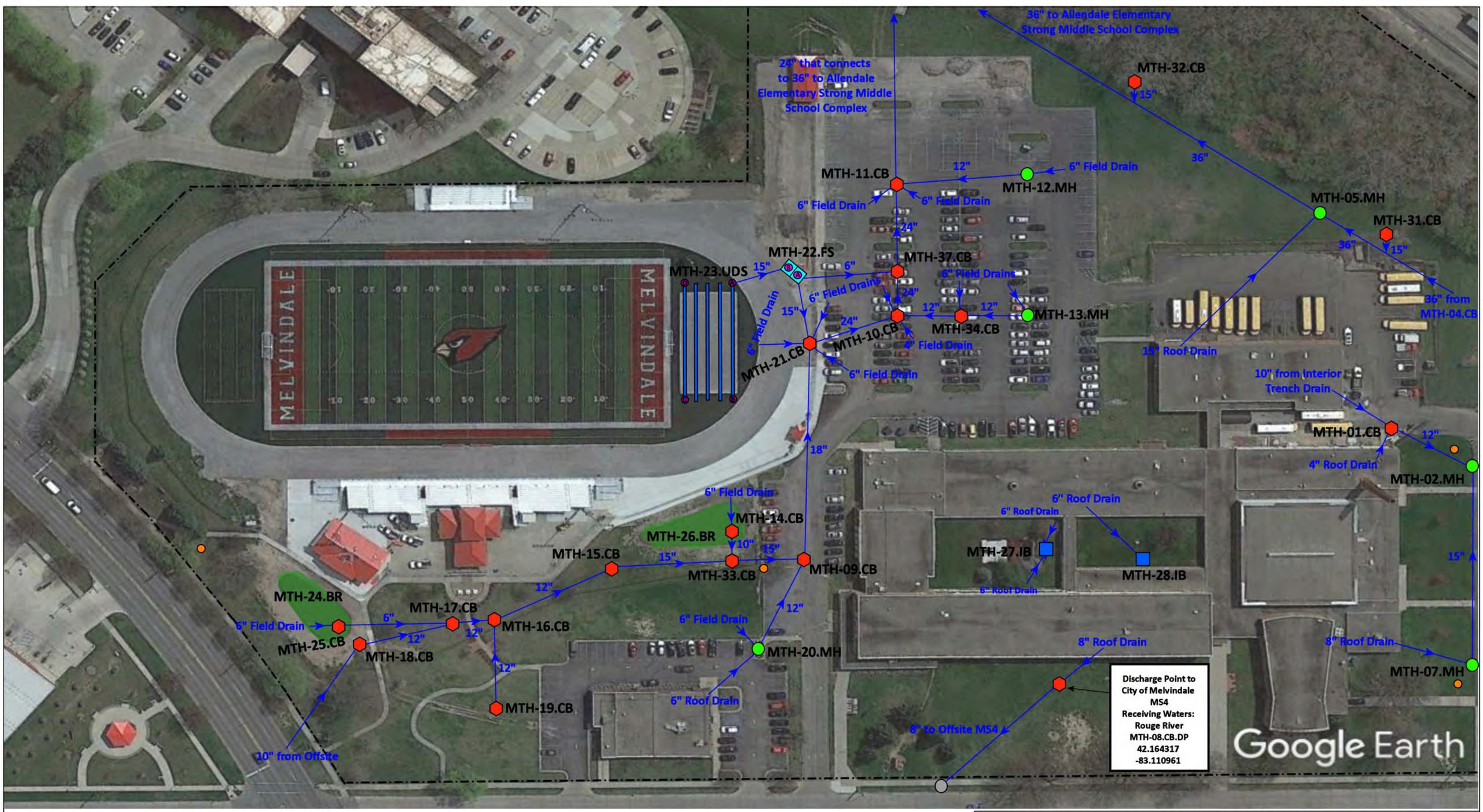
3303 Oakwood Melvindale, MI 48122

Allendale Elementary, Strong Middle School Complex

Melvindale Northern Allen Park Public Schools

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	08/24/2020
Drawn by:	SB
Reviewed:	CC
Page #:	3 of 3
Scale:	Not to Scale



= Property Boundary
= Catch Basin
= Sanitary
= Manhole
= Infiltration Basin
= Buried UDS Access Lid
= Underground Detention System
= Flow Splitter with Access Lids
= Bioretention Basin

North

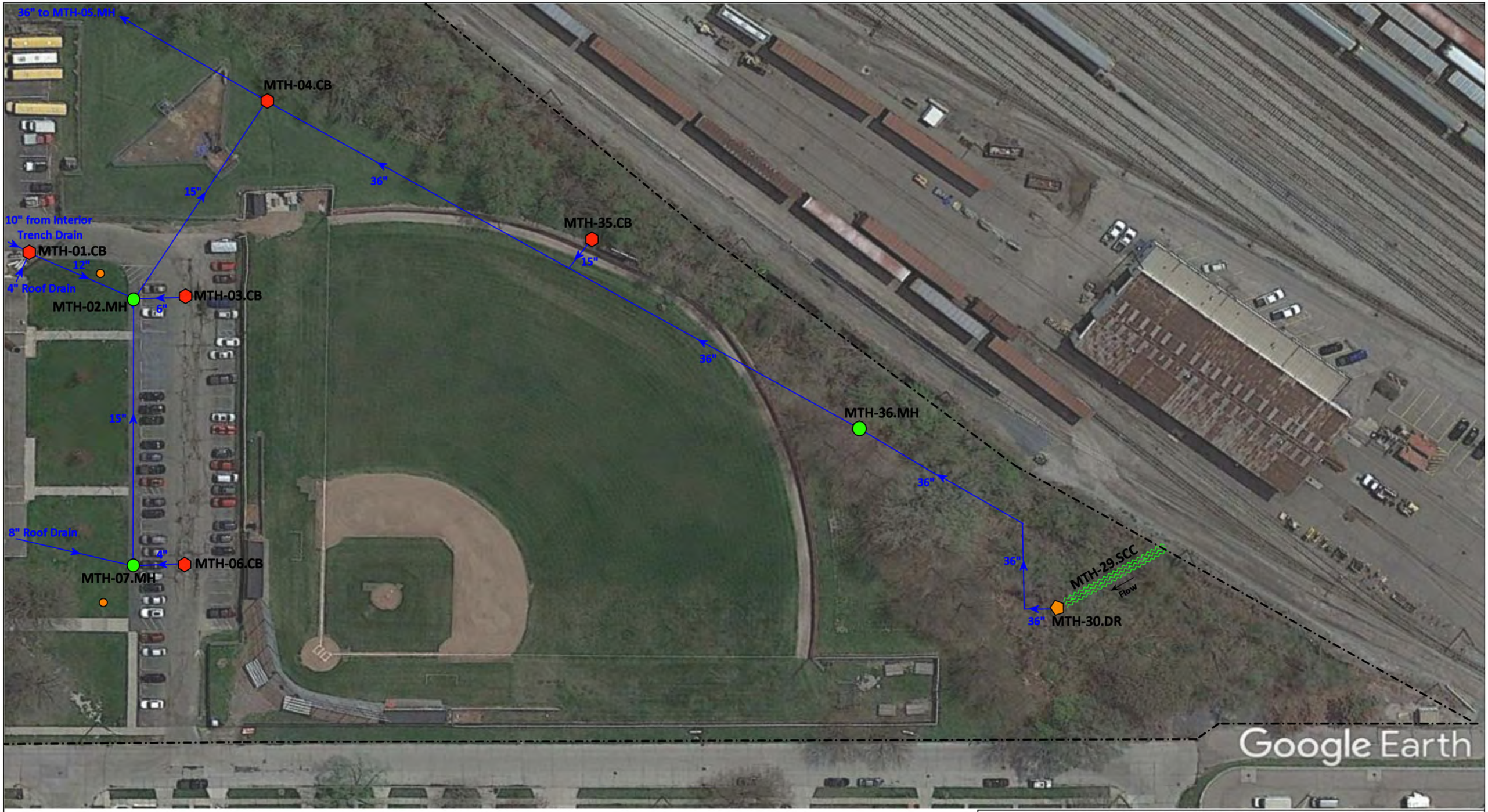
18656 Prospect St, Melvindale, MI 48122

Melvindale High School & Transportation Complex

Melvindale- North Allen Park Public Schools

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	03/24/2021
Drawn by:	KD
Reviewed:	CD
Page #:	1 of 2
Scale:	Not to Scale



= Property Boundary
= Manhole
= Catch Basin
= Sanitary
= Drainage Receptor
= Stormwater Conveyance Channel

North

18656 Prospect St, Melvindale, MI 48122

Melvindale High School & Transportation Complex

Melvindale- North Allen Park Public Schools

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	03/24/2021
Drawn by:	KD
Reviewed:	CD
Page #:	2 of 2
Scale:	Not to Scale

= Catch Basin

= Manhole

= Open Pipe Outlet

= Property Line

= Sanitary

= Stormwater Conveyance Channel

* = TMDL Sampling Location

North

5000 Shenandoah Avenue, Allen Park, Michigan 48101

Rogers Early Elementary School

Melvindale - Northern Allen Park Public Schools

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	10/09/2020
Drawn by:	BJZ
Reviewed:	LK
Page #:	1 of 1
Scale:	Not to Scale

Appendix "B"

School Board Policy Resolution,

Post Construction Stormwater Runoff Program Policy and Procedures,

&

Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking Sheet

Created: May 31, 2016
Revised: May 17, 2021
July 1, 2021
August 24, 2021

Stormwater Management - Post-Construction Policy & Procedure

Melvindale-Northern Allen Park Public Schools
Issue date: July 1, 2021

Applies To: As required by the National Pollutant Discharge Elimination System (NPDES) permit for Melvindale-Northern Allen Park Public Schools, the scope of this Guideline includes all development and redevelopment projects on District properties that involve either:

a. earth disturbance of one (1) acre or greater,
   OR
b. earth disturbance of less than one (1) acre, but which are part of a larger common plan of development or sale that would disturb one (1) acre or more.

Post-Construction Requirements Policy Statement

Melvindale-Northern Allen Park Public Schools development and redevelopment projects on District property are regulated under and must comply with the Melvindale-Northern Allen Park Public Schools NPDES permit for stormwater discharges, as issued by the Michigan Department of Environment, Great Lakes and Energy (EGLE). The Stormwater Management Post-Construction Requirements Guideline has been developed to provide guidance regarding responsibilities and actions to meet the NPDES permit conditions for development and redevelopment projects on district properties.

Post-Construction Plan for Stormwater Management

The post-construction plan for stormwater management on regulated sites **must** include:

- A minimum treatment volume standard to address water quality impacts.
- Channel protection criteria to address resource impairment resulting from flow volumes and rates.
- Review sites with known soil and/or groundwater contamination, including potential “hot spots” and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria to ensure that infiltration BMPs do not exacerbate existing conditions. Hot spots include areas with the potential for significant pollutant loading such as vehicle service and maintenance facilities, vehicle equipment cleaning facilities, fleet storage areas for buses, and outdoor liquid container storage.
- Drawings showing the location of stormwater control measures and the storm system.
- Details on the proposed stormwater control measures.
- Operation & Maintenance (O&M) requirements.
- Supporting information
    - Calculations used for designing all components of the stormwater management systems.

- Total Suspended Solids (TSS) design removal rates and supporting manufacturer documentation, if applicable.
- Geotechnical report including soil boring and infiltration test data.

The project team [Architecture, Engineering & Construction, Other Project Manager, Project Developer and/or Contractors] shall develop the post-construction stormwater management plan in accordance with this guideline and the NPDES permit.

Water Quality Treatment Volume Standard

The minimum treatment volume standard **must** be either:

a. Treat the first one (1) inch of runoff from the entire site.
   OR
b. Treat the runoff generated from ninety percent (90%) of all runoff-producing storms for the project site, as summarized in MDEQ's memo dated March 24, 2006 https://www.michigan.gov/documents/deq/wrd-hsu-ninety-percent_557709_7.pdf

Total Suspended Solids

The treatment methods must be designed on a site-specific basis to achieve the following:

a. A minimum of eighty percent (80%) removal of total suspended solids (TSS), as compared with uncontrolled runoff.
   OR
b. Discharge concentrations of TSS not to exceed 80 milligrams per liter (80mg/L).

A minimum treatment volume standard is not required where site conditions are such that TSS concentrations in storm water discharges will not exceed 80mg/L.

Channel Protection Criteria

The channel protection criteria must maintain post-development site runoff volume and peak flow rate at or below existing levels for all storms up to the 2-year, 24-hour event. "Existing levels" means the runoff volume and peak flow rate for the last land use prior to the planned new development or redevelopment. More restrictive channel protection criteria may be utilized on a case-by-case basis, as appropriate.

Operations & Maintenance Plans

All structural and vegetative stormwater control measures installed as a requirement under this section of the permit shall include a plan for maintaining maximum design performance through long-term operation and maintenance.

Enforcement

The Melvindale-Northern Allen Park Public Schools Stormwater Program Manager will administer and enforce the stormwater management program, including maintaining procedures, guidance, information, etc. to aid district staff and contractors in complying with the post-construction requirements for stormwater management.

Melvindale-Northern Allen Park Public Schools
Board of Education
Resolution in Support of Stormwater Management Plan

WHEREAS, Melvindale-Northern Allen Park Public Schools owns and operates facilities within the boundaries of the "Detroit" urbanized area which discharges stormwater though a municipal separate storm sewer system (MS4) to surface waters of the State of Michigan; and

WHEREAS, The Michigan Department of Environmental Quality – Water Bureau maintains oversight and regulatory authority for compliance with the terms and conditions of the NPDES Municipal Separate Storm Sewer System discharge permit; and

WHEREAS, Melvindale-Northern Allen Park Public Schools has applied for and received permit coverage to discharge stormwater from Melvindale-Northern Allen Park Public Schools facilities to the MS4; and

WHEREAS, Melvindale-Northern Allen Park Public Schools agrees to comply with the NPDES Municipal Separate Storm Sewer System discharge permit requirements, and

WHEREAS, Melvindale-Northern Allen Park Public Schools has developed a Stormwater Management Program Plan (SWMP) outlining the policies, procedures, and best management practices to be employed by the district to comply with the permit requirements, and

WHEREAS, the conditions of the NPDES Municipal Separate Storm Sewer System discharge permit require Melvindale-Northern Allen Park Public Schools to develop policies and procedures that prohibit illicit discharges to their stormwater system and to implement appropriate enforcement procedures and actions to detect and eliminate such illicit discharges, and

WHEREAS, Melvindale-Northern Allen Park Public Schools agrees to prohibit the discharge of non-stormwater discharges into the storm drain system, including but not limited to pollutants or waters containing any pollutants, and

WHEREAS, Melvindale-Northern Allen Park Public Schools agrees to eliminate illicit discharges and illicit connections, and

WHEREAS, Melvindale-Northern Allen Park Public Schools agrees to prohibit the construction, use, maintenance or continued existence of illicit connections to the storm drain system. 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, and

WHEREAS, Melvindale-Northern Allen Park Public Schools agrees to obtain a Part 91 permit from the appropriate state, county, or local governmental soil erosion permitting agency for new development and redevelopment projects that disturb one or more acres, and

WHEREAS, Melvindale-Northern Allen Park Public Schools agrees to obtain a construction site permit from the local municipality or other governing unit for new development and redevelopment projects that disturb one or more acres, and

WHEREAS, Melvindale-Northern Allen Park Public Schools agrees to inspect, operate, and maintain structural controls for the purpose of reducing pollutant contribution, control runoff, and decrease or eliminate stream bank erosion due to stormwater runoff, and

WHEREAS, Melvindale-Northern Allen Park Public Schools agrees to comply with the requirements of the State of Michigan Permit (Rule 323.2190) for stormwater discharge from construction activity.

THEREFORE, be it resolved that the Melvindale-Northern Allen Park Public Schools Board of Education is highly committed to practicing sound environmental principals including the reduction of pollutants to surface waters though discharges of stormwater. The Board hereby approves and instructs the district Superintendent to enforce the above listed policies and procedures for illicit discharge elimination, control of stormwater runoff and long-term operation and maintenance of structural controls as part of the overall Melvindale-Northern Allen Park Stormwater Management Program Plan.

Duly passed and approved by the Melvindale-Northern Allen Park Public Schools Board of Education, Wayne County, Michigan this 13th day of March, 2017.

Approved:

President

Attest:

Secretary

Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking
Melvindale-Northern Allen Park Public Schools

Report Number	Name	Date	Location of Violation	Business/ Organization	Description of Violation	Description of Enforcement Response	Compliance Schedule Date	Date Violation Resolved
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								

Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking
Melvindale-Northern Allen Park Public Schools

Report Number	Name	Date	Location of Violation	Business/ Organization	Description of Violation	Description of Enforcement Response	Compliance Schedule Date	Date Violation Resolved
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								

Appendix "C"

SEMCOG Posters

Created: May 31, 2016
Revised: May 17, 2021
July 1, 2021
August 24, 2021

How to Spot Illicit Discharges

Sanitary Sewer Discharge Observations:

- Sanitary Debris
- Staining on pipe
- Heavy Foam
- Gray or Discolored Water
- Odors (sewage, chlorine, rotten eggs and detergents)



Illegal Dumping, Spills, or Floor Drain Connection Observations:

- Oily Sheen
- Trash, non-sanitary debris
- Petroleum odors
- Stained sediment, rocks, and vegetation
- Vehicle bay washout



Agricultural Runoff, Fertilizers, or Sanitary Sewer Waste Observations:

- Algae growth at or near outlet
- Heavy vegetation at or near outlet


What to Report

- **Spills and Contamination to lakes, river and streams**
  District Stormwater Coordinator, MDEQ, Environmental Health Department, Drain Commissioner's Office
- **Suspicious dumping or discharges from pipes**
  District Stormwater Coordinator, MDEQ, Environmental Health Department, Drain Commissioner's Office
- **Sewage on the ground or in surface water**
  District Stormwater Coordinator, Environmental Health Department
- **Large number of dead fish in waterways**
  District Stormwater Coordinator, MDEQ, Environmental Health Department
- **Failing or leaking septic systems**
  District Stormwater Coordinator, Environmental Health Department
- **Construction site soil erosion to waterways**
  District Stormwater Coordinator, local SESC Enforcing Agency
- **Polluted runoff from storage piles/dumpsters entering waterways**
  District Stormwater Coordinator, Environmental Health Department, Drain Commissioner's Office

Important Numbers

Emergency Call 9-1-1

- Pollution Emergency Alerting System (PEAS) **1-800-292-4706**
- 24 Hour Spill Hot Line – Arch Environmental Group **1-248-522-2821**

Non-Emergency

- School District Contact Number _____
- DEQ Environmental Assistance Center **1-800-662-9278**
- Eaton County Drain Commissioner **1-800-292-4706**
- Genesee County Drain Commissioner **1-810-732-2940**
- Livingston County Department of Public Health **1-517-546-9858**
- Macomb County Public Works **1-877-679-4357**
- Oakland County Water Resources **1-248-858-0958**
- Washtenaw County Drain Commissioner **1-724-222-6860**
- Wayne County Department of the Environment **1-888-223-2363**

environmental group

Remember, it ALL drains to our lakes and rivers

Our Water. Our Future.

Ours to Protect

Keep pollution out of storm drains

Storm drains and roadside ditches lead to our lakes and streams. **So, any oil, pet waste, leaves, or dirty water from washing your car or other outside activities** that enters a storm drain gets into our lakes and streams.

How can you help? Simple. **Use a broom instead of a hose** to clean your driveway. Keep leaves, grass clippings, and trash away from the storm drain, and **never dump motor oil, pet waste, or dirty, soapy water** down the storm drain.
Remember, only rain in the drain!

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Remember, you're not just walking the dog

Our Water. Our Future.

Ours to Protect

Clean up after your pet

Did you know that pet waste has bacteria that makes our lakes and rivers unsafe for swimming and other recreational activities?
That happens when **pet waste left on sidewalks or yards gets washed into storm drains**
or roadside ditches that lead directly to our lakes and rivers.

What can you do? Simple.
No matter where you are **dispose of your pet's waste promptly** in the toilet or trash.

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Remember, you're not just getting rid of weeds and pests

Our Water. Our Future.
Ours to Protect

Choose earth-friendly landscaping

Did you know you can **protect your kids, pets, and the environment** from the harmful effects of herbicides & pesticides by choosing earth-friendly landscaping? These chemicals wash off our lawns and gardens into our storm drains, which lead to our lakes and rivers.

What can you do? Simple.
Spot treat for specific pests and weeds or remove by hand. Mulch around plants. **Water your lawn only when it needs it.** Attract butterflies and birds by **adding plants that are native to Southeast Michigan.**

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Remember, it's not just toxic to you

Our Water. Our Future.

Ours to Protect

Carefully store and dispose of household cleaners, chemicals, and oil

Did you know that many **household products are dangerous to our pets, kids, and the environment?**
These materials get into our lakes and rivers if washed or dumped into a storm drain or roadside ditch.

What can you do? Simple.

Proper disposal is key. Take household cleaners, pesticides, gasoline, antifreeze, used oil, and other dangerous products to your **community's household hazardous waste collection day.** Contact your community for more information on these events.

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Seven Simple Steps to Clean Water

Our Water. Our Future.

Ours to Protect

1. Help keep pollution out of storm drains
2. Fertilize sparingly and caringly
3. Carefully store and dispose of household cleaners, chemicals, and oil
4. Clean up after your pet
5. Practice good car care
6. Choose earth friendly landscaping
7. Save water

Our Water. Our Future. Ours to Protect.

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.
Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Remember, you're not just fertilizing your lawn

Our Water. Our Future.

Ours to Protect

Fertilize sparingly and caringly

Storm drains found in our streets and yards empty into our lakes and streams. So, **when we fertilize our lawn we could also be fertilizing our lakes and streams**. While fertilizer is good for our lawn, it's bad for our water. Fertilizer in our lakes and streams causes algae to grow. Algae can form large blooms and uses up oxygen that fish need to survive. With 1.5 million homes in Southeast Michigan, all of us need to be aware of the far-reaching effects of our lawn care practices.

What can you do? Simple. Use a **no or low phosphorus fertilizer,** select a **slow release** fertilizer where at least half of the nitrogen is water insoluble (check the ingredients on the label), keep fertilizer away from lakes, streams, and storm drains, and **sweep excess fertilizer** back onto your lawn. Not only will our lakes and streams thank you, but so will your pocketbook!

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Remember, you're not just washing your car

Our Water. Our Future.

Ours to Protect

Practice good car care

Did you know there are over four million vehicles in Southeast Michigan? **Practicing good car care helps protect our lakes and streams.**

How? Storm drains and roadside ditches lead to our lakes and streams. So, if motor fluids or dirty water from washing our cars are washed or dumped into the storm drain, it pollutes our local waterways.

What can you do? Simple. **Keep your car tuned and fix leaks** promptly, **recycle used motor oil** and other fluids, **take your car to the carwash or wash your car on the grass.**

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Appendix "D"

Inspection Field Worksheets & Stormwater Sampling
&
Analysis Protocol for School District MS4 Clients (SOP-101)

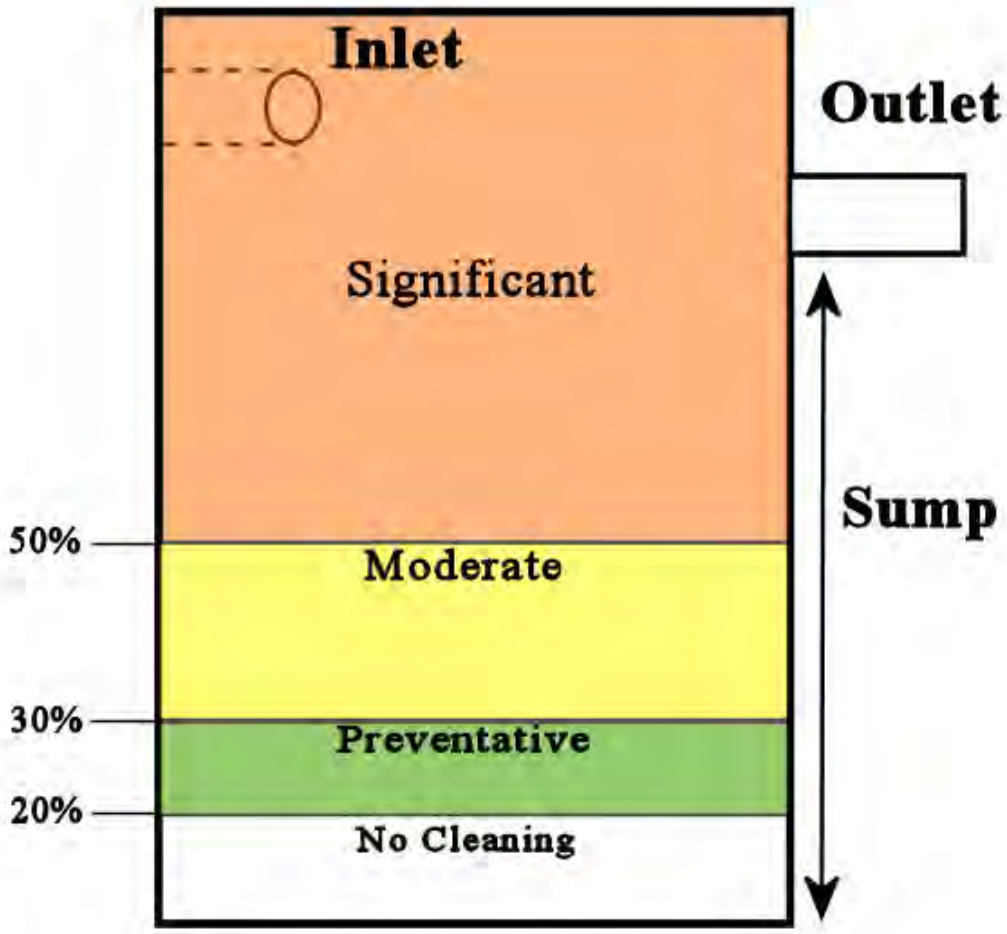
Created: May 31, 2016
Revised: May 17, 2021
July 1, 2021
August 24, 2021

Routine Storm Sewer System Inspection Table

Building:			**Client:**	
Inspectors:			**Start Date:**	
			Inspection Type:	

ID #	Type	Inspected	Standing Water	Color	Odor	Structure Staining	Suds	Oil Sheen	Bacterial Sheen	Sewage	Algae	Slimes	Abnormal Vegetation	Flow Observed	Velocity of Flow	Color of Flow	Blockages	Erosion	Needs Cleaning?	Structural Issues	Structural Trend	Stenciled

environmental group


Inlet
Outlet
Significant
Sump
50%
Moderate
30%
Preventative
20%
No Cleaning

Routine Storm Sewer System Inspection Table

Building:	"School/Location"		**Client:**	"School District"	
Inspectors:	"Inspectors Name"		**Start Date:**	"Start Date"	"End Date"
			Inspection Type:	"Routine Storm Sewer Inspection or other"	

ID #	Type	Inspected	Standing Water	Color	Odor	Structure Staining	Suds	Oil Sheen	Bacterial Sheen	Sewage	Algae	Slimes	Abnormal Vegetation	Flow Observed	Velocity of Flow	Color of Flow	Blockages	Erosion	Needs Cleaning?	Structural Issues	Structural Trend	Stenciled
"Storm Structure ID" Ex. ADM-01.CB(ADM represents building such as Admin, 01=number of structure, and CB=structure type.	Type of Structure (Catch Basin, Manhole, Pond, Swale, Pipe, etc.)	Was it inspected this round. (Yes or No)	Was there standing water in the structure? (Yes or No)	What color is the standing water if present? (Clear, Cloudy, Brown, White, etc.)	Does the basin have a noticeable odor? (Yes or No)	Is there staining on the interior of the structure? (Yes or No) This could be staining caused by a current illicit discharge, remnants of a past illicit discharge, or natural staining from iron oxidizing bacteria etc.	Are there suds present in the structure (organic suds - caused by aeration/natural causes, soapy suds, or no)	Is there oil sheen present on the water surface in the structure? (Significant - indicative of an illicit discharge, OR No)	Is there bacterial sheen on water surface of the structure? (Yes or No) - We ask this to confirm that a sheen in a photo was bacterial instead of oil.	Is evidence of sewage present in water in structure? (toilet paper, poo, etc.) - (Yes or No)	Is Algae growth present in the structure? (Yes or No)	Are there slimes present in the structure? (Yes or No)	Is there abnormal veg. growth in structure? (Yes or No)	Was there water flow observed in the structures pipes? (No, Trickle(light flow), Intermittent(Indicative of a sump), or continuous(usually occurs during/after a rain event))	What is the estimated velocity of the water flow if present? (N/A, Trickle, slow, moderate, or substantial) Substantial occurs during or after a rain event.	What is the color of the flow within the structure? (N/A, Brown, Yellow, Clear, Cloudy, etc.) Used to be sure there is no evidence of illicit activities during or after rain events.	Are any pipes blocked? (Yes or No) This would be evident if there was a visible blockage in a pipe OR if the water level in the structure is high.	Is there erosion occurring around the structure? (Yes or No)	Does the structure have sediment build-up in the sump or bottom? (Significant - for 50% full sump depth below outpipe or higher, moderate - for 30% to 50% sump depth below outpipe, preventative - for 20% to 30% sump depth, OR no cleaning for below 20%. Or Cleaned)	Are there any issues with the structure itself and how severe is it? - This could be for cracking on the interior/exterior, sink holes, erosion, etc. (Significant, Moderate, Preventative, or None, Repaired-since last inspection, or Partial Repair)	If there is a structural issue, is the structural issue worsening since the previous inspection? (Stable - appears the same/hasn't worsened, Improving - appears better/usually for a repair or for erosion lessening, OR deteriorating - the condition has worsened)	Does the structure have a "No Dumping - Drains to River" stencil in place? (No - means it needs one, Yes - it has one, Update - it has one, but it is fading, OR N/A - the structure is in the grass)

environmental group

Detention BMP Inspection Checklist*

Project Location:_____

Date/Time: _____

Inspector:_____

Maintenance Item	Satisfactory/ Unsatisfactory	Recommended Inspection Frequency	Comments
Inlet/Outlet Pipes			
Structural integrity of inlet/outlet (Are any inlet pipes broken, crumbling, separated?) List Inlet Pipes Approximate Diameter and Type of Material Inlet Pipe 1 _____ Inlet Pipe 2 _____ Inlet Pipe 3 _____ Outlet Pipe Size/Type _____		A	
Riprap at inlet pipe (Is the riprap still present? Is it visible and not covered with sediment?		A	
Stone around outlet pipe (Is the stone clogged with debris and/or sediment?)		A	
Trash or debris blocking inlet/outlet (Inspect to ensure no major obstructions hindering general functionality)		M	
Inspect/clean catch basin upstream of the BMP if accessible.		A	
Inspect inlets and outlet for erosion (Are there eroded areas around the pipes?)		A	
Inspect overflow spillway for signs of erosion.		A	
Pretreatment (if applicable) (Might include sediment forebay, upstream catch basin, bioswale, rain garden, swirl concentrator)			
Device functioning to trap/collect sediment		A	
Remove accumulated sediment as appropriate for the pretreatment device. forebay		A	
Detention Pond		A	

Inspection frequency key — A = Annual, M = Monthly, S = After major storm
*It is recommended to review and inspect the basin with the engineering as-built plans.

Maintenance Item	Satisfactory/ Unsatisfactory	Recommended Inspection Frequency	Comments
Inspect side slopes, berms and emergency overflow for erosion		A	
Reestablish permanent native vegetation on eroded slopes		As needed	
Inspect for excess sediment accumulation in pond if not pretreatment device is present		A	
Overall functionality			
Ensure pond is functioning properly (Professional Civil Engineer is recommended)		A	
Ensure the outlet is functioning properly (Professional Civil Engineer is recommended)		A	
Optional/Enhancements			
Maintain 15-20 feet “no mow and chemical free” zone		A	
Mow (or burn) the “no mow” zone		A	
Inspect basin and “no mow” zone for invasive species.		A	
Qualified professional applicator selectively herbicide invasive species		A	
Increase plant diversity by planting additional vegetation in and around pond.		A	
Complaints from residents (note on back)		S	
Encroachment on pond/no- mow zone.		A	
Unauthorized plantings		A	
Aesthetics (e.g., graffiti, unkept maintenance)		A	

Inspection frequency key — A = Annual, M = Monthly, S = After major storm
*It is recommended to review and inspect the basin with the engineering as-built plans.

Summary

Inspector’s remarks: _____

_____

Overall condition of facility (acceptable or unacceptable): Acceptable

Dates any maintenance must be completed by: _____

Inspection frequency key — A = Annual, M = Monthly, S = After major storm
*It is recommended to review and inspect the basin with the engineering as-built plans.

Stream Bank Inspection Table

Client:				**Stream Name:**	
Inspectors:				**Site :**	
				Date:	
Weather in the past 24 hours:				**Current Weather:**	

Field Analysis:

Uptream Turbidity:		NTU	Upstream Temprature:		Upstream pH:		
Downstream Turbidity:		NTU	Downstream Temprature:		Downstream pH:		

Physical Characterization:

In-Stream Characteristics

Pools:	N/A
Runs:	N/A
Riffles:	N/A
Stream Bed Features:	
% of Embedded Bottom:	
Organic Materials:	
Large Wooded Debris	
Water Appearance:	
Water Odor:	

Streambank & Channel Characteristics

Depth of Run:		Stream Erodible Soils:	
Depth of Pool(s):		Bank Modifications:	
Width of Stream:		Condition of Bank:	
Stream Velocity:		Bank Slope:	
Vegitative Cover:			
Shape of Channel:			

Additional Comments:

Watershed / Biological Characteristics:

Wildlife Around Stream:	
Fish In Stream:	
Aquatic Plants in Stream:	
Extent of Alge :	
Potential Stream Impact:	

Stream Photos:

Arch Environmental Group
37720 Interchange Drive,
Farmington Hills MI 48370

Phone: (248) 426-0135
Fax: (248) 426-0136
www.archenvgroup.com

Screening Inspection Log

Building:		**Client:**	
Inspectors:		**Date**	
		Inspection Type:	

Structure Information:

ID Number:		Structure Type		Lat:		Long:	
Type:		Location:					
Outfall Dimensions							

Observations:

Standing Water Characteristics

Standing Water:	
Color:	
Odor:	
Suds:	
Staining:	
Oil Sheen:	
Sewage:	
Bacterial Sheen:	
Floatables:	
Slimes:	
Abnormal Growth:	

Flow Characteristics

Flow Observed:	
Source of Flow:	
Velocity of Flow:	
Color of Flow:	
Flow Odor	

Maintenance

Cleaning:	
Blockages	
Structural Issues	
Structural Trend	
Stenciling:	

Additional Comments:

Sample ID And Information	
Sample Collected?	
Round:	
Last Rain Event:	
Current Weather:	
Sample Location Type:	
Other Screening Activities Conducted:	
Outfall Characterization:	
Sample sent to Lab:	

Field Analysis:	**Results:**	**Units:**	**Initials:**
pH:		pH units	
Temperature:		Celsius	
Surfactants:		mg/L	
Ammonia:		mg/L	
Chlorine:		mg/L	
Turbidity:		NTU	
Conductivity:		uohm/cm	

Equipment Calibration:

Date: 1/1/2013 Cal. By:

Photo ID:

Arch Environmental Group
37720 Interchange Drive,
Farmington Hills MI 48370

Phone: (248) 426-0135
Fax: (248) 426-0136
www.archenvgroup.com

DMB-SESC_Eform

SOIL EROSION AND SEDIMENTATION CONTROL (SESC) INSPECTION REPORT

DEPARTMENT OF MANAGEMENT AND BUDGET
INFRASTRUCTURE SERVICES, DESIGN AND CONSTRUCTION DIVISION
Second Floor, Stevens T. Mason Building
P.O. Box 30026, Lansing, Michigan 48909
This report is required to document soil erosion and sedimentation control on State of Michigan projects. (Authority: Part 91, PA 451)

REPORT NUMBER	SESC PERMIT NUMBER	REPORT DATE		PERIOD (FROM WHEN - TO WHEN)
INDEX NUMBER(S)	AGENCY NUMBER	FILE NUMBER	CONTRACT NUMBER	DEPARTMENT/UNIVERSITY/COLLEGE
PROJECT NAME				
CONTRACTOR				
PROFESSIONAL				

A. REASON FOR INSPECTION: ☐ Regular Inspection ☐ Post-Rain Event Inspection (explain below)

☐ Weekly ☐ Daily

B. CURRENT WEATHER CONDITIONS:

☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Windy Temperature_____

Precipitation: ☐ Rain ☐ Snow ☐ Sleet ☐ Hail Other (explain) _____

C. DESCRIBE SEVERE WEATHER (if applicable):

D. DESCRIBE WEATHER CONDITIONS SINCE LAST INSPECTION (Date of Last Inspection _____):

E. ARE THE CONTROLS INSTALLED ACCORDING TO THE PLANS AND SPECIFICATIONS? ☐ Yes ☐ No (Describe):

F. ARE THE CONTROLS IN PLACE FUNCTIONING PROPERLY? ☐ Yes ☐ No (Describe):

G. ARE THE CONTROLS BEING PROPERLY MAINTAINED? ☐ Yes ☐ No (Describe):

H. INDICATE THE SESC CONTROLS IN PLACE ON SITE (According to the DMB SESC Keying System):

Best Management Practice	Present (check)	Number or Lin Ft of Controls	Best Management Practice	Present (check)	Number or Lin Ft of Controls
Erosion Controls:			**Erosion/Sediment Controls:**		
(E1) Selective Grading & Shaping	☐		(ES31) Check Dam	☐	
(E2) Grubbing Omitted	☐		(ES32) Stone Filter Berm	☐	
(E3) Slope Roughening & Scarification	☐		(ES33) Filter Rolls	☐	
(E4) Terraces	☐		(ES34) Sand Fence	☐	
(E5) Dust Control	☐		(ES35) Dewatering	☐	
(E6) Mulch	☐		(ES36) Diversion Dike/Berm	☐	
(E7) Temporary Seeding	☐		(ES37) Diversion Ditch	☐	
(E8) Permanent Seeding	☐		(ES38) Cofferdam/Sheet Pilings	☐	
(E9) Mulch Blankets	☐		(ES39) Streambank Biostabilization	☐	
(E10) Sodding	☐		(ES40) Polymers	☐	
(E11) Vegetated Channels	☐		(ES41) Wattles	☐	
(E12) Rip Rap	☐		**Sediment Controls:**		
(E13) Gabion Walls	☐		(S51) Silt Fence	☐	
(E14) Energy Dissipator	☐		(S52) Catch Basin Sediment Guard	☐	
(E15) Temporary Slope Drain	☐		(S53) Stabilized Construction Access	☐	
(E16) Slope Drain	☐		(S54) Tire Wash	☐	
(E17) Cellular Confinement Systems	☐		(S55) Sediment Basin	☐	
(E18) Plastic Sheets	☐		(S56) Sediment Trap	☐	
(E19) Temporary Drainageway/ Stream Crossing	☐		(S57) Vegetated Buffer/Filter Strip	☐	
(E20) Temporary Bypass Channel	☐		(S58) Inlet Protection Fabric Drop	☐	
(E21) Live Staking	☐		(S59) Inlet Protection Fabric Fence	☐	
OTHER	☐		(S60) Inlet Protection Stone	☐	

I. WHAT CORRECTIVE ACTIONS SHOULD BE TAKEN BY THE CONTRACTOR?

J. BY WHAT DATE MUST THESE ACTIONS BE IMPLEMENTED: _____

K. OBSERVATIONS / COMMENTS:

_____ _____

Signature of Inspector Date

cc:

Appendix "E"

Illicit Discharge Illegal Spill Reporting Form

Created: May 31, 2016
Revised: May 17, 2021
July 1, 2021
August 24, 2021

Melvindale-Northern Allen Park Public Schools
STORMWATER CONTRACTOR OVERSIGHT RECORD

Melvindale-Northern Allen Park Public Schools shall implement the procedure requiring contractors hired by the District to perform municipal operation and maintenance activities that comply with the District pollution prevention and good housekeeping program and contractor oversight to ensure compliance with the District National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Storm Water Discharge Permit, Section A. Limitations and Monitoring Requirements, #7 Contractor Requirements and Oversight.

1. Identify the potential pollutant-generating activities and pollutants expected to be exposed to stormwater.
2. Describe the location where the potential pollutant-generating activities will occur.
3. Identify the person responsible for implementing the pollution prevention practice or practices for each pollutant-generating activity.

Please initial each line of the procedure.

_____ Prevent and respond to leaks, spills and other releases;

_____ Prevent the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities;

_____ Prevent the discharge of soaps, solvents, detergents, and wash water from construction materials, including the clean-up of stucco,
paint, form release oils, and curing compounds. Collection and proper disposal in a manner to prevent contact with stormwater and prevent discharge of these pollutants.

_____ Minimize the discharge of pollutants from vehicle and equipment washing, wheel wash water and other types of washing (e.g., locating activities away from surface waters and stormwater inlets or conveyance and directing wash waters to sediment basins or traps, using filtration devices such as filter bags or sand filters or using similarly effective controls);

_____ Direct concrete wash water into a leak-proof container or leak-proof settling basin. The container or basin shall be designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wash waters and shall not be discharged to surface waters;

_____ Minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials and wastes including (i) building products such as asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures; (ii) pesticides, herbicides, insecticides, fertilizers, and landscape materials; and (iii) construction and domestic wastes such as packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, Styrofoam, concrete, and other trash or building materials;

_____ Prevent the discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, and sanitary wastes.

_____ Report any other discharge from the potential pollutant-generating activities not addressed above to Melvindale-Northern Allen Park Public Schools.

_____
Name of Business

_____ _____
Business Representative Date

District Illicit Discharge/Illegal Dumping Reporting Form
Melvindale-Northern Allen Park Public Schools

Date:_____ Time_____

Inspectors:_____

I. ORIGIN OF REPORT

1. Describe the reason for conducting the investigation.

- ❑ Illicit Discharge Inspection (Routine)
- ❑ Facility Staff
- ❑ Citizen Complaint
- ❑ Other _____

II. SOURCE

1. Describe location of source of discharge (company name, address, cross streets, physical features, etc.)

_____

_____

2. Describe the Source:

- ❑ Residential
- ❑ Transportation Facility
- ❑ Construction Site
- ❑ Custodial
- ❑ Other _____

3. Facility of the Source:_____

_____

III. TYPE

1. Describe the type of material discharged:

- ❑ Sanitary Leak/Spill
- ❑ Paint Discharge
- ❑ Dumpster Discharge
- ❑ Cleaning Discharge
- ❑ Unhardened Cement Discharge
- ❑ Paint Discharge
- ❑ Vehicle Repair
- ❑ Vehicle Washing
- ❑ Grey Water Discharge
- ❑ Landscape Material Dumping
- ❑ Cooling Water Discharge
- ❑ Allowable Discharge
- ❑ Other _____

Provide Additional Information:_____

_____

2. Other Sources:

- ❑ Illicit Connection
- ❑ Construction Site
- ❑ Other _____

IV. FOLLOW-UP AND ENFOREMENT ACTIVITIES

1. Describe Corrective Actions:_____

_____

2. Describe Enforcement Action:

- ❑ None/Incident Resolved
- ❑ Verbal Notice
- ❑ Administrative Action
- ❑ Cleaning Discharge

3. Date Resolved:_____

4. Responsible Party

Signiture:_____

Stormwater Management – Illicit Discharge Regulatory Policy

Melvindale-Northern Allen Park Public Schools
Issue date: July 1, 2021

This illicit discharge regulatory policy was developed as a regulatory policy for prevention of pollution from storm water runoff and to protect the quality of the waters of the State of Michigan through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This regulatory mechanism establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit through the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The objectives of the regulatory mechanism are:

1. To regulate the contribution of pollutants to the MS4 by stormwater discharges by any user.
2. To prohibit illicit connections and discharges into the MS4.
3. To establish authority to investigate, inspect, and monitor suspected illicit discharges.

District properties include all Melvindale - North Allen Park Public Schools facilities.

Illicit Discharge means any discharge to, or seepage into the separate stormwater drainage system that is not composed entirely of stormwater or uncontaminated groundwater except discharges pursuant to an NPDES permit.

Illicit Connection means a physical connection to the MS4 separate stormwater system that primarily conveys non-stormwater discharges other than uncontaminated groundwater into the MS4 separate storm sewer system; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

Prohibitions of Illicit Discharges

1. Prohibition of Illicit Discharges:
    a. Melvindale - North Allen Park Public Schools prohibits the discharge of non-stormwater discharges into the storm drain system, including but not limited to pollutants or waters containing any pollutants.
    b. No person shall throw, drain, or otherwise discharge, cause, or allow others under its control to throw, drain, or otherwise discharge into the MS4 any pollutants or waters containing any pollutants, other than stormwater.

2. The following discharge is **not prohibited**:
    a. This policy excludes prohibitions from the discharge or flows from firefighting activities to the MNAPPS MS4. Discharge or flows from firefighting activities will be addressed only if they are identified as significant sources of pollutants to surface waters of the state.

b. The following activities are not prohibited under this policy unless they are determined to be significant sources of pollutants to surface waters of the state:
    - Water line flushing and discharges from potable water sources.
    - Landscape irrigation runoff, lawn water runoff, and irrigation waters.
    - Diverted stream flows and flows from riparian habitats and wetlands.
    - Rising groundwater and springs.
    - Uncontaminated groundwater infiltration and seepage.
    - Uncontaminated pumped groundwater, except groundwater cleanups specifically authorized by NPDES permits.
    - Foundation drains, water from crawl space pumps, footing drains, and basement sump pumps.
    - Air conditioning condensation.
    - Waters from noncommercial car washing (runoff from family home).
    - Street wash water.
    - Dechlorinated swimming pool water from single, two, or three family residences. (A swimming pool operated by the permittee shall not be discharged to a separate storm sewer or to surface waters of the state without NPDES permit authorization from EGLE.)

Prohibition of Illicit Connections

1. The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.
2. 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.
3. A person is considered to be in violation of this regulatory mechanism if the person connects a line conveying sewage to the MS4 or allows such a connection to continue.
4. Improper connections in violation of this regulatory mechanism must be disconnected and redirected.
5. Illicit discharge and connections will be eliminated immediately.

Enforcement

The District Stormwater Program Manager will administer and enforce the stormwater management program, including investigate, inspect, and monitor suspected illicit discharges or illicit connections.

If you witness or think a discharge is taking place, please contact the Melvindale - North Allen Park Public Schools at (313) 389-3324.

Appendix "F"

Property Structural Controls Inventory, Inspection, & Maintenance Schedule

Created: May 31, 2016
Revised: May 17, 2021
July 1, 2021
August 24, 2021

Melvindale-Northern Allen Park School District
Structural Control Inventory, Inspection & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Allendale Elementary School/ Strong Middle School Complex 3201 Oakwood Blvd. Melvindale, Michigan 48122	Low	Catch Basin/Manhole	50	Inspect Annually, Clean Once per Permit Cycle
		Open Pipe Outlet	2	Inspect Annually, Maintain as Needed
		Stabilized Outlet	4	Inspect Annually, Maintain as Needed
		Detention Pond	2	Inspect Annually, Maintain as Needed
		Garden	1	Inspect Annually, Maintain as Needed
		SEMCOG Posters	1-3	Inspect Annually, Replace as Needed
		Illicit Discharge Reporting Numbers Poster	1	Inspect Annually, Replace as Needed
Melvindale High School/ Transportation Facility Complex 18656 Prospect St. Melvindale, Michigan 48122	High	Catch Basins/Manholes	29	Inspect Annually, Clean Once per Permit Cycle
		Infiltration Basins	2	Inspect Annually, Maintain as Needed
		Bio-Retention Basin	2	Inspect Annually, Maintain as Needed

Revision Date: July 1, 2021

Melvindale-Northern Allen Park School District
Structural Control Inventory, Inspection & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Melvindale High School/ Transportation Facility Complex		Flow Splitter	1	Inspect Annually, Maintain as Needed
		Underground Detention System	1	Inspect Annually, Maintain as Needed
		Drainage Receptor	1	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed
		SEMCOG Posters	1-3	Inspect Annually, Replace as Needed
		Illicit Discharge Reporting Numbers Poster	1	Inspect Annually, Replace as Needed
Rogers Early Elementary School 5000 Shenandoah Avenue Allen Park, Michigan 48101	Low	Catch Basins/Manholes	3	Inspect Annually, Clean Once per Permit Cycle
		Stormwater Conveyance Channel	2	Inspect Annually, Maintain as Needed
		Open Pipe Outlet	1	Inspect Annually, Maintain as Needed
		Gardens	2	Inspect Annually, Maintain as Needed

Revision Date: July 1, 2021

Melvindale-Northern Allen Park School District
Structural Control Inventory, Inspection & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Rogers Early Elementary School		SEMCOG Posters	1-3	Inspect Annually, Replace as Needed
		Illicit Discharge Reporting Numbers Poster	1	Inspect Annually, Replace as Needed

Revision Date: July 1, 2021

Appendix "G"

TMDL Sample Location

Created: May 31, 2016
Revised: May 17, 2021
July 1, 2021
August 24, 2021

Melvindale-Northern Allen Park Public Schools				
Facility	Point of Discharge	Receiving Waters	Watershed	Parameter
Melvindale High School (Includes Central Office & Transportation)	No Sampling - Discharges to the Middle School Complex			
Rodgers Early Elementary School	RES-04.OP.OF	Ecorse River	Ecorse River Watershed	E. coli
Strong Middle School & Allendale Elementary School Complex	SAS-38.MH.DP SAS-39.MH.DP	Rouge River Rouge River	Rouge River Watershed	E. coli & Biota