

Stormwater Management Program Plan Requirements

Municipal Separate Storm Sewer System (MS4) controls are based on development and implementation of Best Management Practices (BMPs) to address each of the tasks identified as part of the following Six Minimum Management Measures:

- Public Education and Outreach Program(PEP)
- Public Involvement and Participation Program(PIP)
- Illicit Discharge Elimination Program(IDEP)
- Post Construction Stormwater Management Program for New LSD Development and Redevelopment of any LSD Properties.
- Construction Site Stormwater Runoff Control Program
- Pollution Prevention/Good Housekeeping for LSD faculty and staff.

The SWMP also includes current information regarding water quality status, water quality stresses, upcoming activities, and identification of shared responsibilities with other jurisdictions.

ATTACHMENT 1

Enforcement Response Procedure ERP

The Lansing School District has complete control over the MS4 and therefore the ability to compel compliance of violations of ordinances and/or regulatory mechanisms identified in the Stormwater Management Program (SWMP) and respond to unauthorized discharges to groundwater or waters of the state in such a way as to compel compliance by using the following enforcement response procedures. These procedures include, if necessary, fines, citations, stop work orders, or other tools as identified in the relevant ordinances.

When a staff member identifies or receives a report of a violation that may impact water quality, the report will be forwarded to the Stormwater Program Manager or a designated member of the LSD Public Safety Department for investigation and follow-up.

The Stormwater Program Manager or the staff member will conduct a site visit and, if an ordinance violation is observed, will notify the person responsible for violation of the relevant code or regulatory mechanism violated and enforce any cleanup or other action required. A deadline will be provided if necessary.

If a violation occurs that is handled by the LSD Public Safety Department or the Stormwater Program Manager, all violations are entered into the school districts work order system and reported alongside all other storm sewer maintenance tracking systems. All contacts, inspections, correspondence, dispatch of sewer maintenance crews, invoicing, and all other actions taken should be documented and include:

- Date of inspection/violation
- Location of inspection/violation associated with impacted system entities (i.e., pipes, catch basins, outfalls, etc.)
- Responsible parties
- Checklist of permit requirements met
- Any enforcement actions issued and specific violations of code
- Date of required compliance
- Date violation was resolved
- Date of rescheduled inspection or follow-up.

The information gathered will remain accessible for future reference (e.g., tracking a repeat violator, escalating enforcement, and identification of areas where education may be required.) This information will also allow us to summarize cases and to report

discharges to groundwater or surface waters of the state to the MDEQ and required by the NPDES permit and Part 5 Rules.

During Business hours, discharges should be reported to the DEQ District office per the NPDES permit or Part 5 Rules, after working hours/ on weekends, MDEQ's 24-hour pollution Emergency Alerting System (PEAS) at 1-800-292-4706 will be contacted

The Lansing School District shall not authorize illicit and non-illicit discharges, however, the LSD has allowed the exceptions below that are identified as not being significant contributor to violations of Water Quality Standards:

- Water line flushing and discharges from potable water sources
- Landscape irrigation runoff, lawn watering runoff, and irrigation waters
- Rising groundwater's and springs
- Uncontaminated groundwater infiltration and seepage
- Uncontaminated pumped groundwater, except for 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
- Street wash water
- Firefighting activities

Approved by Board of Education

Date

Public Education Plan (PEP)

Lansing School District (LSD) "Public Education Program" (PEP) is designed to promote, publicize, and facilitate the education for the purpose of encouraging the public to reduce the discharge of pollutants into the LSD separate storm sewer system. The term "Public" as referred in the this document is defined to include all persons who could potentially affect the quality of stormwater discharges from LSD properties including but not limited to LSD faculty, staff, contractors, and students of LSD, as well as area residents, visitors, public employees, local businesses, industries, construction contractors and property developers. The PEP will include a variety of mechanisms and venues to provide watershed awareness and pollution prevention education throughout the jurisdiction.

Although some of the designated tasks outlined in this PEP may not specifically apply to public school facilities, LSD is dedicated to work with other permitted entities, local municipalities, and watershed organizations to assist in the development and/or dissemination of educational materials throughout the area.

Public Education Program (PEP) Objectives

- 1) Educate the public about hazards associated with illicit discharges and the improper disposal of waste materials, encourage public reporting of illicit discharges or improper disposal of materials into the LSD separate storm sewer system including development and publishing a 24-hour hotline for reporting.
- 2) Educate the public about the water body that would be potentially impacted by improper actions at or near a LSD facility.
- 3) Educate the public about the availability, location, and requirements of facilities for the collection and/or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, grass clippings, leaf litter, animal wastes, and motor vehicle fluids.
- 4) Educate the public regarding the acceptable application and disposal of pesticides, herbicides, and fertilizers including the use of phosphorous free fertilizer alternatives, as appropriate.
- 5) Educate the public regarding preferred vehicle and equipment cleaning agents and procedures.
- 6) Educate the public about proper septic system maintenance and how to recognize system failures as appropriate.
- 7) Educate the public on, and promote the benefits of, green infrastructure and low impact Development.

Lansing School District is committed to promoting awareness and educating the public about problems associated with stormwater runoff and plan to work cooperatively with municipal partners and local watershed organizations in promoting watershed awareness and pollution prevention topics throughout the district and plan to continue throughout the term of this permit.

Educational mechanisms will include cooperation with distribution of community newsletters and other watershed partner literature, cable TV public service announcements or advertisements, event notices in school newsletters, development of a specific "stormwater awareness" webpage on the districts website, and the use and application of the program posters, brochures, tip cards, & display boards to be strategically implemented and placed throughout the school system.

All elements and obligations to each are listed in the attached PEP Plan.

ATTACHEMENT 2

**Greater Lansing Regional Committee
For Stormwater Management**

**Lansing Public Schools
Public Education Plan**



www.mywatersheds.org

REVISED: June 1, 2015

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INTRODUCTION

The Public Education Plan (PEP) is being prepared for the communities of the Greater Lansing Regional Committee for Stormwater Management (GLRC) to comply with the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit requirements. This creates a concise document for members and the PEP Committee to work from throughout the permit cycle (2013-2017).

The original PEP was completed in 2003, updated in 2006 and 2010; this current version of the PEP will be submitted to the Michigan Department of Environmental Quality (MDEQ) on January 21, 2013. The PEP was written for all GLRC members, educating the public on a regional and watershed level. However, each permittee will take their specific watershed and community characteristics into consideration throughout PEP implementation. Where applicable, each member has included their specific individual efforts throughout the PEP.

GLRC members participating in the PEP are as follows:

City of DeWitt	Lansing Charter Township
City of East Lansing	Meridian Charter Township
City of Grand Ledge	Lansing Public Schools
City of Lansing	Clinton County
City of Mason	Eaton County
Delhi Charter Township	Ingham County
Delta Charter Township	Michigan State University
DeWitt Charter Township	

Associate GLRC members include: Windsor Charter Township and Oneida Charter Township.

A. PUBLIC PARTICIPATION PROCEDURE – GLRC WEBSITE/SOCIAL MEDIA

As required, the Stormwater Management Program (SWMP) will be made available to the public via each community website. Local public notice requirements will be met as appropriate, both the SWMP and contact information will be provided to encourage public review. The public will be invited to participate in the implementation and periodic review of the SWMP, this will be accomplished through each community website and the GLRC website. When the progress reports are submitted to MDEQ, they will be posted on the GLRC and community websites. This will update the public and invite them to participate or provide input related to the implementation of the SWMP if they choose to.

In addition, the PEP, progress reports and other appropriate supporting documents will be posted on the GLRC website. The GLRC website serves as one of our strongest tools for information sharing with the public. All of the GLRC documents (template manuals, progress reports, implementation materials, brochures, quarterly newsletters, annual reports, etc.) are available on the GLRC website. The GLRC maintains a calendar that announces public meeting information, workshops, trainings and events. The GLRC also recognizes the importance of social media. Our existing Facebook and Twitter accounts help us to reach out to different demographics and reach larger audiences. The GLRC will continue to utilize social media as a communication and outreach tool.

B. PRIORITIZATION AND EVALUATION PROCEDURES

The GLRC conducted a water quality survey of residents during the fall of 2006. The purpose of the survey was to provide a benchmark to gauge the effectiveness of regional and local public outreach campaigns on water quality issues in the Greater Lansing Region. The survey results provided a baseline for evaluating the effectiveness of regional and local water quality initiatives over time. These results have been used by the GLRC and other organizations in the region to prioritize and implement public education programs through the most effective and efficient methods possible.

The 2006 survey results can be found here:

[Greater Lansing Regional Water Quality Survey Findings Report 2006](#)

Since a baseline for evaluating the effectiveness of current (and past) water quality initiatives was completed in 2006, the GLRC committed to conducting the survey again in 2012 to identify successes related to the current public education efforts and areas for improvement. The 2012 survey was conducted in the exact same manner as the 2006 survey; both statistically valid surveys ensure the GLRC is effective and efficient in our public education efforts. Evaluation mechanisms are essential to gauge implementation status and assess the effectiveness of the overall program. Identification of Quantifiable measures provides both measurability and accountability within the program. The PEP Committee meets frequently to discuss progress of ongoing activities, review current priorities, track measurable goals and to explore new educational opportunities based on the survey results. The PEP Committee has completed the prioritization at the GLRC level and categorized topics areas as: high, medium and low. The PEP Committee met and reviewed the survey results in detail to determine the priority topic areas. Many factors were considered in this process including the survey results, available resources, cost effective outreach methods, existing public knowledge levels and collaborating with other programs currently underway (i.e. Greening Mid-Michigan). High priority topics areas: B. Inform and educate the public about the connection of the MS4 to area water bodies and potential impacts discharges have on surface waters; C. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4; I. Educate the public on, and promote the benefits of, green infrastructures and low impact development. The GLRC will report on the measurable goals achieved during the regular Progress Report submissions.

The 2012 survey results can be found here:

[Greater Lansing Regional Water Quality Survey Findings Report 2012 \(with comparison data\)](#)

The GLRC PEP Committee will explore avenues for a follow up survey to be completed when approaching the end of the permit cycle. The survey will be used to evaluate successes, challenges and to determine the overall effectiveness of the PEP. During the Progress Report submittal, general evaluation and effectiveness will be discussed and changes could be made based on initial results, adaptive management is an important part of public education.

The GLRC is also working with several partners in the larger surrounding area to accomplish a variety of public education efforts. The Middle Grand River Organization of Watersheds (MGROW) is developing a regional public education campaign to provide educational resources for smaller watershed groups (including the GLRC, friends groups, Middle Grand River Watershed Management Planning Project (319) and the Red Cedar River Watershed Management Planning Project (319)). The GLRC will work with MGROW and the 319 groups to develop consistent, meaningful public education messages and delivery mechanisms that will benefit the entire region. This effort will incorporate the GLRC survey results and several other survey results in the region. The GLRC is confident that our collaborative and individual

PEP accomplishments and efforts will continue to be successful and we will work in the most effective, efficient way possible.

C. REQUIRED TOPIC AREAS

The PEP follows the format recommended by the MDEQ and includes the eleven topic areas required in the permit.

An adequate PEP will implement a sufficient amount of educational activities to ensure that the targeted audiences are reached with the appropriate message(s) for the following topics:

- (A) Promote public responsibility and stewardship in the applicant's watershed(s).*
- (B) 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.*
- (C) Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.*
- (D) Promote preferred cleaning materials and procedures for car, pavement, and power washing.*
- (E) Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.*
- (F) Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.*
- (G) Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous waste, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.*
- (H) Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.*
- (I) Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development.*
- (J) Promote methods for managing riparian lands to protect water quality.*
- (K) Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff.*

D. PUBLIC EDUCATION PLAN IMPLEMENTATION

Activities listed here correspond directly with the eleven topic areas A - K for compliance. The GLRC action plan, as part Lansing School District SWMP details the activities below and includes a schedule and general evaluation mechanisms.

(A) Promote public responsibility and stewardship in the applicant's watershed(s).

Activity: Continue to maintain watershed signage at road and river crossings.

Corresponding topic area:

Priority: Medium

Target audience: Public

Key message: Promoting local water resources, connecting the public to their surrounding environment. Signs read "You are in the Grand River, Looking Glass, or Red Cedar River Watershed".

Delivery mechanism: Passing vehicles, people biking, walking or running will view the signs.

Year and frequency of implementation: N/A

Responsible party: GLRC – Signs are no longer available.

Evaluation: in place in surrounding municipalities.



Activity: Use "Do you know your watershed?" brochure and update as appropriate.

Corresponding topic area: B

Priority: Medium

Target audience: Public

Key message: The brochure educates the public about what a watershed is, our local watersheds and general information about watershed protection.

Delivery mechanism: Posted on the GLRC website, handed out at public events, posted in community lobbies, and the Lansing School District Website.

Year and frequency of implementation: The brochure will be used at all public events (Adopt A River, Quiet Water Symposium, Michigan Water Environment Association (MWEA) Watershed Summit), update as appropriate. Will be available at Lansing School District's Physical Plant as well as various school locations

Responsible party: PEP Committee and Lansing School District

Evaluation: Will maintain throughout the year and website link traffic.

Activity: Support and promote Mid-Michigan Environmental Action Council (Mid-MEAC) in their volunteer stream monitoring efforts.

Corresponding topic area(s): C, J

Priority: Medium

Target audience: Public – recruiting volunteers for action.

Key message: Educate the public (volunteers) about macroinvertebrates and why they are an important indicator of water quality. This provides an opportunity to discuss pollutant sources and reporting of illicit discharges and riparian buffer purpose and management.

Delivery mechanism: Direct communication with volunteers, recruitment through events (When using the educational display, GLRC website and social media postings as well as Lansing School District website).

Year and frequency of implementation: Macroinvertebrate collections are done annually in the spring and fall, identification is completed in the fall.

Responsible party: GLRC Coordinator

Evaluation: Number of volunteers participating in the collections and identification of macroinvertebrates.

Activity: GLRC Educational Display

Corresponding topic area(s): B, C, D, E, F, G, H, I, J, K (all)

Priority: Medium

Target audience: Public and businesses

Key message: General watershed education; promoting action of the public about what they can do to reduce pollution.

Delivery mechanism: The display is used at the annual Quiet Water Symposium, annual Adopt-A-River event and the Michigan Water Environment Association Watershed Summit as well as the Lansing School District's Annual Showcase and various school locations throughout the year.

Year and frequency of implementation: Continuous use at annual events. Panels will be updated in 2014 to relate more specifically to the minimum control measures and target audiences.

Responsible party: GLRC Coordinator, PEP Committee and Lansing School District

Evaluation: Number of events and potential foot traffic, general conversations with the public. Review website traffic after an event to see if correspondents visited the website.



Activity: Update basic educational graphic with tag line and GLRC website

Corresponding topic area(s): B, C, D, E, F, G, H, I, J, K (all)

Priority: Medium

Target audience: Public

Key message: The current tag line reads "It all ends up in the Grand River", demonstrating that what we put on land effects the water. The website is also listed which directs the public to information that covers all topic areas listed in this plan.

Delivery mechanism: The 2013 billboard posting will direct viewers to the website. Other media will also be used with the graphic to direct people to the website.

Year and frequency of implementation: 2013 billboard posting for the months of March and April. The graphic will be updated in 2014.

Responsible party: PEP Committee

Evaluation: Website link traffic.



Activity: Utilize existing news articles and update them to be more flexible with different media outlets (Twitter, shorter columns, etc.).

Corresponding topic area(s): B, C, D, E, F, G, H, I, J, K (all)

Priority: Medium

Target audience: Public, elected officials

Key message: Articles cover the following topics:

What is a watershed	Pet Waste
Riparian Areas	Storm Vs. Sanitary Sewer
Who/What is the GLRC	Car Washing Article
Onsite Septic System	Adopt Your Catch Basin
Fertilizer	Illicit Discharge
Vehicle Maintenance	Wetlands

Delivery mechanism: Articles (including a posting timeline) are posted on the GLRC website, community websites and newspapers and Lansing School District website/newsletter

Year and frequency of implementation: Continue to maintain articles on the GLRC website. Update/reformatting is scheduled for 2014. News articles will be posted monthly through social media throughout the permit cycle on the Lansing School District Website as it is posted on GLRC website.

Responsible party: GLRC Coordinator, PEP Committee and Lansing School District

Evaluation: Number of articles posted on website or newsletter, including the number of residents receiving the Publication; 2. The GLRC Coordinator can track website traffic as well as Lansing School District can track website.

Activity: MSU Science Festival

Corresponding topic area(s): B, C, D, E, F, G, H, I, J, K (all)

Priority: Medium

Target audience: Elementary students, teachers and parents

Key message: Water resource awareness, pollution prevention, source water protection, water conservation, infiltration, etc.

Delivery mechanism: Direct communication with teachers (mail, phone, newsletter, etc.) to develop a plan for attending the festival as a field trip

Year and frequency of implementation: This is anticipated to be an annual event as is has been in the past.

Responsible party: GLRC Coordinator (aka water festival coordinator), Lansing School District students attending as a field trip option

Evaluation: Number of participants including students, teachers, presenters, etc. will be determined on what school participates. Looking at focusing on STEM Schools as Science is large part of their curriculum.

(B) 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.

Activity: GLRC webpage titled "My Watershed"

Corresponding topic area: A

Priority: High

Target audience: Public, elected officials

Key message: This section of the website promotes watershed health information, describes what citizens can do, how our water is impacted, etc.

Delivery mechanism: GLRC website and social media, community website link to the GLRC webpage

Year and frequency of implementation: Continuous posting on the website, update as appropriate.

Responsible party: GLRC Coordinator

Evaluation: Website link traffic.

Activity: GLRC quarterly newsletters and annual report

Corresponding topic area(s): A, C, D, E, F, G, H, I, J, K (all)

Priority: High

Target audience: Public, elected officials

Key message: The newsletters and annual report provide information on specific GLRC activities/events related to the six minimum measures. It also provides information related to relevant partner events and activities. It serves to educate municipal staff, elected officials, and also the public.

Delivery mechanism: GLRC website, social media, school lobbies, email distribution, Lansing School District website

Year and frequency of implementation: Ongoing, newsletters are completed quarterly and the annual report is completed after the first of the calendar year. Will post as they are completed to Lansing School District website.

Responsible party: GLRC Coordinator, Lansing School District

Evaluation: Website link traffic, number of people reached through email.

(C) Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.

Activity: Maintain the GLRC website for community and the state website and pollution reporting phone numbers for illicit discharges and acts of pollution. Will explore different delivery methods (language, etc.) to make this more relatable to the public. Lansing School District Website

Corresponding topic area:

Priority: High

Target audience: Public

Key message: To report illicit discharges (description provided), illegal dumping, etc.

Delivery mechanism: GLRC website and social media, permittee website

Year and frequency of implementation: Continuous posting on the website, social media.

Responsible party: GLRC Coordinator, PEP Committee, Lansing School District

Evaluation: Website link traffic.

(D) Promote preferred cleaning materials and procedures for car, pavement, and power washing.

Activity: Series of posters and brochures covering: car washing, pet waste, motor oil and fertilizer reduction.

Corresponding topic area(s): A, B, F, G

Priority: Medium

Target audience: Public

Key message: The posters and brochures describe the impact that bad practices related to car washing, pet waste disposal, motor oil disposal and fertilizer application can have on water quality. They also provide alternatives or best management practices for each of the four topics.

Delivery mechanism: Posters and brochures are available in community lobbies, brochures are handed out at public events, etc. Posted to the GLRC website and social media. Post on website and have brochures at Administration/High traffic schools

Year and frequency of implementation: Continuous use at public events (Adopt A River, Quiet Water Symposium, MWEA Watershed Summit), etc., update as appropriate.

Responsible party: GLRC Coordinator, PEP Committee and Lansing School District

Evaluation: Number of brochures provided throughout the year and website link traffic. Will keep brochures at secondary schools and have link to Charity Car Wash guidance document provided through DEQ.

(E) Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.

See corresponding topic area G below.

(F) Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.

Activity: Promote existing materials related to grass clippings and leaf litter.

Corresponding topic area(s): A, K

Priority: Medium

Target audience: Public, small businesses

Key message: Use the best management practices for management of grass clippings and leaf litter.

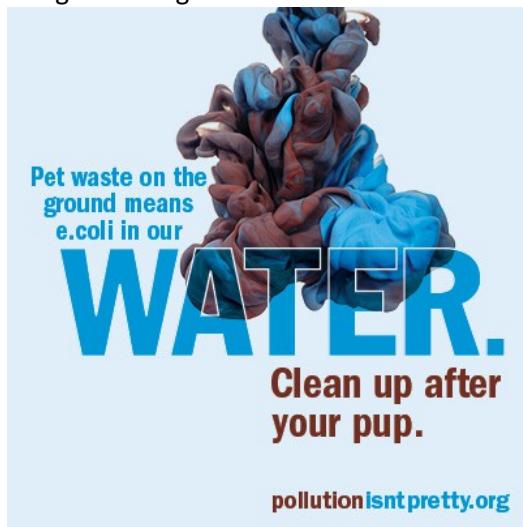
Delivery mechanism: Website and social media postings, promoted through the GLRC Educational display

Year and frequency of implementation: 2013, continuous

Responsible party: GLRC Coordinator and Lansing School District

Evaluation: Number of flyers/brochures handed out and website link traffic.

Activity: Continue to maintain pet waste reduction watershed signage at parks or designated dog areas.



Corresponding topic area(s): A, D

Priority: Medium

Target audience: Public

Key message: Promoting pet waste reduction for watershed protection, connecting the public to their surrounding environment.

Delivery mechanism: Passing vehicles, people biking, walking or running, and pet owners will view the signs.

Year and frequency of implementation: The signs will be maintained indefinitely with help

from the local Road Commissions and Lansing School District employees.

Responsible party: Lansing School District

Evaluation: 10 signs posted, routine maintenance to make sure they are secure to posts.

(G) Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous waste, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.

Activity: Promote local Household Hazardous Waste Collection and Recycling Events. GLRC Members: Erin will provide us with a fact sheet to post to Lansing School District website.

Corresponding topic area(s): D, E,

Priority:

Target audience: Public, small businesses

Key message: Pollution prevention by using available resources for appropriate disposal of waste.

Delivery mechanism: GLRC website, social media, Lansing School District website.

Year and frequency of implementation: Continuous, updates as necessary and as events are scheduled.

Responsible party: GLRC coordinator and Lansing School District

Evaluation: Website link traffic

(H) Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.

Activity: Promote and post local Point of Sale/Time of Sale septic/well inspection ordinances in Eaton and Ingham Counties. Also partner with local 319 groups addressing existing *E.coli* TMDL, post materials developed, explore educational opportunities, etc.

Corresponding topic area: A

Priority: Low

Target audience: Public

Key message: Maintain your septic system; it could be contaminating local water bodies through stormwater runoff.

Delivery mechanism: GLRC website, social media, Lansing School District website.

Year and frequency of implementation: Continuous

Responsible party: GLRC coordinator and Lansing School District

Evaluation: Website link traffic.

(I) Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development.

Activity: Promote Low Impact Development (LID) brochure, update as appropriate.

Corresponding topic area: A

Priority: High

Target audience: Public, elected officials, small businesses

Key message: Promote the use of LID and green infrastructure (GI) as a tool for reducing polluted runoff from development sites. The brochure explains what LID and GI are and provides examples and resources (links).

Delivery mechanism: GLRC website, social media, use with GLRC educational display, lobbies, etc. Lansing School District website

Year and frequency of implementation: Continuous, will use at events (Adopt A River, Quiet Water Symposium and MWEA Watershed Summit, Lansing School District Showcase) and update as appropriate.

Responsible party: GLRC Coordinator and Lansing School District

Evaluation: Number of brochures handed out and website traffic linked.

Activity: GLRC LID local projects webpage

Corresponding topic area: A

Priority: High

Target audience: Public, small businesses

Key message: The webpage promotes local LID and GI projects in the region to help encourage others to pursue projects in their own neighborhood or community. Promotes Networked Neighborhood for Eco-Conservation Online (NECO) (LID map and sharing system).

Delivery mechanism: GLRC website and social media

Year and frequency of implementation: Continuous, will update as needed, initial revision July 2013.

Responsible party: GLRC Coordinator

Evaluation: Website link traffic.

Activity: LID Presentation Series

Corresponding topic area: A

Priority: High

Target audience: GLRC members, elected officials, public

Key message: Educate participants on several different best management practices (examples include: snow management, LID project highlights, LID monitoring results, pervious pathways and tree preservation techniques, etc.) Several topics are explored based on interest from the GLRC.

Delivery mechanism: Email distribution, GLRC website, social media

Year and frequency of implementation: Continuous, complete 5 presentations in the permit cycle.

Responsible party: GLRC Coordinator, Ordinance/BMP Committee

Evaluation: Number of participants at each presentation.

Activity: Participate in the Greening Mid-Michigan (GMM) Project (regional GI vision)/Video Development

Corresponding topic area: A

Priority: High

Target audience: Public

Key message: The 27-minute video will be produced with WKRA and shot by Scott Allman will promote GI techniques, demonstrating how they lead to improved land use, water resource management, etc. The GLRC will also receive 3-4 shorter sound bites specifically related to stormwater management.

Delivery mechanism: GLRC website, social media, video distribution (including schools), WKAR local TV, municipal TV

Year and frequency of implementation: Video development will occur in 2013-2014, GLRC will post video segments to website, social media quarterly thereafter.

Responsible party: GLRC Coordinator represents the GLRC at all GMM meetings.

Evaluation: Number of video views, website traffic.

(J) Promote methods for managing riparian lands to protect water quality.

Activity: Riparian buffer brochure developed, other resources posted to the GLRC website

Corresponding topic area: A

Priority: Medium

Target audience: Riparian landowners

Key message: The brochure provides general information about native riparian buffers and why they are important for water quality and habitat.

Delivery mechanism: GLRC website, social media, use with educational display, lobbies, etc.

Year and frequency of implementation: Continuous, will use at events.

Responsible party: GLRC Coordinator

Evaluation: Number of brochures provided at events, website traffic linked.

(K) Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff.

Activity: Explore opportunities to connect with local business regarding pollution prevention through stormwater runoff. This may include business publications, presentation to associations, focus groups, etc.

Corresponding topic area(s): A

Priority: Medium

Target audience: Businesses, industries, institutions

Key message: Improve stormwater management to reduce pollution.

Delivery mechanism: Will explore through the committee

Year and frequency of implementation: The GLRC Coordinator will outreach to local businesses twice per permit cycle.

Responsible party: PEP Committee

Evaluation: Number of connections made with local businesses, etc.

ATTACHMENT 3

Illicit Discharge Elimination Program (IDEP)

The Lansing School District Illicit Discharge Elimination Program is to prohibit and effectively eliminate illicit discharges, including discharges of sanitary wastewaters, to the permitted separate stormwater drainage systems.

IDEP Program Objectives

Measurable Goals:

- 1) Develop and implement policy and procedures to regulate the contribution of pollutants to the MS4, prohibit illicit discharges including direct dumping or disposal of pollutants into the MS4, inspect and monitor suspected illicit connections or discharges, and require the elimination of identified illicit connections or discharges into the MS4.

- 2) Develop and implement a program to find and eliminate illicit connections and discharges the MS4 including:
 - A. Store and maintain storm sewer system maps showing the location of all discharge points and the names and locations of all surface waters that receive discharges from the MS4 at the Physical Plant Operations Department, located at 1717 Sam's Way, Lansing MI 48906.
 - B. Identification of areas for "Dry-Weather Screening" for detection and elimination of illicit discharges.
 - C. A plan and procedure to perform "Dry-Weather Screening" of each discharge point at least once every five (5) years of all outfalls and point of discharge.
 - D. Procedures for identification of detected illicit discharges.
 - E. Procedures for eliminating illicit discharges and pursuing enforcement action including response to spills and emergency situations.

- 3) Develop a program to train staff, especially those involved in illicit discharge related activities and those who have field jobs with the potential to witness illicit discharges and connections including:
 - A. The definition of illicit discharges, illicit connection and sanitary seepage
 - B. Techniques for locating illicit discharges including field screening, source identification, and recognizing illicit discharges and connections
 - C. Methods for eliminating illicit discharges
 - D. Proper procedure for responding to spills and emergency situations

- E. A schedule and requirement for initial training of appropriate staff, with recurrent (refresher) training once every three (3) years.

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 the Lansing School District. We currently own and operate separate storm sewer systems that discharge to surface waters or other municipal storm sewer systems (MS4s) and has developed this policy for elimination of illicit connections and discharges as part of the "Storm Water Management Program Plan" (SWMP). The purpose of these guidelines and associated procedures are to outline the steps to be taken by Lansing School District to locate, identify, and eliminate illicit connections and/or discharges from the facilities.

"**Illicit discharge**" means any discharge (or seepage) to the separate stormwater drainage system that is not composed entirely of stormwater or uncontaminated groundwater. 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

"**Illicit connection**" means a physical connection to the drainage system that 1) primarily conveys illicit discharges into the drainage system or 2) is not authorized or permitted by the local authority (where a local authority requires such authorization or permit).

Lansing School District policy is to eliminate all illicit connections or discharges from the facilities 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 facility to any waterway or the municipally owned separate storm sewer system (MS4).

Illicit Discharge Elimination Program Procedures

The LSD has developed the following program to inspect all separate storm sewer systems within the jurisdiction, prepare mapping of all storm water conveyances, locate discharge points, conduct dry- weather screening of outfalls, and complete testing of outfalls (if necessary) to identify the presence of potential illicit connections or discharges.

Dry – Weather Screening Procedures

The LSD will conduct dry-weather screening of all outfalls and discharge locations at least once every 5 years. Dry- weather screening will be conducted by State of Michigan Certified Industrial Stormwater Operators. Certified operators will inspect each outfall or discharge point following a period of at least 48-72 hours of dry weather. Visual inspection observations will be described on the Inspection Log.

Samples will be collected from outfalls with flowing water or other indications of illicit discharge within 24 hours of observing flow. Field screening of samples will be conducted by the certified operator to determine potential presence of illicit discharges. At a minimum, collected samples will be analyzed for pH, ammonia, surfactants, and temperature. Additional physical and/or chemical analysis may be conducted based on the determination of the certified operator to provide evidence of potential illicit connections or discharges.

Illicit Discharge Identification Procedures

Where results of inspection or analysis indicate an illicit discharge, the LSD will conduct investigations to determine the source or location of the discharge or connection within 24 hours. Investigations will include review of illicit discharge indicator parameter analysis results, dye tracing, smoke testing, video camera inspection, and documented visual observations. Certified operators will use the applicable testing or tracing method to investigate upstream conveyances to locate the source of the discharge.

Illicit Discharge or Connection Elimination Procedures

Illicit discharges from LSD facilities will be corrected immediately using the most expedient method possible based on the type and configuration of the discharge or connections. Long term corrective action may take up to 30 days. Illicit connections will be immediately capped, closed, or temporarily re-routed to the sanitary sewer or other collection system until permanent repairs can be completed. 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.

Evidence of illicit discharges traced to other MS4 jurisdictions will be provided to the responsible MS4 operator along with any collected data to assist the MS4 operator in completing their investigations to correct the illicit discharge or connection. The LSD 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 within 30 days.

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 Lansing School District facilities.

Preparedness for toxic hazard and asbestos hazard

The Lansing School District is concerned for the safety of the students and staff members and will attempt to comply with all Federal and State statutes and regulations to protect them from hazards that may result from industrial accidents beyond the control of school officials or from the presence of asbestos material used in the previous construction.

Toxic Hazards

These hazards exist in chemicals, pesticides, and other substances used in the school setting such as laboratories, science classrooms, kitchens, and in the cleaning of rooms and equipment.

The Lansing School District Certified Storm Water Operator or a designee will be responsible for the following:

- A. Hazard Determination
Identification of potential sources of toxic hazards in cooperation with material suppliers, who shall supply the Operator or Designee with Material Safety Data Sheets (MSDSs). The Board will rely on MSDS's from material suppliers to meet hazard determination requirements.
- B. Labeling
Ensuring that all incoming materials are properly labeled with the identity of the chemical, hazard warning, and the name and address of the manufacturer or responsible party, and that any container to which the material is transferred are also properly labeled.

C. Material Safety Data Sheets (MSDSs)

Maintaining a current file of MSDS's for all hazardous materials present on LSD District Property. The MSDS files will be kept at the Physical Plant Operations Department.

MSDSs will be available for review to all employees. Copies will be available upon request to the Toxic Hazard Preparedness Officer. Posters identifying the person responsible for monitoring MSDSs and where MSDSs are located will be hung at the Maintenance Department and at individual buildings. Posters notifying when new MSDSs are received will be located in the same location. The Officer or designee shall contact the supplier, in writing, if a required MSDS is not received, and promptly procure the MSDS before releasing the material for use.

If S/he is unable to obtain an MSDS from a supplier, S/he should contact MiOSHA's Occupational Health Division (OHD) or General Industry safety Division (GISD) for assistance in obtaining the MSDS.

D. Multi-Employer Work Sites – Informing Contractors

Informing contractors and their employees of any hazardous substances to which they may be exposed; measures to be employed to control or eliminate exposure; container and pipe labeling system used on site; and where applicable MSDS's can be viewed or obtained. Whenever District employees may potentially be exposed to hazards brought on site by contractors, the Physical Plant Operations Office will obtain information from the contractor pertaining to chemicals brought on site, and measures that should be taken to control or eliminate exposure to chemicals.

E. Maintenance/Custodial Employee Information and Training

Providing information to and conducting a training program for all District employees on sure topics as detection of hazards, explanation of the health hazards to which they could be exposed in their work environment, and the Districts plan for communication and labeling. Records of each employee's hazardous communication training should be maintained and all new employees should receive training regarding any hazardous chemicals they may potentially come in contact with as part of their job.

The information should include:

1. Regulations of MiOSHA's hazardous communication standard;
2. All operations in employee's work area where hazardous chemicals are present;
3. Location and availability of written hazardous communication program (i.e. the policy), the list of hazardous chemicals and the MSDSs. Training should include:
 1. Techniques used to detect presence of hazardous chemicals in the work area;
 2. Physical and health hazards of hazardous chemicals;
 3. The measures employees should take to protect themselves from these hazards;
 4. Details of the hazardous communication program including an explanation of the labeling system and MSDSs and how employees can obtain and use hazard information.

Employees shall also be informed of:

1. The employer's antidiscrimination/discharge policy for employees accessing hazard information;
2. How the employee can contact OHD or GISD for assistance in obtaining and MSDS if s/he is unable to obtain the MSDS from the employer.

Any staff member or contactor who applies pesticides on District property shall meet the requirements of AG 8431A in addition to the requirements established by the state. S/he shall provide written notification each year, prior to any application, to all parents and staff members:

1. That a pesticide is to be applied;
2. The type of pesticide and its potential side effects;
3. The location of the application;
4. The date of the application.

In fulfilling these responsibilities, the Officer or designee may enlist the aid of county and municipal authorities and, if possible, the owners or operators of identified potential sources of toxic hazard.

Emergency Spill Response Procedures

Each facility 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 facility. Spill containment materials such as pads, booms, diking materials, storm drain covers, etc. are to be stored and maintained at all facilities 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, of the ground:
 - A. Contain spill to the smallest area possible.
 - B. Review the Material 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 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 Operations & Maintenance Department at (517)-755-3800.
- B. If there is the threat of fire, explosion, or if any person(s) exhibit severe symptoms of exposure, contact 911 to initiate local emergency services.
- C. Alert anyone in the area and begin evacuation procedures.
- D. Use 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 Operations Department will initiate all notification procedures and contact contracted emergency response company to mitigate and remediate the release.
- G. Complete the "Hazardous Material or Waste Spill Exposure Form" for all exposed persons.
- H. The Supervisor of Operations will assess the spill and notify all agencies as required.

3) Spills of Elemental Mercury

- A. Contact the Operations & Maintenance 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. Maintenance and operations will contact the emergency response company to clean up the spill and properly decontaminate and/or dispose of all contaminated articles. This guidance has been developed in anticipation of potential releases of hazardous materials and substances. The procedures outlined in this guidance should only be implemented by those persons who have received sufficient training and are competent in the handling of the released material.

The 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 Operations & Maintenance Department and reported to the Supervisor of Operations & Maintenance. The Supervisor of Operations & Maintenance will be responsible for developing, maintaining, and implementing procedures for managing hazardous materials spill response and associated employee education and training for compliance with the policy and procedures.

Illicit Discharge Elimination Program – Best Management Practices (BMP's)

The following BMPs will be implemented to investigate potential illicit discharges from LSD facilities:

- BMP #1** Development of facility specific storm sewer system maps will be completed through review of existing site diagrams and conducting site inspections to verify and/or identify storm sewer conveyances identify location of all outfalls, and determine waterway or other MS4 where the stormwater discharges or leaves the subject property.
- BMP #2** Dry weather screening of all outfalls will be conducted, all stormwater structures will be inspected, and outfalls will be inspected and tested for illicit discharge parameters where indicated as necessary. The final facility MS4 maps will identify all storm system structures and other conveyances, all outfalls, and the receiving water or other MS4 operator to which the point sources discharge.
- BMP #3** Update facility diagrams with the location of stormwater structures and conveyances, along with the location of any outfalls, and the water body name or other MS4 operator's name identifying where the stormwater discharges.
- BMP #4** Eliminate illicit discharge connections if found during investigation and mapping phase.
- BMP #5** LSD will continue a system of marking and labeling storm drain structures in all parking lots and other impervious surface areas to identify those going to river/waterway. A system of stenciling, marking, and/or signage is used to identify all these structures.
- BMP #6** LSD maintenance, Grounds, and custodial staff are trained annually in proper handling of hazardous materials and substances and to prevent inadvertent disposal of materials into river/waterway.
- BMP #7** LSD requires the washing of District vehicles and equipment only in vehicle wash bay facility areas with drains to sanitary sewer lines.

- BMP #8** LSD will continue to investigate each facility including sensitive areas such as garage floor drains and auto shop classrooms to ensure proper use and maintenance of oil-water separators and that they are connected to the proper sewer system.
- BMP #9** LSD conducts routine inspections of maintenance areas, garage buildings, and auto shop classroom for proper storage of polluting materials (proper storage of vehicle fluids, cleaning chemicals, landscape pesticides, herbicides and fertilizers).
- BMP #10** Evaluate all existing buffer areas and ensure proper maintenance. LSD currently uses mulching mowers, therefore grass clippings and leaf litter will be worked into existing lawn areas. All drainage from these areas will pass through natural buffer areas to filter discharge. All turf areas other than athletic fields are cut to 3" length, field turf is cut to 2 ½".
- BMP #11** LSD will conduct re-inspections of storm sewer system structures and conveyances including dry weather screening and outfall testing at least once every five years.

Use of Tracer Dyes

Use of tracer dyes for dye testing activities requires pre-approval from the Michigan Department of Environmental Quality (MDEQ)-Water Bureau and only MDEQ approved dyes may be used. LSD will apply to the MDEQ for approval to conduct dye testing of the storm system prior to conducting these activities.

The following table provides a list dyes approved for use by the Michigan Department of Environmental Quality:

DYE NAME	CAS NUMBER	ALTERNATE NAME	FAV
Blue AZO Liquid	3844-45-9	Blue Dye	12,000 ug/l
Fluorescein	518-47-8	CI Acid Yellow 73 FLT Yellow/Green Fluorescein FLT Fluorescein LT Sodium Fluorescein Uranine	30 mg/l
Rhodamine WT	37299-86-8	Acid Red 388	13 mg/l
Lissamine Yellow FF	--	CI Acid Yellow 7 Brilliant Sulphoflavine FF Brilliant Acid Yellow 8G	200 mg/l

Illicit Discharge Identification and Elimination Training Program

Lansing School District will provide illicit discharge identification and elimination training for maintenance, operation, and grounds department staff. Specific training programs will be based on individual job functions. Training programs will include identification of BMPs, review of site stormwater system maps, operation and maintenance of BMPs, identification and reporting of illicit discharges and connections.

BMP operation and maintenance manuals will be developed for each facility and include a listing of all structural and non-structural controls along with specific guidance and instructions for each BMP. BMP O&M manuals will include schedules for routine inspection and maintenance as well as policies and procedures for collection, transportation, and disposal of wastes collected during maintenance operations.

Responsible staff will be trained at least once every three years, and new hires within a year of hire.

Evaluation

The Lansing School District will evaluate by the number of discharges and/or quantity of discharges eliminated using a combination of findings, enforcement efforts by the Public Safety Department, and reported tracking system. We will take all efforts to discuss and train all staff in all the different enforcement methods.

IDEP Map of outfall Points

Facilities	PSD ID#	Latitude	Longitude	Receiving Waterbody
Administration Building	Combined			
Attwood Elementary	Attw 101	42 40'31.55N	-84 33'52.00W	Sycamore Creek
Averill Elementary	Aver 101	42 42'2.53N	-84 35'55.59W	
Averill Elementary	Aver 103	42 42'2.52N	-84 35'54.72W	
Averill Elementary	Aver 105	42 42'2.51N	-84 35'53.96W	
Beekman Center	Beek 101	42 42'3.88N	-84 30'41.69W	
Cavanaugh Elementary	Cav 101	42 41'22.08N	-84 33'13.01W	Sycamore Creek
Cumberland Elementary	Cum 101	42 45'23.10N	-84 35'19.29W	Grand River
Eastern High	Eas 101	42 44'5.84N	-84 32'8.80W	Red Cedar River
Eastern High	Eas 103	42 44'5.55N	-84 32'8.80W	Red Cedar River

Education Center				
Elmhurst Elementary	Elm 101	42 42'29.45N	-84 34'21.95W	Grand River
Environmental Center				
Everett High	Eve 101	42 41'42.43N	-84 33'13.91W	Sycamore Creek
Everett High	Eve 103	42 41'37.99N	-84 33'30.35W	Sycamore Creek
Everett High	Eve 105	42 41'40.38N	-84 33'30.35W	Sycamore Creek
Everett High	Eve 107	42 41'41.76N	-84 33'30.54W	Sycamore Creek
Everett High	Eve 109	42 41'42.20N	-84 33'30.86W	Sycamore Creek
Fairview Elementary	Fair 101	42 44'35.24N	-84 31'19.62W	Red Cedar River
Forest View Elementary	For 101	42 41'54.38N	-84 30'53.58W	Sycamore Creek
Gardner Middle	Gard 101	42 40'55.05N	-84 33'28.17W	Sycamore Creek
Gardner Middle	Gard 103	42 40'51.87N	-84 33'29.78W	Sycamore Creek
Gardner Middle	Gard 105	42 40'48.30N	-84 33'29.64W	Sycamore Creek
Gier Park Elementary	Gier 101	42 45'32.46N	-84 32'51.73W	Grand River
Gier Park Elementary	Gier 103	42 45'32.31N	-84 32'49.48W	Grand River
Gier Park Elementary	Gier 105	42 45'32.39N	-84 32'46.29W	Grand River
Grand River Head Start	Gran 101	42 44'54.65N	-84 32'8.89W	Grand River
Grand River Head Start	Gran 103	42 44'50.87N	-84 32'13.01W	Grand River
Grand River Head Start	Gran 105	42 44'50.82N	-84 32'9.16W	Grand River
Harley Franks				
Hill Center	Hill 101	42 40'15.90N	-84 35'22.22W	Gilbert Drain
Hill Center	Hill 103	42 40'34.17N	-84 35'14.99W	Gilbert Drain
Kendon Elementary	Ken 101	42 41'12.36N	-84 32'22.20W	Sycamore Creek
Lansing STEM	Dwig 101	42 42'18.96N	-84 35'1.11W	Grand River
Lansing STEM	Dwig 103	42 42'25.72N	-84 35'0.89W	Grand River
Lansing STEM	Dwig 105	42 42'24.32N	-84 35'27.72W	Grand River
Lansing STEM	Dwig 107	42 42'23.84N	-84	Grand River

			35'28.01W	
Lewton Elementary	Lew 101	42 42'40.30N	-84 35'23.6W	Grand River
Lyons Elementary	Lyon 101	42 42'6.46N	-84 32'18.00W	Sycamore Creek
Lyons Elementary	Lyon 103	42 42'9.13N	-84 32'30.67W	Sycamore Creek
Mt. Hope Elementary	Mt. hope 101	42 42'46.06N	-84 32'7.04W	Red Cedar River
North Elementary	Nor 101	42 40'18.37N	-84 32'59.27W	Sycamore Creek
North Elementary	Nor 103	42 40'13.51N	-84 32'59.08W	Sycamore Creek
Otto Middle	Otto 101	42 45'28.67N	-84 32'52.98W	Grand River
Otto Middle	Otto 103	42 45'29.19N	-84 32'49.45W	Grand River
Otto Middle	Otto 105	42 45'29.05N	-84 32'44.56W	Grand River
Pattengill Middle	Patt 101	42 44'27.33N	-84 31'33.67W	Red Cedar River
Pattengill Middle	Patt 103	42 44'27.31N	-84 31'29.06W	Red Cedar River
Pattengill Middle	Patt 105	42 44'27.12N	-84 31'24.12W	Red Cedar River
Physical Plant	Bus 101	42 45'45.32N	-84 31'44.27W	Blue Ribbon Drain
Pleasant View	Plea 101	42 41'19.44N	-84 34'56.83W	Grand River
Post Oak Elementary	Post 101	42 45'30.60N	-84 31'1.42W	Smedley/Coolidge Drain
Post Oak Elementary	Post 103	42 45'29.72N	-84 30'59.62W	Smedley/Coolidge Drain
Reo Elementary	Reo 101	42 41'13.62N	-84 34'17.55W	Sycamore Creek
Reo Elementary	Reo 103	42 41'18.03N	-84 34'17.02W	Sycamore Creek
Riddle Elementary	combined			
Sexton High	Sexton 101	42 43'59.62N	-84 34'37.86W	Grand River
Sexton High	Sexton 103	42 43'56.34N	-84 34'37.77W	Grand River
Sheridan Elementary	Sher 101	42 46'14.38N	-84 32'47.05W	Reynolds
Vehicle Maintenance Center	Bus 101	42 45'45.32N	-84 31'44.27W	Blue Ribbon Drain
Wainwright Elementary	Wain 101	42 41'22.57N	-84 35'38.00W	Grand River

Wainwright Elementary	Wain 103	42 41'27.13N	-84 35'33.56W	Grand River
Wexford Elementary	Wex 101	42 40'48.88N	-84 35'31.84W	Grand River
Wexford Elementary	Wex 103	42 40'48.87N	-84 35'40.89W	Grand River
Wexford Elementary	Wex 105	42 40'59.05N	-84 35'51.58W	Grand River
Willow Elementary	Combined			Grand River
Woodcreek Elementary	Wood 101	42 41'49.05N	-84 36'23.76W	Grand River
Woodcreek Elementary	Wood 103	42 41'43.26N	-84 36'23.76W	Grand River
Woodcreek Elementary	Wood 105	42 41'42.23N	-84 36'23.02W	Grand River

ATTACHMENT 4

CONSTRUCTION STORM WATER RUNOFF CONTROL PROGRAM

The procedures provided are specific to the Lansing School District and state the following:

- If soil or sediment is discharged to the school district's MS4 from construction activity, the school district will work directly with the contractor on site to notify the city or township as the Part 91 Agency within 24 hours of becoming aware of the discharge.
- If soil, sediment or other polluting materials are discharged to the school districts MS4 from construction activity at levels that cause a water quality impact, the school district as well as the contractor on site will notify the DEQ within 24 hours of becoming aware of an impact to surface waters of the state.
- The LSD contracts out construction activity and requires that all contractors obtain a Part 91 permit if construction activity results in one acre or greater of total earth disturbance and permit-by-rule coverage for qualifying construction activity.

List of all Part 91 Agencies that fall under the Lansing School District Zones:

Ingham

Delhi Charter Township Community Development-MEA
2074 Aurelius Road
Holt, Michigan 48842
(517) 694-8281
Fax (517) 694-1289
http://www.delhitownship.com/CommunityDevelopment_sesc.htm

East Lansing-MEA
City Hall
410 Abbot Road
East Lansing, Michigan 48823
(517) 337-9459
Fax (517) 337-3943
<http://www.cityofeastlansing.com/Home/Departments/PublicWorks/EngineeringDivision/ConstructionPermitApplications/>

Ingham County Drain Commissioner-CEA
707 Buhl Avenue
Mason, Michigan 48854
(517) 676-8395
Fax (517) 676-8364
<http://dr.ingham.org/>

Lansing Public Service Department-MEA
124 West Michigan Avenue
Lansing, Michigan 48933
(517) 483-4455
Fax (517) 483-6082
<http://www.lansingmi.gov/stormwater>

Lansing Township Planning & Development-MEA
3209 West Michigan Avenue
Lansing, Michigan 48917
(517) 485-4063
Fax (517) 485-3276
<http://www.lansingtowship.org/Departments/PlanningandDevelopment.aspx>

ATTACHMENT 5

Lansing School District Policy Manual for Post Construction Storm Water Runoff Program

I. SUBJECT

Policy for compliance with the Lansing School district National Pollutant Discharge Elimination System (NPDES) Permit requirement for Discharge of Stormwater to Surface Waters from the Municipal Separate Storm Sewer System (MS4)

II. PURPOSE

To provide a policy that provides direction regarding the Post construction Stormwater Runoff Control associated with the new development and redevelopment of Township owned and/or nested entities.

III. DEFINITIONS FOR PURPOSES OF THIS POLICY

90 Percent Annual Non-Exceedance Storm- the 90 percent non-exceedance storm is the storm where 90 percent of the runoff-producing storm rainfalls are equal to or less than the specified value. The Center for watershed protection recommends using a runoff threshold of 0.10 inches, because impervious areas of the watershed are assumed to generate runoff beginning at approximately 0.10 inches of rainfall.

Discharge of Stormwater to Surface Waters- Precipitation that does not infiltrate into the ground or evaporate due to impervious surfaces, but instead flows into drain/sewer systems which may include open ditches, detention ponds or pipe that eventually flow to a surface water and/or county drain.

Municipal Separate Storm Sewer System (MS4)- A system of drainage (including roads, storm drains, pipes, and ditches, etc.) that is not combined sewer or part of a sewage treatment plant. During wet weather, pollutants are transported through MS4's to local water bodies.

Nested Entities- A permit tee may have, within it political or territorial boundaries "nested" drainage systems owned or operated by public bodies that include, but are not limited to, public school districts, public universities, or county, state, or federal agencies. If the permit tee and the nested entity agree to cooperate in carrying out the responsibilities for control of the drainage system, the nested entity does not need to apply for a separate storm water drainage system permit.

Post Construction Best Management Practices- Permanent storm water management practices and site design features which store, treat, infiltrate or reduce the volume of runoff from development sites.

Post Construction Stormwater Runoff Control- The mitigation of stormwater impacts from new or redevelopments through the use of practices used to treat, store, and infiltrate runoff onsite before it can affect water bodies downstream.

Pre-Development- The last land use prior to the planned new development or redevelopment.

IV. SCOPE

This policy applies to the Lansing School District and its nested entities, and includes new development and redevelopment projects that disturb one or more acres of land as well as projects less than one acre that are a part of a larger common plan of development, and that will result in a discharge to the LSD MS4.

V. POLICY

The Lansing School District shall comply with its NPDES Permit requirement for Discharge of Stormwater to Surface Waters from the LSD MS4. This includes, at a minimum, provide for the following:

- A. Water quality shall be obtained by providing a minimum treatment equivalent to the first one inch of runoff from the entire site, or the runoff volume generated from the 90 percent annual non-exceedance storm. Those Best Management Practices (BMPs) used to provide the minimum treatment shall be designed on a site-specific basis to reduce post development total suspended solids loadings by 80 percent or achieve a total suspended solids discharge concentration of 80 mg/L or less.
- B. The following volume/channel protection criteria shall be met: no net increase in offsite runoff volume and rate for storm events up to the two-year, 24-hour event from that of predevelopment conditions.
- C. For all Lansing School District owned properties, the LSD, or its designee shall operate and maintain all post-construction BMPs in perpetuity.

The Lansing School District would follow appropriate jurisdiction and each jurisdiction would follow permit requirements for site review.

ATTACHMENT 6

**GOOD HOUSEKEEPING AND POLLUTION PREVENTION
MANUAL FOR
LANSING SCHOOL DISTRICT**



September 2015

Prepared in partnership with:



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Section 1

1.1 Introduction

Stormwater runoff is part of a natural hydrologic process. Human activities particularly urbanization and agriculture, can alter natural drainage patterns and add pollutants to rivers, lakes, and streams as well as coastal bays, estuaries, and ultimately, the ocean. Numerous studies have shown urban runoff to be a significant source of water pollution, causing declines in fisheries, restricting swimming, and limiting our ability to enjoy many of the other benefits that water resources provide (USEPA, 1992). Urban runoff in this context includes all flows discharged from urban land uses into stormwater conveyance systems and receiving waters and includes both dry weather non-stormwater sources (e.g., runoff from landscape irrigation, water line and hydrant flushing) and wet weather stormwater runoff. In this handbook, urban runoff and stormwater runoff are used interchangeably.

For many years, the effort to control the discharge of stormwater focused mainly on the quantity (e.g. drainage, flood control) and, only to a limited extent, on the quality of the stormwater (e.g. sediment and erosion control). In recent years, however, awareness of the need to improve water quality has increased. With this awareness, federal, state, and local programs have been established to reduce pollutants contained in stormwater discharges to our waterways. The emphasis of these programs is to promote the concept and the practice of preventing pollution at the source, before it can cause environmental problems (USEPA, 1992). Where further controls are needed, treatment of polluted runoff may be required.

1.2 Manual Purpose and Scope

Lansing School District as a member of the Greater Lansing Regional Committee (GLRC) for Stormwater Management has developed this manual to provide general guidance for selecting and implementing Best Management Practices (BMPs) to reduce pollutants in runoff from municipal operations. Federal and state programs require selected municipalities to reduce the discharge of pollutants in their stormwater discharges to the maximum extent practicable (MEP) using an array of control measures including BMPs.

Although MEP has not been defined by the federal regulations, the use of this handbook and the selection process presented herein should assist municipalities in achieving MEP. In selecting BMPs that will achieve MEP, it is important to remember that municipalities will be responsible to reduce the discharge of pollutants in stormwater to the maximum extent practicable. The following factors should be considered in deciding if a BMP is practicable:

- Pollutant Removal - Will the BMP remove (or control) the pollutant(s) of concern?
- Regulatory Compliance - Is the BMP compatible with stormwater regulations as well as other regulations for air, hazardous wastes, solid waste disposal, groundwater protection, etc.?
- Public Acceptance - Does the BMP have public support?
- Implementation - Is the BMP compatible with land uses, facilities, or activities in question?
- Cost - Will the cost for implementing the BMP significantly exceed the pollution control benefits? Does a revenue stream exist for ongoing maintenance?
- Technical Feasibility - Is the BMP technically feasible considering soils, geography, water resources, etc.?

Ultimately, the municipality must implement and maintain the selected BMPs and prepare and adhere to a schedule for implementation and maintenance.

1.3 Users of the Handbook

This handbook is primarily designed to assist municipal staff with incorporating pollution prevention controls into their overall stormwater management program and specifically publicly owned/operated facilities (fixed facilities) and field activities (field programs). Users include public and private sector engineers, planners, environmental specialists, and stormwater program managers. Managers and employees of the various municipal facilities and municipal field programs may find this handbook especially helpful when implementing and evaluating the effectiveness of these stormwater management efforts.

1.4 List of Locations, Type of Use, and Risk Level

Building Name	Type of Use	Risk Level
Administration	LSD Offices	Low
Attwood	School	Low
Averill	School	Low
Beekman Center	School	Low
Cavanaugh	School	Low
Cumberland	School	Low
Eastern	School	Low
Education Center	Closed	Low
Elmhurst	Leased Out Space	Low
Everett	School	Low
Fairview	School	Low
Forest View	School	Low
Grand River Head Start	Leased out Space	low
Gardner	School	Low
Gier Park	School	Low

Harley Franks	Leased Out Space	Low
Hill Center	LSD offices, Leased out Space	Low
Kendon	School	Low
Lansing STEM	School	Low
Lewton	School	Low
Lyons	School	Low
Mt. Hope	School	Low
North	School	Low
Otto	Closed	Low
Pattengill	School	Low
Physical Plant	Offices,Grounds,Mechanical,Electrical,Carpenter,Warehouse	High
Pleasant View	School	Low
Post Oak	School	Low
Reo	School	Low
Riddle	School	Low
Sexton	School	Low
Sheridan Road	School	Low
Vehicle Maintenance Center	Garage	High
Wainwright	LSD Offices	Low
Wexford	School	Low
Willow	School	Low
Environmental Center	Leased Out Space Located in Wayland, MI	Medium

1.5 Stormwater Pollutants and Impacts on Water Quality

Stormwater runoff naturally contains numerous constituents; however, urbanization and urban activities (including municipal activities) typically increase constituent concentrations to levels that may impact water quality. Pollutants associated with stormwater include sediment, nutrients, bacteria and viruses, oil and grease, metals, organics, pesticides, and gross pollutants (floatables). In addition, nutrient-rich stormwater runoff is an attractive medium for vector production when it accumulates and stands for more than 72 hours.

Municipal Activities Generating Pollutants

Municipalities conduct various activities that are sources of pollutants in stormwater runoff. For the purpose of this handbook, these activities are categorized according to whether they occur at a specific location (fixed facility) or across a broader and non-specific area (field programs). Some of these activities are summarized in the list below. All activities are discussed in more detail in Section 2. These activities must be addressed through the implementation of BMPs to minimize or eliminate the pollutants from entering the local water bodies or drainage system.

Typical Municipal Operations that Generate Pollutants

Fixed Facilities Activities

Solid Waste Collection and Recycling

Building Maintenance & Repair

Parking Lot Maintenance

Landscape Maintenance

Salt Storage

Waste Handling and Disposal

Equipment Maintenance & Repair

Vehicle and Equipment Storage

Vehicle and Equipment Cleaning

Material Handling & Storage

Material Loading & Unloading

Minor Construction

Field Program Activities

Salt application

Structure Maintenance

Sidewalk Surface Cleaning

Storm Drain System Cleaning

Sidewalk Repair

Controlling Litter

Landscape Mowing/Trimming/Planting

Fertilizer & Pesticide Management

Controlling Illicit Connections

Controlling Illegal Dumping

1.6 Pollutant Impacts on Water Quality

Sediment is a common component of stormwater, and can be a pollutant. Sediment can be detrimental to aquatic life (primary producers, benthic invertebrates, and fish) by interfering with photosynthesis, respiration, growth, reproduction, and oxygen exchange in water bodies. Sediment can transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter.

Nutrients including nitrogen and phosphorous are the major plant nutrients used for fertilizing landscapes, and are often found in stormwater. These nutrients can result in excessive or accelerated growth of vegetation, such as algae, resulting in impaired use of water in lakes and other sources of water supply. For example, nutrients have led to a loss of water clarity in Lake Tahoe. In addition, un-ionized ammonia (one of the nitrogen forms) can be toxic to fish.

Bacteria and viruses are common contaminants of stormwater. For separate storm drain systems, sources of these contaminants include animal excrement and sanitary sewer overflow. High levels of indicator bacteria in stormwater have led to the closure of beaches, lakes, and rivers to contact recreation such as swimming.

Oil and grease includes a wide array of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Sources of oil and grease include leakage, spills, cleaning and sloughing associated with vehicle and equipment engines and suspensions, leaking and breaks in hydraulic systems, restaurants, and waste oil disposal.

Metals including lead, zinc, cadmium, copper, chromium, and nickel are commonly found in stormwater. Many of the artificial surfaces of the urban environment (e.g., galvanized metal, paint, automobiles, or preserved wood) contain metals, which enter stormwater as the surfaces corrode, flake, dissolve, decay, or leach. Over half the trace metal load carried in stormwater is associated with sediments. Metals are of concern because they are toxic to aquatic organisms, can bio accumulate (accumulate to toxic levels in aquatic animals such as fish), and have the potential to contaminate drinking water supplies.

Organics may be found in stormwater in low concentrations. Often synthetic organic compounds (adhesives, cleaners, sealants, solvents, etc.) are widely applied and may be improperly stored and disposed. In addition, deliberate dumping of these chemicals into storm drains and inlets causes environmental harm to waterways.

Pesticides (including herbicides, fungicides, rodenticides, and insecticides) have been repeatedly detected in stormwater at toxic levels, even when pesticides have been applied in accordance with label instructions. As pesticide use has increased, so too have concerns about

adverse effects of pesticides on the environment and human health. Accumulation of these compounds in simple aquatic organisms, such as plankton, provides an avenue for bio magnification through the food web, potentially resulting in elevated levels of toxins in organisms that feed on them, such as fish and birds.

Gross Pollutants (trash, debris, and floatables) may include heavy metals, pesticides, and bacteria in stormwater. Typically resulting from an urban environment, industrial sites and construction sites, trash and floatables may create an aesthetic “eye sore” in waterways. Gross pollutants also include plant debris (such as leaves and lawn-clippings from landscape maintenance), animal excrement, street litter, and other organic matter. Such substances may harbor bacteria, viruses, vectors, and depress the dissolved oxygen levels in streams, lakes, and estuaries sometimes causing fish kills.

Vector production (e.g., mosquitoes, flies, and rodents) is frequently associated with sheltered habitats and standing water. Unless designed and maintained properly, standing water may occur in treatment control BMPs for 72 hours or more, thus providing a source for vector habitat and reproduction (Metzger, 2002).

1.7 Regulatory Requirements

The federal Clean Water Act (CWA), as amended in 1987, is the principal legislation for establishing requirements for the control of stormwater pollutants. Enforcement of the CWA and other laws such as the Endangered Species Act has generated a number of federal, state and local requirements and programs that deal directly or indirectly with controlling stormwater discharges. In the following sections, various programs are discussed in relationship to control of pollutants in stormwater from municipal storm drain systems. These programs are expected to evolve over the next several years and the user is advised to contact local regulatory and/or municipal officials for further information.

Municipal NPDES Stormwater Programs

In Michigan, municipalities were given the option to either have an individual permit (based on jurisdictional boundaries), or to have a watershed based approach, which allows many municipalities within a watershed to work as a group, through a watershed management plan to meet Phase II requirements. Each plan serves as a blueprint for protecting water quality within the various watersheds. The watershed management plans are used in turn to identify more specific controls for discharges (e.g., wastewater treatment plant effluent, urban runoff, and agriculture drainage).

In Michigan, the federal NPDES stormwater permitting program is administered by the Michigan Department of Environmental Quality (MDEQ) by issuing general NPDES permits.

Municipalities with a population of over 100,000 or that have been determined to be a significant contributor of pollutants are required to obtain an individual NPDES stormwater permit. These municipalities are classified as Phase I communities and are typically referred to as MS4s (municipal separate storm sewer systems). To meet CWA Section 402(p) requirements.

Smaller, Phase II communities (fewer than 100,000 in population) are covered by a General Permit. Phase II communities are required to develop and implement a stormwater management plan with the following six minimum control measures:

- **Public Education and Outreach** - Distributing educational materials and performing outreach to inform citizens about the impacts polluted stormwater runoff discharges can have on water quality.
- **Public Involvement and Participation** - Providing opportunities for citizens to participate in program development, implementation, and review, including effectively publicizing public hearings or participation.
- **Illicit Discharge Detection and Elimination** - Developing and implementing a plan to detect and eliminate illicit discharges to the storm drain system including illicit connections and illegal dumping.
- **Construction Site Runoff Control** - Developing, implementing, and enforcing an erosion and sediment control program for construction activities that disturb one or more acres of land.
- **Pollution Prevention / Good Housekeeping for Municipal Operations** - Developing and implementing a program to prevent or reduce pollutant runoff from municipal operations. (This is a primary focus of this handbook.)
- **Post-Construction Stormwater Management in New Development and Redevelopment** - Developing, implementing, and enforcing a program to address discharges of stormwater runoff from new and redevelopment areas.

In addition to the six measures listed above, the stormwater management plan must identify measurable goals (or performance standards) for each minimum control measure. Measurable goals will be used by the MS4 and the MDEQ to gauge compliance and evaluate the effectiveness of individual BMPs or control measures and the stormwater management program as a whole. Phase II communities must also monitor their efforts and prepare annual reports demonstrating that the community has implemented the minimum control measures and complied with the measurable goals.

1.7 LSD Facilities and the Potential to discharge pollutants

The Lansing School District owns a total of 34 facilities and or sites

1.8 Definitions

Many of the common definitions for stormwater control are found in the Glossary (see Section 4). Throughout the handbook, the user will find references to the following terms:

NPDES Permit for Stormwater Discharges NPDES is an acronym for National Pollutant Discharge Elimination System. NPDES is the national program for administering and regulating Sections 307, 318, 402 and 405 of the Clean Water Act (CWA). In Michigan, MDEQ has issued a General Permit for stormwater discharges associated with Phase II communities. For Phase I communities MDEQ issues individual NPDES permits to individual permittees.

Notice of Intent (NOI) is a formal notice to the MDEQ submitted by a Phase II municipality. The NOI provides information on the permittee, location of discharge, type of discharge and certifies that the permittee will comply with conditions of the Phase II General Permit. The NOI is not a permit application and does not require approval.

A **Best Management Practice (BMP)** is defined as any program, technology, process, siting criteria, operating method, measure, or device which controls, prevents, removes, or reduces pollution.

Source Control BMPs are operational practices that prevent pollution by reducing potential pollutants at the source. They typically do not require maintenance or construction.

Non-Stormwater Discharge is any discharge to municipal separate storm sewer that is not composed entirely of stormwater.

Vector is any animal capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury, including, but not limited to, mosquitoes, flies, other insects, ticks, mites, and rodents.

Section 2 Source Control BMP's

2.1 Introduction

This section provides a description of specific source control Best Management Practices (BMPs) for activities related to municipal operations. As noted in Sections 1 and 2, municipal fixed facilities

TABLE 2.1 District Fixed Facility BMP's	
Non-Stormwater Management	
2.2	Spill Prevention, Control and Cleanup
Vehicle and Equipment Management	
2.3	Vehicle and Equipment Cleaning
2.4	Vehicle and Equipment Repair
Material and Waste Management	
2.5	Outdoor Equipment Maintenance
2.6	Outdoor Storage of Raw Materials
Building and Grounds Management	
2.7	Building and Grounds Maintenance
2.8	Parking Lot Maintenance
District Field Program BMPs	
2.9	Salt Application and Storage
2.10	Drainage System Maintenance

conduct activities that have the potential to generate pollutants. The source control BMPs in this section addresses these activities.

In addition, the District conducts various field programs where activities may occur and create pollutants. (See Table 2.1)

Fact Sheet Format

Each BMP fact sheet is a short document that gives all the information about a particular BMP. The fact sheets contain side bar presentations with information on BMP objectives and targeted constituents.

Staff Training

Current maintenance personnel will be trained on stormwater pollution prevention once per permit cycle. New employees are trained within the first year of employment. All topics related to stormwater pollution prevention/good housekeeping of municipal facilities and activities are covered during the training. In addition the Districts Physical Plant Supervisors attended the Stormwater Pollution Prevention Plan Training conducted by DEQ on May 28, 2015.

2.2 Spill Prevention, Control & Cleanup BMP

Description

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

Pollution Prevention

- All indoor drains at district facilities are piped to the sanitary sewer to avoid surface water contamination.
- All potentially environmental unfriendly materials are stored indoors at the service facility and educational buildings.

Objectives

- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

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

- Commercial grade spill cleanup material is readily available (kitty litter) at the service and vehicle facilities.

Protocols

Spill/Leak Prevention Measures

- All material is handled indoors, under cover, or away from storm drains or sensitive water bodies.
- Properly label all containers so that the contents are easily identifiable.
- Spill cleanup materials, such as absorbents, are located where they are readily accessible (e.g. near storage and maintenance areas).
- Place drip pans or absorbent materials beneath all mounted taps and at all potential drip and spill locations during the filling and unloading of containers. Any collected liquids or soiled absorbent materials should be reused/recycled or properly disposed of.
- If necessary, protect catch basins while conducting field activities so that if a spill occurs, the material will be contained.

Training

- Educate employees about spill prevention, spill response and cleanup on a routine basis.
- Well-trained employees can reduce human errors that lead to accidental releases or spills:
 - The employees should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.
 - Employees should be familiar with the Spill Prevention Control and Countermeasure Plan if one is available.
- Training of staff from all municipal departments should focus on recognizing and reporting potential or current spills/leaks and who they should contact.

Spill Cleanup Procedures

- Store and maintain appropriate spill cleanup materials in a clearly marked location near storage areas; and train employees to ensure familiarity with the site's spill control plan and/or proper spill cleanup procedures.
- Locate spill cleanup materials, such as absorbents, where they will be readily accessible (e.g. near storage and maintenance areas).

- If a spill occurs, notify the key spill response personnel immediately. If the material is unknown or hazardous, the local fire department may also need to be contacted.
- If safe to do so, attempt to contain the material and block the nearby storm drains so that the area impacted is minimized. If the material is unknown or hazardous wait for properly trained personnel to contain the materials.
- Perform an assessment of the area where the spill occurred and the downstream area that it could impact. Relay this information to the key spill response and clean up personnel.
- Small non-hazardous spills
 - Use a rag, damp cloth or absorbent materials for general clean up of liquids
 - Use brooms or shovels for the general clean up of dry materials
 - If water is used, it must be collected and properly disposed of. The wash water cannot be allowed to enter the storm drain.
 - Dispose of any waste materials properly
 - Clean or dispose of any equipment used to clean up the spill properly
- Large non-hazardous spills
 - Use absorbent materials for general clean up of liquids
 - Use brooms, shovels or street sweepers for the general clean up of dry materials
 - If water is used, it must be collected and properly disposed of. The wash water cannot be allowed to enter the storm drain.
 - Dispose of any waste materials properly
 - Clean or dispose of any equipment used to clean up the spill properly
- Hazardous materials are not stored or used by maintenance staff

Reporting

- Report spills in accordance with applicable reporting laws. Spills that pose an immediate threat to human health or the environment must be reported immediately to 911, the Pollution Emergency Alerting System (PEAS) at 800-292-4706 and the National Response Center (NRC) at 800-424-8802.
- Spills that pose an immediate threat to human health or the environment may also need to be reported within 24 hours to the Local Emergency Planning Committee (LEPC), State Emergency Response Center (SERC), Michigan Department of Agriculture (MDA), various divisions of Michigan Department of Environmental Quality (MDEQ), and the Department of Labor and Economic Growth (DLEG).
- After the spill has been contained and cleaned up, a detailed report about the incident should be generated and kept on file. The incident may also be used in briefing staff about proper procedures.

These records should contain the following information:

- Date and time of the incident

- Weather conditions
- Duration of the spill/leak/discharge
- Cause of the spill/leak/discharge
- Response procedures implemented
- Persons notified
- Environmental problems associated with the spill/leak/discharge

Separate record keeping systems should be established to document housekeeping and preventive maintenance inspections, and training activities. All housekeeping and preventive maintenance inspections should be documented. Inspection documentation should contain the following information:

- The date and time the inspection was performed
- Name of the inspector
- Items inspected
- Problems noted
- Corrective action required
- Date corrective action was taken

Other means to document and record inspection results are field notes, timed and dated photographs, videotapes, and drawings and maps.

2.3 Vehicle and Equipment Cleaning BMP

Description

Wash water from vehicle and equipment cleaning activities performed outdoors or in areas where wash water flows onto the ground can contribute toxic hydrocarbons and other organic compounds, oils and greases, nutrients, phosphates, heavy metals, and suspended solids to stormwater runoff.

Pollution Prevention

- If possible, use properly maintained off-site commercial washing and steam cleaning businesses whenever possible. These businesses are better equipped to handle and properly dispose of the wash waters.
- Good housekeeping practices can minimize the risk of contamination from wash water discharges.

Policy

Objectives

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

Targeted Constituents

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

In keeping with compliance with the MDEQ and EPA regulations it is the policy of the district to take a proactive approach to minimize and eliminate the discharge of potential contaminants produced through the washing and cleaning of apparatus and equipment into the stormwater drain system.

Procedure

- Use biodegradable, phosphate-free detergents for washing vehicles as appropriate.
- Post signs stating that only washing is allowed in wash area and that discharges to the storm drain are prohibited.
- Provide a trash container in wash area.

Vehicle and Equipment Cleaning

- All vehicles will be washed within the confines of the maintenance garage using a phosphate-free detergent. Runoff of cleaning detergents and water will be squeegeed or diverted to floor drains within the garage. Runoff within the floor drains will run to the sanitary sewer where it will be treated at a wastewater treatment plant.
- Floors will be swept before washing to minimize solid debris from entering the sanitary sewer system. Floor drains will be inspected and cleaned periodically to remove any sediment collected during vehicle washing.
- The policy will be distributed to all personnel and will be posted in the maintenance garage areas.

2.4 Vehicle and Equipment Repair BMP

Description

Vehicle or equipment maintenance and repair is potentially a significant source of stormwater pollution, due to the use of materials and wastes created that are harmful to humans and the environment. Engine repair and service (e.g. parts cleaning), replacement of fluids (e.g. oil change), and outdoor equipment storage and parking (dripping engines) can impact water quality if stormwater runoff from areas with these activities occurring on them becomes polluted by a variety of contaminants.

Pollution Prevention

- Switch to non-toxic chemicals for maintenance when possible.

<u>Objectives</u>	
▪ Cover	
▪ Contain	
▪ Educate	
▪ Reduce/Minimize	
▪ Product Substitution	
<u>Targeted Constituents</u>	
Sediment	
Nutrients	
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	

- Choose cleaning agents that can be recycled.
- Minimize use of solvents. Clean parts without using solvents whenever possible.
- Keep an accurate, up to date inventory of materials.
- Recycle used motor oil, diesel oil, and other vehicle fluids and parts whenever possible.

Protocol

- Use a vehicle maintenance area designed to prevent stormwater pollution - minimize contact of stormwater with outside operations through appropriate drainage routing.
- Do not pour materials down drains or hose down work areas; use dry sweeping.
- Designate a special area to drain and replace motor oil, coolant, and other fluids. This area should not have any connections to the storm drain or the sanitary sewer and should allow for easy clean up of drips and spills.
- Do not pour liquid waste to floor drains, sinks, outdoor storm drain inlets or other storm drains or sewer connections.
- Keep equipment clean; do not allow excessive build-up of oil and grease.
- Do all liquid cleaning at a centralized station so the solvents and residues stay in one area
- Make sure incoming vehicles are checked for leaking oil and fluids. Apply controls accordingly.
- Promptly transfer used fluids to the proper waste or recycling drums and store in an appropriately designed area that can contain spills. Don't leave drip pans or other open containers lying around.
- Do not dispose of oil filters in trash cans or dumpsters, which may leak oil and contaminate stormwater. Place the oil filter in a funnel over a waste oil recycling drum to drain excess oil before disposal. Most municipalities prohibit or discourage disposal of these items in solid waste facilities. Oil filters are recycled.
- Store cracked and/or dead batteries in a non-leaking covered secondary container and dispose of properly at recycling or household hazardous waste facilities.
- Ensure that employees are familiar with the sites spill control plan and/or proper spill cleanup procedures. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur

<u>Objectives</u>	
▪ Cover	
▪ Contain	
▪ Educate	
▪ Reduce/Minimize	
▪ Product Substitution	
<u>Targeted Constituents</u>	
Sediment	✓
Nutrients	
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓
Oxygen Demanding	

2.5 Outdoor Equipment Maintenance BMP

Description

Outside process equipment operations and maintenance can contaminate stormwater runoff. Activities, such as grinding, painting, coating, sanding, degreasing or parts cleaning, landfills and waste piles, solid waste treatment and disposal, are examples of process operations that can lead to contamination of stormwater runoff.

Pollution Prevention

- The District requires these activities are contained in a building where the floor drains to the sanitary sewer.

Protocols

- Train employee and contractors in proper techniques for spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

2.6 Outdoor Storage of Raw Materials BMP

Description

Raw materials, by-products, finished products, containers, and material storage areas exposed to rain and/or runoff can pollute stormwater. Stormwater can become contaminated when materials wash off or dissolve into water or are added to runoff by spills and leaks. Improper storage of these materials can result in accidental spills and the release of materials. To prevent or reduce the discharge of pollutants to stormwater from material delivery and storage, pollution prevention and source control measures, such as minimizing the storage of hazardous materials on-site, enclosing or covering materials, storing materials in a designated area, installing secondary containment, conducting regular inspections, preventing stormwater run-on and runoff, and training employees and subcontractors must be implemented.

Pollution Prevention

- Employee education is paramount for successful BMP implementation.
- Minimize inventory of raw materials.
- Keep an accurate, up to date inventory of the materials delivered and stored on-site.

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize

Targeted Constituents

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

Protocols

- If the stockpiles are so large that they cannot feasibly be covered and contained, implement erosion control practices at the perimeter of your site and at any catch basins to prevent erosion of the stockpiled material off site.
- Keep outdoor storage containers in good condition.
- Keep storage areas clean and dry.
- Prevent the run-on of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the stockpile areas, by placing a curb along the perimeter of the area. The area inside the curb should slope to a drain.
- Employees should be well trained in proper material storage.

2.7 Building & Grounds Maintenance BMP

Description

Stormwater runoff from building and grounds maintenance activities can be contaminated with toxic hydrocarbons in solvents, fertilizers and pesticides, suspended solids, heavy metals, and abnormal pH. Utilizing the following protocols will prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance activities by washing and cleaning up with as little water as possible, following good landscape management practices, preventing and cleaning up spills immediately, keeping debris from entering the storm drains, and maintaining the stormwater collection system.

Pollution Prevention

- Encourage proper lawn management and landscaping, including use of native vegetation.
- Encourage proper onsite recycling of yard trimmings.
- Recycle residual paints, solvents, lumber, and other material as much as possible.

Protocols

Washing

- All washing is conducted inside the maintenance facility.

Landscaping Activities

Objectives

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

Targeted Constituents

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

- Chemicals (insecticide, herbicide, or fertilizer) are not applied directly to surface waters, unless the application is approved and permitted by the state.
- Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage, or by composting. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Mulch is used for erosion control measures on exposed soils.
- All district applicators shall be certified by the state in the following categories of pesticides;3A and 6
- The varsity sports fields are irrigated and overwatering is avoided.
- Irrigation schedules are set so pesticides will not be washed away and to minimize non-stormwater discharge.
- Temporarily stockpiled material is stored inside the maintenance facility away from watercourses and drain inlets.
- Grass clippings that fall on sidewalks during mowing are blown back on to the mowed area, other grass clippings are left on the mowed area to mulch.
- Inspections on irrigation systems are done periodically to ensure proper water supply and minimize excess watering. Repairs are made when they are observed.
- All insecticides, herbicides, or fertilizers are applied by a third party company.

2.8 Parking Lot Maintenance BMP

Description

Parking lots and storage areas can contribute a number of substances, such as trash, suspended solids, hydrocarbons, oil and grease, and heavy metals that can enter receiving waters through stormwater runoff or non-stormwater discharges.

Pollution Prevention

- The District Sweeps all facility parking lots once a year.
- Inspections of the catch basins are conducted annually to determine if maintenance needs to occur.
- The LSD will follow MDEQ catch basin guidelines and use the following compliance assistance document:
http://www.michigan.gov/documents/deq/wb-stormwater-CatchBasinGuidance_216198_7.pdf

Protocols

- The parking lot is kept clean and orderly. Debris is removed during the spring/ summer season. Lots may be swept by district personnel or by a contractor as determined by the district. Contractors shall comply with all BMP's in accordance with the contracted services language.

Objectives

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

Targeted Constituents

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

- An adequate number of litter receptacles are used.

Surface Repair

- Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- Parking lot repair is using concrete, asphalt, and seal coat is conducting during dry weather to prevent contamination from contacting stormwater runoff.

Inspection

- Have designated personnel conduct inspections of the parking facilities and stormwater conveyance systems associated with them on a regular basis.
- Inspect cleaning equipment/sweepers for leaks on a regular basis.
- The appropriate District staff is trained on stormwater pollution prevention practices; street sweeping and catch basin maintenance is covered as part of the training.

2.9 Salt Application BMP

Description

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

During road salt application, certain best management practices can produce significant environmental benefits. The amount of road salt applied should be regulated to prevent over-salting of motorways and increasing runoff concentrations. The amount of salt applied should be varied to reflect site-specific characteristics, such as road width and design, traffic concentration, and proximity to surface waters.

Calibration devices for spreaders in trucks aid maintenance workers in the proper application of road salts. Alternative materials, such as sand or gravel, should be used in especially sensitive areas

Pollution Prevention

- Uses the minimum amount of salt needed to get the job done.
- The District only salts board facilities, parking lots, and sidewalks

Objectives

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

Targeted Constituents

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

- Surface temperatures are considered when determining volume of salt to apply.

Protocol

- The District uses both truck applicators and hand-operated applicators. The truck applicators are calibrated according to manufacturer’s recommendations in the beginning of the season, and then are revisited as required and are adjusted according to weather conditions.
- The District removes snow manually from driveways and sidewalks.
- Bulk salt is loaded directly into the maintenance vehicles at an outside facility. The District also uses bag salt which comes bagged and is stored inside to prevent a loss due to runoff.
- The District knows when to plow and reapply salt. The need for another salt application can be determined by watching melting snow kicked out behind vehicle tires. If the slush is soft and fans out like water, the salt is still working. Once the slush begins to stiffen and is thrown directly to the rear of vehicle tires, it is time to plow.

2.10 Drainage System Maintenance BMP

Description

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

Pollution Prevention

- Regular inspection of the system and structures is conducted during regular maintenance of the surrounding areas. Inspections sheets are on file and reported on as part of the progress reporting requirement.

Protocol

- District staff should regularly inspect facilities to ensure the following:
 - Immediate repair of any deterioration threatening structural integrity.
 - Cleaning before the sump is 40% full. Catch basins should be cleaned as frequently as needed to meet this standard.
- The district will contract out to clean catch basins, storm drain inlets, and other conveyance structures in high pollutant load areas just before the wet season to remove sediments and

<u>Objectives</u>	
▪ Contain	
▪ Educate	
▪ Reduce/Minimize	
<u>Targeted Constituents</u>	
Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓
Oxygen Demanding	✓

debris accumulated during the summer. The contractor is responsible for adherence to all federal, state and local regulations concerning disposal of all waste materials.

- The district must only maintain the catch basins for the parking lots of the municipally owned facilities. The systems are inspected annually and are cleaned on an as-needed basis since they are very low traffic areas.
- Conduct inspections more frequently during the wet season for problem areas where sediment or trash accumulates more often. Clean and repair as needed.
- Keep accurate logs of the number of catch basins cleaned.
- During routine maintenance of conveyance system and drainage structures field staff should look for evidence of illegal discharges or illicit connections:
 - Is there evidence of spills such as paints, discoloring, etc.
 - Are there any odors associated with the drainage system
 - Record locations of apparent illegal discharges/illicit connections
 - Track flows back to potential dischargers and conduct aboveground inspections. This can be done through visual inspection of up gradient manholes or alternate techniques including zinc chloride smoke testing, fluorometric dye testing, physical inspection testing, or television camera inspection.
 - Once the origin of flow is established, require illicit discharger to eliminate the discharge.
- Post “No Dumping” signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- To report environmental violations during business hours, contact the State’s Environmental Assistance Division at 800-662-9278. Emergency calls and calls after business hours, during weekends and holidays should be directed to the Pollution Emergency Alerting System (PEAS) at 800-292-4706.

Section 3

BMP Implementation and Evaluation

3.1 Introduction

As noted in Section 1 each municipality regulated under stormwater NPDES permits, whether categorized as a Phase I or Phase II municipality, is required to implement a stormwater management program and to assess the effectiveness of the program. Although specific program requirements and the level of implementation required differ between Phase I and Phase II municipalities, both prohibit non-stormwater discharges into storm drains, and require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP). As part of the program, the municipalities are required to address public agency (municipal) operations to reduce the discharge of pollutants and to assess these efforts. Section 2 provides

information on some of the necessary elements and steps involved in identifying BMPs for municipal activities occurring at fixed facilities and in field programs, whereas this Section discusses the components necessary to successfully implement a BMP and evaluate its effectiveness.

3.2 BMP Implementation

Municipal employees perform numerous municipal activities that have the potential to discharge pollutants. Staff should consistently implement the procedures or BMPs applicable to these activities. Some municipal activities are contracted to other parties. For example, many municipalities contract out street sweeping or waste collection. Similarly, many municipalities lease city-owned facilities to other parties, at which activities take place that have the potential to discharge pollutants. To ensure measures are taken to reduce pollutants while contractors or lessees perform such activities, contract and lease language should explicitly specify requirements to comply with all BMP specifications. Sample contract/lease language is presented in Appendix D.

Successful implementation of a BMP is dependent on the following components:

- Effective training of municipal and contract employees working in both fixed facilities and field programs.
- Regular inspections of fixed facilities, field programs, and treatment controls.
- Maintenance of treatment controls as needed to ensure proper functioning.
- Periodic evaluation/monitoring of BMP performance consistent with NPDES permit requirements.
- Follow-up action to correct deficiencies in BMP implementation noted during inspections.
- Accurate record keeping to track training, inspections, monitoring, and BMP maintenance.
- Submittal of an annual report to the applicable RWQCB regarding the effectiveness of the municipal efforts to reduce pollutants from fixed facilities and field programs.
- For Phase II Programs, documentation showing how the municipality has met its measurable goals, or revisions to those goals with supporting documentation.

3.3 Staff Training

Education and training is the key to the success of BMP implementation. Typically, municipalities provide annual training sessions. In addition to municipally sponsored training, staff may also attend local, regional, statewide, or national training seminars or workshops related to stormwater management and water quality conducted by other organizations.

In general, a municipality should consider a training program for employees working in fixed facilities and/or field programs. The training program should address the following subjects:

- Maintenance Procedure Implementation and Inspection – In this training effort, proper procedures for performing municipal activities that may adversely affect stormwater quality are addressed. Maintenance procedures cover a wide range of municipal activities and the training may address either all maintenance procedures applicable to the municipality or a specific procedure (e.g. fertilizer and pesticide use). This training can be conducted in either a formal or a tailgate-style format.
- Pollution Prevention/Spill Awareness – This training addresses the general techniques municipal staff may implement to prevent pollution, as well as to respond to spills once they have occurred. Training can be tailored to management and other municipal staff who oversee pollution prevention measures, to field staff conducting activities that may result in spills, or to field staff who may encounter spills or illicit discharges.

3.4 Site Inspections

Inspections of municipal fixed facilities and field programs should be performed to verify that BMPs are being implemented, that they are appropriate for that facility or program, and that they continue to reduce the discharge of pollutants. Inspections generally consist of the following:

- Fixed Facilities – Inspections are typically performed by a combination of stormwater program staff and on-site fixed facility managers. The inspection of a fixed facility may include spot checks of the facility and activities being performed at the facility, and interviews with key line staff.
- Field Programs– Inspections are typically performed by a combination of stormwater program staff and field program supervisors. The inspection of a field program may include spot checks of activities being performed, and interviews with key staff.
- Contracted Activities – Inspections are typically performed by municipal staff to supplement and check on self-inspections and reporting by the management staff of the contract firm performing the activity. Performance should be checked against contract/lease language (see Appendix D).
- Leased Facilities – Inspections are typically performed by municipal staff to supplement and check on self-inspections and reporting by the management staff of the lessor (see Appendix D).

Inspection Frequencies

Fixed facility or field program inspection frequency depends on the nature of the facility or program. Annual inspection is typical, with a more frequent schedule for facilities/activities that pose a greater threat to discharge pollutants (e.g. corporation yards). In the event of an observed problem, such as ineffective maintenance procedures or detected non-stormwater

discharges, the inspection frequency should be increased as appropriate to facilitate correction of the problem.

Inspection Documentation Procedures

Inspection forms may be developed and used to properly document all inspections and gather the necessary information for record keeping and annual reporting. Examples include:

- **General Inspection Forms** – These primary forms provide for a general characterization of the fixed facility or field program being inspected, including the type of facility or program, the reason for inspection, activities that may take place, and BMPs applicable for the facility. A general form for all inspections and a single fixed facility specific form should be completed.
- **Activity Specific Inspection Forms** – These secondary forms include a series of questions or checklist items about specific activities taking place at a fixed facility or as part of a field program, as well as a list of suggested corrective action plans that can be implemented should a problem be found. All forms applicable to the activities being performed at a fixed facility or field program should be completed.

3.5 Analytical Monitoring

Although expensive, stormwater monitoring is a valuable way to assess long-term BMP effectiveness and cost-effectiveness of selected BMPs at reducing pollutants to the “maximum extent practicable”. For Phase I municipalities, specific monitoring requirements depend on the individual NPDES permits issued. Phase II municipalities are covered by the Phase II General NPDES Permit and are not explicitly required to conduct chemical monitoring. Monitoring activities can include source identification, and chemical characterization of effluent/runoff, and non-stormwater discharges.

It is beyond the scope of this handbook to describe specific sampling and analytical techniques. For guidance on conventional stormwater sampling techniques and protocol, the reader should refer to NPDES Stormwater Sampling Guidance Document, 1992, published by the USEPA, or Caltrans’ Guidance Manual: Stormwater Monitoring Protocols, 2000.

3.6 Enforcement

To ensure proper BMP performance, enforcement procedures and mechanisms should be established for the municipal fixed facilities and field programs. Enforcement actions may occur as a result of a problem found during an inspection or in response to a complaint that is received. Several different types of enforcement mechanisms and penalties can be utilized to ensure compliance. The internal enforcement procedures, directed toward municipal staff, include initial verbal warnings, written warnings, and more serious disciplinary actions if verbal and written warnings do not result in appropriate action. External enforcement procedures

which pertain to municipal contractors may be undertaken primarily by the municipality's inspectors, managers, and supervisors who possess enforcement authority through established policies and procedures or ordinances. Depending on the severity of the violation, enforcement could range from the issuance of a notice of noncompliance to the loss of a contract or lease, or a fine.

3.7 Recordkeeping

As applicable, the municipality should maintain records demonstrating successful implementation of BMPs. Recordkeeping may include training, site inspection and maintenance, and if applicable, monitoring.

Training and Workshops

Records of all training sessions provided to staff should be maintained to allow for:

- Determining which staff requires which training;
- Determining when training sessions must be conducted; and
- Documenting training activities for enforcement and compliance purposes.

Municipal staff may attend training sessions or workshops sponsored by non-Permittees such as local or national organizations. For these sessions, the following information should be recorded:

- Name of Workshop/Training
- Sponsoring Organization
- General Description of the Subject Matter
- Location and Date
- Attendee information (name, title, department, phone and/or email)

Site Inspection and BMP Maintenance

Inspection reports should be kept to track frequency and results of inspections, BMPs implemented, condition of BMPs inspected, and follow-up actions taken. It is also important to keep a record of maintenance activities or any other BMPs that are of an "action" nature. It is easy to demonstrate that a BMP that involves a physical change, such as berming or covering, has been accomplished. However, actions that relate to good housekeeping can only be demonstrated by recordkeeping. Besides demonstrating compliance, records can assist in BMP management. Keeping a record of catch basin cleaning, for example, also provides insight into how long it takes for the catch basin sump to refill.

Monitoring

Records of all stormwater monitoring information, inspections and visual observations, certifications, corrective actions and follow-up activities, and copies of all reports must be retained for a period of at least five years. These records shall include at a minimum, when applicable:

- Date, place, and time of sampling, visual observations, and/or measurements.
- Individual(s) who performed the sampling, visual observations, and or measurements.
- Visual observation records for storm events.

- Visual observations and inspections of non-stormwater discharges.
- Calibration and maintenance records of on-site instruments used.
- Visual observations and sample collection exception records.
- Date and approximate time of analyses.
- Individual who performed the analyses.
- Analytical results, method detection limits, and the analytical techniques or methods used.
- Quality assurance/quality control records and results.
- Sampling and analysis exemption and reduction certifications and supporting documentation.
- Records of any corrective actions and follow-up activities that resulted from the visual observations.

3.8 Reporting

Phase I municipalities are required to submit annual reports documenting BMP implementation, with due dates varying depending on individual NPDES permit requirements. Specific reporting requirements differ between individual permits. Typically, they include, but are not limited to, the following:

- Program implementation status.
- Summary of stormwater activities performed.
- Stormwater monitoring results summary and analysis.
- Assessment of the effectiveness of selected control measures or BMPs.
- Changes or suggested changes to the BMP that will improve overall effectiveness of the program.

Phase II municipalities will be required under the Phase II General NDPEs Permit, beginning in 2004, to submit annual reports to the Michigan Department of Environmental Quality on October 1 of each year, or as otherwise required. Specific reporting requirements will include:

- Program implementation status.
- Summary of stormwater activities performed.
- Results of information collected, such as monitoring data.

- Summary of proposed stormwater activities for the next reporting cycle.
- Changes made in BMP selection.
- Changes in stormwater management personnel.
- Changes made in program or measurable goals.

Additionally, the Lansing School District will update/revise inventory of any added, removed or no longer owned or operated by the applicant within in 30 days of the change in the stormwater control.

ATTACHMENT 7

Standard Operating Procedure Vehicle Maintenance Center/Grounds Garage Lansing School District

The following standard operating procedures shall be implemented at the Vehicle Maintenance Center and Grounds Garage:

1. Identify all structural (secondary containment) and non-structural controls (spill kits) at the facility.
2. Identify the person responsible for oversight of the facility and maintenance of controls.
3. Provide a list of significant materials present on the site including all fuels, oil, parts cleaners, paints, fertilizer/pesticides, salts, and janitorial chemicals. The list should also include a description of the storage and handling practices.
4. Conduct bi-weekly routine maintenance and inspections of onsite storm water management control devices. The inspections shall be logged and kept onsite.
5. Perform and document a comprehensive inspection every 6 months. The inspection shall include all structural and nonstructural controls. Based on weather condition and school seasons, March 15th and September 15th are target dates for the 6 month inspection.

The onsite facility manager shall maintain the above documentation onsite.

TOXIC, HAZARDOUS, OR POLLUTING MATERIALS INVENTORY (FRESH CHEMICAL):

This inventory must include all raw materials (including oils and other petroleum based products) for which you have a safety data sheet (SDS). Make additional copies of this sheet to list all materials if necessary.

INFORMATION	INGREDIENTS	PERCENT	PHYSICAL STATE	CAS#	HAZARD	MAXIMUM STORAGE	END POINT	STORAGE TYPE
A) Common Name B) Manufacturer C) Storage Location	Chemical Names (Top three ingredients)	%	<u>S</u> olid <u>L</u> iquid <u>G</u> as	CAS Number (See MSDS or product label)	Class I-VII (See Page 5 for instructions)	Maximum Storage Volume	<u>H</u> auled Off-site <u>I</u> ncorporated into product <u>S</u> anitary Sewer <u>A</u> ir <u>R</u> ecycled <u>O</u> ther	See Page 5 for instructions
Example:								
A) Lacquer Thinner	Toluene	46%	L	108-88-3	Class 3,	40 gallons	I, H	D
B) ACME Chemical	Xylene	32%		1330-20-7				
C) Paint Room	Benzene	22%		71-43-2				
A) Propane	propane	100%	G	74-98-6	3	70 gal	I	D
B) Lansing Ice/Fuel								
C) Grounds Dept.								
A) Carb Clean	acetone	85%	G	67-64-1	2	13 cans	I	F
B) Cyclo Industries	toluene	9%		108-88-3				
C) Grounds Dept.	carbon dioxide	5%						
A) Break Cleaner	acetone	60%	G	67-64-1	2	13 cans	I	F
B) Cyclo Industries	heptane	35%						
C) Grounds Dept.	isopropyl alcohol	5%						
A) Parts Cleaner	mineral oil	80%	L	64742-52-5	3	55 gal	I	D
B) Cyclo Industries	hydrotreated dist.	20%		64742-46-7				
C) Grounds Dept.								
A) Oxygen	pure oxygen	100%	G	7782-44-7		14.5 cu ft.	I	L
B) Airgas								
C) Grounds Dept.								

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Example:								
A) Lacquer Thinner	Toluene	46%	L	108-88-3	Class 3, 6	40 gallons	I, H	D
B) ACME Chemical	Xylene	32%		1330-20-7				
C) Paint Room	Benzene	22%		71-43-2				
A) Acetylene	acetylene	100%	G	74-86-2		14.5 cu ft	I	L
B) Airgas								
C) Grounds Dept.								
A)								
B)								
C)								
A)								
B)								
C)								
A)								
B)								
C)								
A)								
B)								
C)								

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Example:								
A) Lacquer Thinner	Toluene	46%	L	108-88-3	Class 3, 6	40 gallons	I, H	D
B) ACME Chemical	Xylene	32%		1330-20-7				
C) Paint Room	Benzene	22%		71-43-2				
A) Greases			L			55 gal	O	D
B)								
C) Veh. Maint. Gar.								
A) Gear Lube	petroleums	95%	L	64742-56-1	3	55 gal	O	D
B) Various	other additives	5%						
C) Veh. Maint. Gar.								
A) Parts Washer	mineral oil	80%	L	64742-52-5	3	15 gal	H	D
B) Cyclo Industries	hydrotreated dist.	20%		64742-46-7				
C) Veh. Maint. Gar.								
A) Ultra Pure Diesel Exhaust Fluid			L			55 gal		D
B)								
C) Veh. Maint. Gar.								
A) Misc. Spray Cans								
B) Various						22 cans		R
C) Veh. Maint. Gar.								

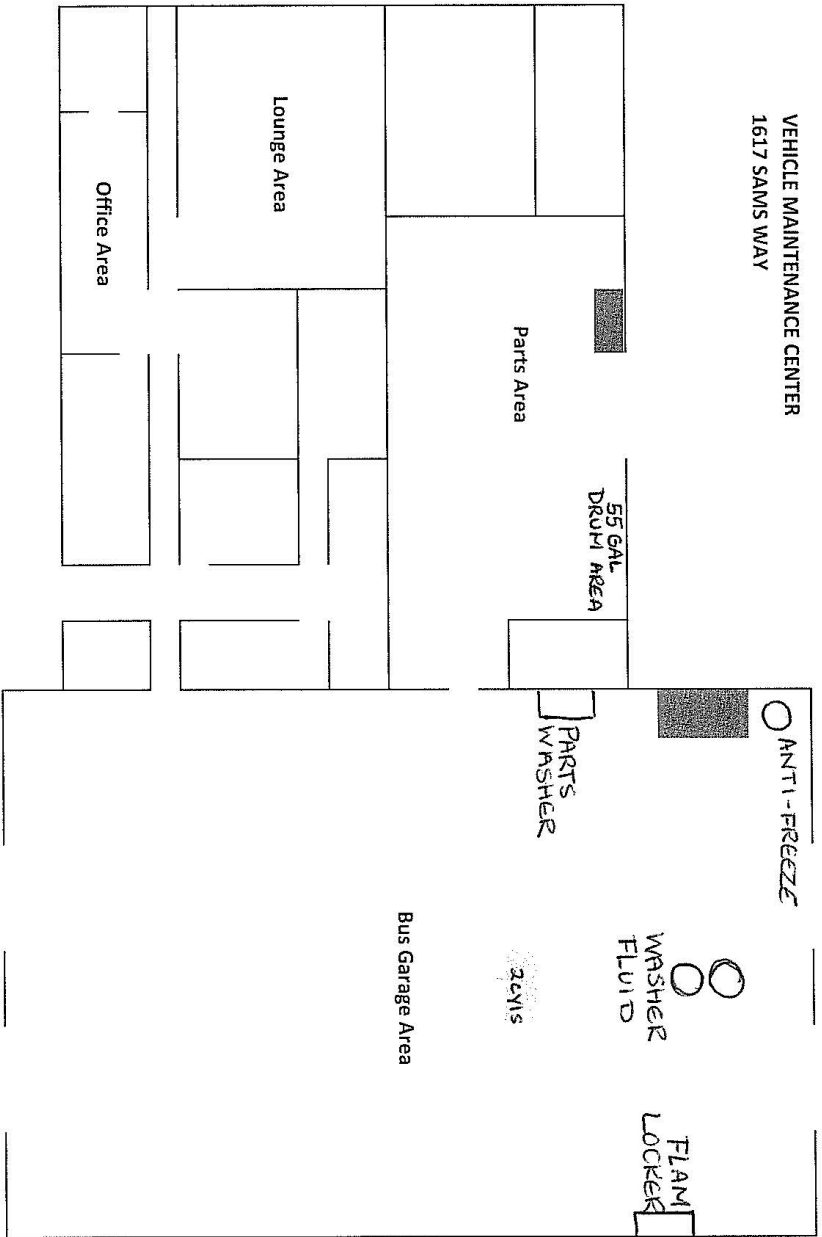
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Example:								
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B) ACME Chemical	Xylene	32%		1330-20-7				
C) Paint Room	Benzene	22%		71-43-2				
A) Oxygen	Pure Oxygen	100%	G	7782-44-7		3 cu ft	I	L
B) Airgas								
C) Veh. Maint. Gar.								
A) Acetylene	acetylene	100%	G	74-86-2		3 cu ft	I	L
B) Airgas								
C) Veh. Maint. Gar.								
A) Washer Solution						55 gal	O	D
B)								
C) Veh. Maint. Gar.								
A)								
B)								
C)								
A)								
B)								
C)								

LANSING PUBLIC SCHOOLS HAZMAT LOCATION DIAGRAM

VEHICLE MAINTENANCE CENTER
1617 SAMIS WAY



LANSING PUBLIC SCHOOLS HAZMAT LOCATION DIAGRAM

