

## Attachment C

NPDES Phase II

### **Municipal Separate Storm Sewer (MS4) Permit Application**

Storm Water Management Program Plan (SWMP)

Previous Permit Number MIS040091

Grand Blanc Township

Revised June, 2019



Prepared by:



ROWE PROFESSIONAL  
SERVICES COMPANY

PO Box 3748 | Flint, MI 48502

## INTRODUCTION

This document is intended to correspond to the MDEQ Stormwater Discharge Permit Application Section VII, Stormwater Management Program. This permit governs storm water discharges from municipal separate storm sewer systems (MS4s), with controls based on six minimum measures developed by the U.S. Environmental Protection Agency. The permit requires that Grand Blanc Township *"develop, implement and enforce a storm water management program designed to reduce the discharge of pollutants from the township's drainage system to the Maximum Extent Practicable (MEP), to protect the designated uses of the waters of the state, to protect water quality and to satisfy the appropriate water quality requirements of the Federal Act and the Michigan Act."*

Grand Blanc Township is located in the southern portion of Genesee County. The township has an area of 32.7 square miles and a population of 37,508 according to the 2010 census. Approximately 27.5 square miles (85%) of the township falls within the "urbanized area".

The township lies entirely within the Flint River Watershed.

This Storm Water Management Program Plan for Grand Blanc Township is to be utilized to guide the township in increasing awareness regarding issues involving storm water management for the township's facilities. The plan will serve as a procedural guide for township employees to follow so the storm water leaving the township's facilities has the best storm water quality possible.

### Six Minimum Measures

As part of the permit, Grand Blanc Township must comply with the six minimum measures identified by the state. These are Public Education, Public Involvement & Participation, Illicit Discharge Elimination, Post Construction Storm Water Management, Construction Storm Water Runoff Control and Pollution Prevention/Good Housekeeping. Since the township does not own or operate any of the storm sewers with the exception of those on township property, its ability is limited in many respects and will rely on other agencies to address many tasks of the minimum measures on Grand Blanc Township's behalf.

Each of the minimum measures and the associated tasks are outlined below. Descriptions, indication of non-applicability or other responsible agencies is provided below each task. Where applicable, an implementation schedule and measurable goal are listed.

## 1 ENFORCEMENT RESPONSE PROCEDURE (ERP)

Grand Blanc Township Sanitary Sewer Use Ordinance addresses and enforces illegal discharge, illicit discharges, proper connection to available sanitary sewer, acceptable discharge to the storm and sanitary sewer systems and the inclusion of grease/oil interceptors for certain operations. It also provides township staff the right to enter, inspect and monitor public sewer systems and provides for enforcement for violations to the ordinance. The ordinance is on the township's website:

[https://www.municode.com/library/mi/grand\\_blanca\\_charter\\_township\\_\(genesee\\_co.\)/codes/code\\_of\\_ordinances?nodeId=COOR\\_CH34UT](https://www.municode.com/library/mi/grand_blanca_charter_township_(genesee_co.)/codes/code_of_ordinances?nodeId=COOR_CH34UT) . See Section 34, Article III for general information and Section 34-96 for enforcement penalties.

## 2 PUBLIC INVOLVEMENT AND PARTICIPATION PLAN

Public input will be obtained on the Storm Water Management Program through public notice, following local public notice requirements. A copy of the draft plan will be submitted to the GCDC, GCRC, MDOT and the FRWC to gain additional public participation. The draft plan will be placed on the Township's website with a comment tab to receive input and comments on the plan. The final approved Storm Water Management Program will be made available to the public once the permit has been issued. It will be placed on the Township's website as well as any progress reports. Grand Blanc Township has already initiated implementing the plan in many respects.

### 2.1 Public Notice of the Storm Water Management Plan (the Storm Water Management Plan will be public noticed in the spring of 2015)

**Goal:** Gain public input.

**Delivery:** Track number of comments received following the notice.

**Schedule:** Number of comments will be reported annually.

### 2.2 Work together with stream or watershed groups

The township is currently a member of the Flint River Watershed Coalition ([www.flintriver.org](http://www.flintriver.org)). The township is also a member of the Grand Blanc Chamber of Commerce and will work with them for additional public participation.

**Goal:** Increase public awareness

**Delivery:** Monitor the number of groups participating

**Schedule:** The number of groups participating will be reported annually

## 3 PUBLIC EDUCATION PROGRAM

Public education regarding storm water management has been a priority for Grand Blanc Township for many years. The township has partnered with the Genesee County Drain Commissioner's office Surface Water Management division during the first permit cycle.

### 3.1 Educate residents about the water body where their storm water goes

Grand Blanc Township will make available, and attempt to educate the public regarding the Flint River watershed, and the importance of preservation and conservation. This will be done by working with and participating in various groups such as the Flint River Watershed Coalition ([www.flintriver.org](http://www.flintriver.org)).

**Goal:** Increase public awareness on the Flint River watershed, and the importance of its conservation.

**Delivery:** Tracking number of members and public participation at various meetings/events.

**Schedule:** Tracking the number of members will be done annually.

### 3.2 Educate the public about the hazards associated with illicit discharges.

Grand Blanc Township will educate the public regarding illicit discharges to our system. We will make available additional educational literature through the township's website.

**Goal:** Increase public awareness and prevent illicit discharges in the Grand Blanc Township storm water systems.

**Delivery:** Monitor number of pamphlets removed and hits to the website.

**Schedule:** Monitoring the number of pamphlets and hits to the website annually.

### 3.3 Establish a public hotline for reporting illicit discharges

The township will publicize the number to call to report an illicit discharge to Grand Blanc Township's MS4's on the township website.

**Goal:** To provide an avenue for reporting illicit discharges to our water systems.

**Delivery:** The township will track the number of calls received and the action taken through its work order program

**Schedule:** The number of calls received will be publicized annually.

### 3.4 Educate the public to encourage reporting of illicit discharges

Grand Blanc Township will encourage the reporting of illicit discharges into their system by placing the EPA's "After the Storm" brochure electronically on their website which displays the hotline number for the township's MS4 contact person.

**Goal:** Increase public awareness and promote public involvement with reporting illicit discharges

**Delivery:** The Township will track the number of website hits and the calls received and the action taken once the call is complete.

**Schedule:** The website displaying the reporting contact number will be posted as soon as possible.

### 3.5 Educate the public about waste collection and recycling sites

The Genesee County Health Department Household Hazardous Wastes division assists with household hazardous waste collections, which are conducted twice annually in various locations throughout the county. The collections are scheduled in the spring, in conjunction with Earth Day festivities, and in the fall. The consortium responsible for household hazardous waste collection activity includes: the Genesee County Health Department, the City of Flint, MSU Extension-Genesee County and the Genesee County Recycling Coalition. Others supporting the effort include General Motors, UAW Local 599 Environmental Committee, and various community volunteers.

Grand Blanc Township currently posts information on hazardous material collection dates in the township hall and on its website. This is also done by the Genesee County Health Department.

**Goal:** Provide an efficient means of hazardous materials disposal for the public

**Delivery:** The township will obtain information from the county on the number of residents that drop-off chemicals and other materials on the dates collected. This information will be included in the annual report.

**Schedule:** The tracking of the number of members dropping off materials will be done annually

### 3.6 Educate the public about appropriate use and handling of pesticides, herbicides and fertilizers

Grand Blanc Township regularly places information regarding proper handling of pesticides, herbicides and fertilizers in the township hall. Many area retailers are posting information regarding non-phosphorous fertilizers in their establishments.

**Goal:** Increase public awareness on the appropriate use of handling pesticides, herbicides and fertilizers.

**Delivery:** Monitor number of pamphlets removed from the stands placed at various locations within the township and/or commercial establishments.

**Schedule:** The number of pamphlets removed will be recorded annually.

### 3.7 Educate the public about residential and non-commercial car washing

Grand Blanc Township will keep a supply of the EPA's "Solution to Stormwater Pollution" brochures on the subject at the township hall and website. They will make them readily available to the public.

**Goal:** To inform the public about residential and non-commercial car washing.

**Delivery:** Monitoring the number of flyers distributed and website hits.

**Schedule:** The number of flyers distributed and website hits will be reported annually.

### 3.8 Educate the public about proper septic system maintenance

Grand Blanc Township will keep a supply of the EPA's "Solution to Stormwater Pollution" brochures on the subject at the township hall and website. They will make them readily available to the public.

**Goal:** Inform the citizens on the proper techniques to maintaining their septic systems.

**Delivery:** Monitoring the number of hits on the township website's EPA brochure and link to the Genesee County Health Department.

**Schedule:** The number of website hits will be recorded annually.

### 3.9 Educate the public on management of riparian lands to protect water quality

The township will continue this work if additional riparian enhancement projects are performed. The GCDC and the township will continue to coordinate this activity as needed.

**Goal:** Educate the public on how to manage riparian lands and protect the water quality.

**Delivery:** Enhancement projects performed and monitoring performance.

**Schedule:** Any enhancement projects that are created will be monitored for the riparian lands improved management.

### 3.10 Educate the public about their responsibility and stewardship in their watershed

Grand Blanc Township will keep a supply of the EPA's "Solution to Stormwater Pollution" and "After the Storm" brochures on the subject at the township hall and website. They will make them readily available to the public.

**Goal:** Create a well-informed public for their responsibility and stewardship in their watershed.

**Delivery:** Monitoring the number of flyers distributed and website hits.

**Schedule:** The number of flyers taken and website hits will be recorded annually.

### 3.11 Educate the public about the water quality impacts from disposal practices for grass clippings, leaf litter, and animal wastes.

In addition to the EPA literature mentioned above, Grand Blanc Township will provide literature regarding water quality impact from disposal of grass clippings, leaves and animal wastes. The township contracts with a waste removal company that takes and composts yard and leaf waste. Their schedule is posted on the township's website. The township parks promote dog waste pickup at Bicentennial Park as well as the non-motorized trail.

**Goal:** Create awareness of the impacts of grass, leaves, and animal waste on the water quality.

**Delivery:** Monitoring the number of flyers distributed and website hits throughout the year. Monitor the annual yard waste volumes with the waste removal company.

**Schedule:** The number of flyers disbursed, website hits, and the volume of compost will be recorded annually.

### 3.12 Educate the public on the beneficial uses of green infrastructure / Low Impact Development

Grand Blanc Township will keep a supply of brochures on the subject at the township hall and make them readily available to the public.

**Goal:** Generate an informed community on the benefits from using green infrastructure.

**Delivery:** Monitoring the number of flyers distributed from the township hall.

**Schedule:** The number of brochures taken will be recorded annually.

### 3.13 Educate local commercial, industrial, and educational facilities about good housekeeping

Grand Blanc Township will keep a supply of the EPA's "After the Storm" brochures on the subject at the township hall and website. They will make them readily available to the public.

**Goal:** Educate the local commercial, industrial, and educational facilities on the benefits of a clean work or living area.

**Delivery:** Monitoring the number of web hits on good housekeeping

**Schedule:** The number of website hits will be monitored and reported annually.

### 3.14 Evaluate the overall PEP

The township will evaluate the overall effectiveness of the PEP through volume of flyers/brochures acquired as well as the number of website hits.

## 4 ILLICIT DISCHARGE ELIMINATION PROGRAM (IDEP)

This plan aims to reduce illicit discharges to the township's separate storm water drainage system and from the township's sanitary sewer system. The township has performed a dry weather screening of its outfalls and has not found any illicit discharges. Section 34-81 of the township's Sewer Use

Ordinance prohibits non-clean water from being discharged to any MS4. The ordinance can be found on the township's website at the following link:

[https://www.municode.com/library/mi/grand\\_blanca\\_charter\\_township\\_\(genesee\\_co.\)/codes/code\\_of\\_ordinances?nodeId=COOR\\_CH34UT\\_ARTIISE\\_S34-78STGRUNWA](https://www.municode.com/library/mi/grand_blanca_charter_township_(genesee_co.)/codes/code_of_ordinances?nodeId=COOR_CH34UT_ARTIISE_S34-78STGRUNWA)

#### 4.1 Develop a map of the MS4

A map of the MS4 is included as Attachment B. The map will be updated as new township storm water facilities are constructed.

#### 4.2 Conduct dry weather point source screening the mapped MS4; find, eliminate and minimize illicit connections in the mapped MS4

A visual/olfactory dry weather screening of the township's two storm sewer outfalls is performed on a permit cycle basis. To date, no dry weather flow has been identified.

Grand Blanc Township will train one to three members of the township staff who have responsibility in the IDEP program to conduct the dry weather point source screening. Training will be renewed every three years until jurisdictional permit is complete.

**Goal:** Identify and/or prevent illicit discharges

**Delivery:** The township will track the number of illicit discharges discovered and the action taken

**Schedule:** To be completed each permit cycle.

#### 4.3 Limit seepage from public sanitary systems

A majority of the township's sanitary sewer system is a gravity system with 14 pump stations. If a leak or illicit discharge occurs from the pressure sanitary sewer system, it is immediately known and corrected. The gravity system is TV inspected and cleaned on a schedule that is approximately every five years. A list of situations encountered will be kept on file and submitted with the annual report.

**Goal:** Identify and/or prevent illicit discharges from the sanitary collection system

**Delivery:** The township will track the number leaks discovered and the action taken to eliminate potential migration into the storm system.

**Schedule:** The number of leaks discovered and acted upon will be recorded annually.

#### 4.4 Limit seepage from on-site sewage disposal systems (e.g., septic systems)

The township does not control any on-site sewage disposal systems. Septic field permitting and oversight is the responsibility of the Genesee County Health Department (GCHD). The township will continue to work with the GCHD to coordinate any problems or incidences regarding on-site systems. The GCHD will provide, upon request of the township, a yearly summary report regarding replacement on-site systems.

**Goal:** Preventing illicit discharges

**Delivery:** Track number of failed septic systems identified by the county that are in the vicinity of any township storm water facilities

**Schedule:** The number of failed systems will be reported annually.

#### 4.5 Legally regulate pollutant contribution to the MS4 and legally prohibit illicit connections and illicit discharges to the MS4

Grand Blanc Township Sewer Ordinance, Section 34-81 addresses illegal discharge and illicit discharges to the township's MS4. Section 34-96 provides for enforcement for violations to the ordinance.

**Goal:** Preventing illicit discharges

**Delivery:** Track number of violations identified.

**Schedule:** The number of violations will be reported annually.

#### 4.6 Require compliance with ordinances, permits, etc.

Grand Blanc Township continually requires compliance with all laws, ordinances, permits and codes through its site plan review and building department review processes.

**Goal:** Preventing illicit discharges

**Delivery:** Track number of violations identified.

**Schedule:** Violations tracked will be recorded and reported annually.

#### 4.7 Procedure for elimination of connection or discharge if observed during the dry weather screening

Grand Blanc Township will be responsible to eliminate the connection or discharge. If dry weather flow is observed, the township will enact the following procedure to investigate and eliminate the source. This procedure will be performed only as needed.

Procedure:

1. Investigate the manhole or other sewers upstream from the flow observed
2. Televiser the storm sewer system for cracks or other possible sources of discharge
3. Disconnect any illegal connections to the storm sewer

#### 4.8 Procedure for responding to and reporting illegal dumping / spills

Any illegal dumping or spills will be reported to the MDEQ as required. Complaints will be responded to immediately by the appropriate Township Staff or Police. The Township will follow MDEQ requirements for follow up screening of the spill. See attachments G and K.

#### 4.9 Program for IDEP training and evaluation

1. Training for appropriate existing staff on these topics will occur during the course of the permit cycle and for new employees as needed.
2. Evaluation will be determined based on trained staff's ability to follow the procedure for investigating and eliminating any found illicit discharges into the Township's MS4.



#### 4.10 Ordinance / regulatory mechanism that regulates the contribution of pollutants to the MS4

Section 34-81 of the township's Sewer Use Ordinance prohibits non-clean water from being discharged to any MS4. The ordinance can be found on the township's website at the following link below. Also, exempted non-storm water discharges are situations such as fire fighting activities, landscape irrigation runoff, and air conditioning condensation provided they are not identified as significant contributors to violations of the Water Quality Standards.

[https://www.municode.com/library/mi/grand\\_blanca\\_charter\\_township\\_\(genesee\\_co\)/codes/code\\_of\\_ordinances?nodeId=COOR\\_CH34UT\\_ARTIISE\\_S34-78STGRUNWA](https://www.municode.com/library/mi/grand_blanca_charter_township_(genesee_co)/codes/code_of_ordinances?nodeId=COOR_CH34UT_ARTIISE_S34-78STGRUNWA)

## 5 CONSTRUCTION STORM WATER RUNOFF CONTROL

The township's MS4 does not have significant off-site storm water runoff entering into the system. For new township developments, SESC permits will be obtained to assure that adequate controls are in place. The Genesee County Drain Commissioner's Office is the responsible Act 91 agency for issuing permits. Also see Township ordinance Section 18-97:

[https://www.municode.com/library/mi/grand\\_blanca\\_charter\\_township\\_\(genesee\\_co\)/codes/code\\_of\\_ordinances?nodeId=COOR\\_CH18LADISULA\\_ARTIISUCO\\_DIV3DEST\\_S18-97SOERSECO](https://www.municode.com/library/mi/grand_blanca_charter_township_(genesee_co)/codes/code_of_ordinances?nodeId=COOR_CH18LADISULA_ARTIISUCO_DIV3DEST_S18-97SOERSECO)

#### 5.1 Prohibit discharges to the MS4 that are not in compliance with the Construction Permit-by-Rule

Soil erosion and sedimentation control is monitored through permits. If Grand Blanc Township had reason to believe that pollutants have been discharged from construction activity they are responsible to implement the following procedure.

1. Notify the Genesee County Drain Commission office and the MDEQ when soil and sediment are discharged
2. Notify the MDEQ when other wastes have been discharged

**Goal:** Preventing construction site runoff from entering and impacting our waterways.

**Measurable Goal:** Number of approved permits issued.

**Schedule:** Ongoing.

#### 5.2 Notify the soil erosion agent and the department of construction deposits and other pollutants into the MS4

The township currently does and will continue to notify all necessary departments and agencies of any construction deposits and other pollutants such as pesticides, petroleum derivatives, and solid wastes that may become mobilized when land is disturbed, into the MS4 from construction sites.

**Goal:** Preventing construction site runoff from entering and impacting our waterways.

**Measurable Goal:** Number of notifications

**Schedule:** Ongoing

### 5.3 Review preliminary construction site plans greater than one acre to assure space is allotted for BMPs

Grand Blanc Township Department of Public Services reviews all preliminary construction site plans through the Preliminary Site Plan review committee so that adequate space is allotted for BMPs.

**Goal:** Preventing construction site runoff from entering and impacting our waterways.

**Measurable Goal:** Ensure each site construction contractor has the required Part 91 permit prior to starting construction.

**Schedule:** Each site plan.

## 6 POST CONSTRUCTION STORM WATER MANAGEMENT TASKS

Grand Blanc Township will adopt a Storm Water Drainage Ordinance, which will require source and site controls to minimize development impacts on the township's rivers, lakes and streams. The GCDC-SWM division is currently working on an alternative approach that the township will adopt as its own. The key focus of source controls will be to reduce the volume of runoff generated and improve the quality on development sites. Key practices will include the preservation of existing natural features, minimization of impervious surfaces, direct runoff to grassed areas to "disconnect" runoff from impervious surfaces, and provide careful design and placement of soil erosion control measures. Site controls include detention basins that will treat a range of storm events to minimize water quantity and quality impacts to receiving waters.

### 6.1 Require controls for residential and commercial developments

Grand Blanc Township's adopted construction plan design standards provide for the review of proposed storm water management systems for new developments, developments that disturb at least one or more acres, including projects less than an acre that are part of a larger common plan of development and discharge to the Township's MS4. For any developments that drain into a county drain, the development must follow the Genesee County Drain Commissioner's Office – Surface Water Management's Design Standards & Requirements.

[http://www.gcdswm.com/PhaseII/Permit\\_Forms/2014%20Application/Ordinance%20Companion%20for%20GC%20FINAL2013.doc](http://www.gcdswm.com/PhaseII/Permit_Forms/2014%20Application/Ordinance%20Companion%20for%20GC%20FINAL2013.doc) and

<http://www.gcdswm.com/Design%20Information/APA%20Procedures%20Final.pdf> and

[http://www.twp.grand-blanc.mi.us/document\\_center/Zoning/Grand\\_Blanc\\_Clearzoning\\_11122013.pdf](http://www.twp.grand-blanc.mi.us/document_center/Zoning/Grand_Blanc_Clearzoning_11122013.pdf)

**Goal:** Ensure long-term control measures are prepared in the design phase of a development.

**Measurable Goal:** Number of plan reviews

**Schedule:** Per plan review

### 6.2 Ensure post-construction controls to minimize water quality impacts

Grand Blanc Township requires continued site plan compliance and has required storm water detention and storm sewer system maintenance agreements for recently developed projects.

**Goal:** Ensure planned control measures are effective.

**Measurable Goal:** Number of site visits

**Schedule:** As-needed site visits

### 6.3 Address post-construction flow impacts

Grand Blanc Township requires private maintenance agreements for all private storm sewers and storm water quality/quantity systems.

**Goal:** Ensure privately owned storm sewers are properly maintained

**Measurable Goal:** Owner to provide maintenance records.

**Schedule:** Maintenance records must be provided annually starting September 2010.

### 6.4 Develop and implement ordinances or other regulatory mechanisms for development sites

Grand Blanc Township requires compliance with the Township's Department of Public Services construction plan design standards.

**Goal:** Minimizing construction site impact on our waterways.

**Measurable Goal:** Number of ordinance violations & corrective action taken.

**Schedule:** As-needed

### 6.5 Require post-construction BMPs by ordinance or other regulatory means

Grand Blanc Township requires continued compliance with an approved site plan.

**Goal:** Ensure privately owned storm sewers are properly maintained

**Measurable Goal:** Owner to provide maintenance records.

**Schedule:** Annual

### 6.6 Require adequate long-term O&M of BMPs by ordinance or other regulatory means

The township requires all developments to provide a storm sewer system and detention system maintenance agreement.

**Goal:** Ensure privately owned storm sewers are properly maintained

**Measurable Goal:** Owner to provide maintenance records.

**Schedule:** Per ordinance

### 6.7 Require post-construction erosion and sedimentation control by ordinance or other regulatory means

The township does control soil erosion and sedimentation control through existing ordinance through the Community Development Department.

**Goal:** Ensure proper long term soil erosion measure are adequate

**Measurable Goal:** Owner to provide maintenance records

**Schedule:** As-needed

### 6.8 Regulate the flow rate into the MS4 from development sites by ordinance or other Regulatory means

No significant off-site storm water discharges enter into the MS4. The township regulates storm water discharge rates for all new developments.

**Goal:** N/A

**Measurable Goal:** N/A

**Schedule:** N/A

### 6.9 Review site development plans for adequate BMPs

Grand Blanc Township requires regulatory compliance for approval.

**Goal:** Preventing site storm runoff from negatively impacting waterways.

**Measurable Goal:** Number of approved site plans

**Schedule:** Per plan review

### 6.10 Review commercial site development plans for inlet isolation from polluting sources

Grand Blanc Township reviews plans for Best Management Practices.

**Goal:** Preventing site storm runoff from negatively impacting waterways.

**Measurable Goal:** Number of approved site plans

**Schedule:** Per plan review

## 7 POLLUTION PREVENTION/GOOD HOUSEKEEPING TASKS

The township currently owns a number of facilities including buildings, parks and recreational paths. The Township Hall and Police Station have two outfalls, outfall 1 and outfall 2 (shown on Attachment B), that flow to the Rauch Branch of the Thread Creek. All other properties infiltrate into the ground surface. Below is a description of each of the township-owned facilities that contain a MS4:

- **Township Campus** - This site is approximately 22 acres and contains the township hall, police station, pole barn, vehicle sheds, salt barn, paved path, and paved parking lots. The area also includes native landscaping, swales and detention basins. All runoff drains through the MS4 to natural outlets. The township provides maintenance of vehicles in-house. Salt storage is contained in an outside building on township campus. Township personnel maintain all lawn cutting and general grounds maintenance. A private company performs fertilizing of the township campus. The township will require the company to perform soil testing prior to all fertilizer applications to assure the fertilizer application rate is appropriate.

### 7.1 Ensure that public employees properly handle waste, recyclables, chemicals and equipment

Grand Blanc Township has an in-house paper recycling program. Cleaning supplies are utilized at the township's buildings. Material Safety Data Sheets (MSDS) will be posted for the chemicals utilized. Training for appropriate existing staff on these topics will occur during the course of the permit cycle and for new employees as needed.

**Goal:** Increase employee awareness.

**Measurable:** Number of employees trained.

**Schedule:** Ongoing

## 7.2 Ensure that public employees maintain a clean work area

Department heads are responsible for assuring that work areas are kept free of miscellaneous debris.

**Goal:** Clean and neat work areas.

**Measurable:** Monitor the number of reprimands for cleanliness

**Schedule:** Ongoing

## 7.3 Ensure that public employees identify and report storm water pollution sources

A written program is in place that guides employees on how to handle potential pollution spills (attachments G and K). There is only one significant material stored at the township campus that has the potential to pollute storm water and that is salt. As mentioned it's stockpile in a salt barn. The salt trucks are also stored inside. The only opportunity for pollution is the loading operation from the salt pile to the trucks. Trucks are carefully loaded not only for pollution reasons, but also for financial reasons. Spilled salt is swept back into the salt barn for future use. All other potential polluting materials (hydrocarbons, antifreeze, etc) are stored and used in the vehicle maintenance building and are not exposed to any storm water outlets.

**Goal:** Increase employee awareness and getting them involved.

**Measurable:** Reported incidences

**Schedule:** Ongoing

## 7.4 Provide public employee guidance or operation manuals

O & M personnel are provided adequate guidance and operation manuals for all equipment. Also, O & M personnel are provided adequate training and have obtained required state licenses where required.

**Goal:** Properly trained employees.

**Measurable:** Reported incidences

**Schedule:** Ongoing

## 7.5 Provide public employee storm water SMP training

Storm water management training will be provided to township DPW technicians. New employees are trained within the first 6 to 12 months of employment. The township has two Certified Stormwater Operators on staff. This certification is renewed biannually.

**Goal:** Maintain a minimum of four properly trained employees

**Measurable:** Number of training sessions/hours of training provided.

**Schedule:** Ongoing

## 7.6 Provide equipment for pollution prevention and good housekeeping

The township currently has adequate equipment to maintain BMPs and prevent storm water runoff pollution. This equipment consists of a wide variety of mowers, runoff filter materials, backhoes, loaders, skid-steers, street sweepers (parking lots), Vactor trucks, and hand tools. Additional equipment will be provided as needed.

**Goal:** Being prepared to respond and prevent storm water runoff.

**Measurable:** Number of responses and corrective action taken.

**Schedule:** Annual review of equipment

## 7.7 Inspect and maintain of catch basins, and vegetative swales

The catch basins and vegetative swales depicted on the map of the township's MS4 will be inspected on an annual basis. The parking lots will be swept as needed which is typically once per year. The township will utilize its sanitary sewer Vactor truck to remove all material in the catch basin and swales at least once per year. The material shall be transported to the GCDC dumping station for sanitary sewer wastes. Vegetative swales or detention basins are mowed regularly (once per week at peaks) and reseeded as needed.

**Goal:** Keep catch basins and vegetative swales free of debris.

**Measurable:** Number of catch basins inspected & cleaned.

**Schedule:** Basins and swales will be inspected on an annual basis.

## 7.8 Inspect and maintain vegetative BMPs

The township continually inspects and maintains all of the BMPs at their facilities to minimize soil erosion and maximize storm water runoff treatment. Native plantings and grass is replaced when required. Regular mowing is done by the township's forces as needed (typically weekly). Vegetative BMP's are inspected at each mowing. Leaf removal is done in the fall annually.

**Goal:** Maintain a healthy landscape

**Measurable:** Number of employee hours charged to landscaping maintenance.

**Schedule:** Continually

## 7.9 Inspect and maintain structural BMPs

Structural BMPs will be inspected on an annual basis or after major storm events and will be maintained on an as-needed basis.

**Goal:** Properly maintained BMPs.

**Measurable:** Number of BMP inspected and repaired

**Schedule:** Annual

## 7.10 Add or enhance structural controls as needed to reduce storm water runoff pollution

Currently, all of the township's storm water facilities have structural controls designed to current standards. As technology changes and opportunities arise, the township will retrofit existing structural controls.

**Goal:** Prevent storm runoff pollution

**Measurable:** Number of retrofits or repairs completed

**Schedule:** As-needed

#### 7.11 Add or enhance cleaning schedules as needed to reduce storm water runoff pollution

Current cleaning schedules should be adequate to reduce storm water runoff pollution to the maximum extent practicable.

**Goal:** Prevent or minimize storm runoff pollution

**Measurable:** Number of revisions to cleaning schedule

**Schedule:** As needed

#### 7.12 Properly dispose of operation and maintenance wastes to prevent violation of water quality standards

All operation and maintenance of Grand Blanc Township equipment and fleet vehicles is performed in accordance with best management practices. The township has several different options to dispose of the waste which include:

1. Implement the use of drying beds to separate the solid from the liquid waste. This is usually completed at a treatment facility allowing the liquid waste to be treated. The remaining solid should be collected with a Vactor Truck, and properly disposed of at an off-site location in accordance with Parts 115 or 121.
2. Permission must be granted from a local waste water treatment plant to rid of the solid/liquid waste in the sanitary system. Many require pre-treatment for discharge.
3. The last option is to allow for the solid waste to settle and then, using a sump pump, carefully siphon out the liquid being careful not to disturb the solid. The clear water or liquid from the sump pump may be disposed of down a gutter, sanitary system or applied to the ground surrounding the catch basin, or source of hazardous waste. The solid and liquid remaining must be collected with a Vactor Truck, and properly disposed of at an off-site location in accordance with Parts 113 or 121.

**Goal:** Minimize the potential for violations

**Measurable:** Number of violations

**Schedule:** Continually

#### 7.13 Provide road construction and maintenance controls

The township maintains some single-family subdivision roadways with snow removal equipment during snow events only. Although this is the responsibility of the Genesee County Road Commission, the township applies salt in accordance with GCRC and MDEQ guidelines. The township uses salt trucks with calibrated salt delivery systems. No additives are added to the salt.

**Goal:** Prevent or minimize salt runoff pollution

**Measurable:** Careful calibration of material used

**Schedule:** Seasonal

#### 7.14 Provide highway construction and maintenance controls

The township does not maintain any highways. This is the responsibility of the Genesee County Road Commission and the Michigan Department of Transportation.

**Goal:** N/a

**Measurable:** N/a

**Schedule:** N/a

#### 7.15 Provide parking lot construction and maintenance controls

All new parking lots will be provided with adequate BMPs. All existing parking lots currently have detention and runoff water quality controls.

**Goal:** Prevent or minimize storm runoff pollution with a properly functioning detention basin.

**Measurable:** Properly functioning detention basin

**Schedule:** Seasonal

#### 7.16 Clean Streets

The township does not clean streets except for snow removal. This is the responsibility of the Genesee County Road Commission and the Michigan Department of Transportation.

**Goal:** N/a

**Measurable:** N/a

**Schedule:** N/a

#### 7.17 Keep salt and sand (de-icing materials) out of receiving streams to the maximum extent practicable

The township maintains a salt shed with protective covering and doors minimizing the migration of salt to the storm sewer system. The township complies with the salt storage requirements of the Part 5 Rules (Rules 324.2001 to 324.2009 of the Michigan Administrative Code.) Because salt storage is only on a temporary part-year basis, a detailed pollution prevention plan is not provided. Long term storage of salt is the responsibility of the GCRC.

**Goal:** Prevent or minimize storm runoff pollution

**Measurable:** Record of repairs/upgrades

**Schedule:** Annual

#### 7.18 Provide good housekeeping at sand/salt storage facilities and maintenance facilities

Salt utilized for road de-icing is stored in the salt shed protected from the environment.

**Goal:** Prevent or minimize storm runoff pollution

**Measurable:** Record of repairs/upgrades

**Schedule:** Continually

#### 7.19 Maintain vehicles and equipment to prevent storm water runoff pollution

All operation and maintenance of Grand Blanc Township equipment and fleet vehicles is performed by an in-house full-time certified mechanic. A regular maintenance schedule is followed for all fleet vehicles. Police, Fire and DPW vehicles (including salt trucks) are washed in an indoor facility with runoff entering a grease / oil separator prior to entering the sanitary sewer



system. The washing takes place inside the facility and no runoff from the washing operation enters the storm water system or MS4 facilities.

**Goal:** Prevent or minimize storm runoff pollution

**Measurable:** Record of repairs/upgrades

**Schedule:** Continually

#### 7.20 Label newly built outfall structures

All newly built outfall structures will have labels similar to "NO DUMPING OF WASTE, FLOWS TO RIVER". The Engineering Design standards approved by the Township Board on 14 September 2006, requires *"All catch basins at curb shall be EJIW 7045 Catch Basin Curb Inlet with Type M2 adjusting grate type T4 back with "Dump no waste - Drains to river" lettering and fish image."*

**Goal:** Increase Public Awareness

**Measurable:** Number of outfall structures constructed

**Schedule:** As-needed

#### 7.21 Construct new flood controls with water quality controls

All new township flood control facilities will have integrated water quality control features that meet township standards.

**Goal:** Control Storm Runoff

**Measurable:** Number of outfall structures constructed

**Schedule:** As-needed

#### 7.22 Examine and retrofit existing flood controls for water quality control

All existing storm water management facilities have water quality control features.

**Goal:** Maintain an updated flood control system

**Measurable:** Number of outfall structures 'retrofitted

**Schedule:** As-needed

#### 7.23 Provide a turf management program (including soils testing and minimizing the use of chemicals) for public lands to control storm water runoff pollution. Utilize soil testing as needed

Grand Blanc Township hires a professional licensed herbicide / pesticide applicator for turf maintenance. The applicator's license must be provided at the township award process.

**Goal:** Reduce concentration of fertilizers in storm water runoff.

**Measurable:** Amount of chemicals used annually.

**Schedule:** Ongoing