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1.0 Executive Summary

In an effort to preserve, protect, and improve the Nation's water resources from polluted storm water runoff, the Environmental Protection Agency (EPA) has expanded regulatory requirements for storm water permitting. This expansion, known as Phase II of the National Pollution Discharge Elimination System (NPDES), requires urbanized areas with fewer than 100,000 residents to implement programs and practices to control storm water discharges that may cause environmental degradation. Within the state of Texas, this authority to develop, implement, and enforce the General Permit has been transferred from the EPA to the Texas Commission on Environmental Quality (TCEQ). The Texas Pollution Discharge Elimination System (TPDES) branch of the TCEQ will handle the general storm water permitting.

As required for coverage under the TPDES General Permit for Storm Water from Small Municipal Separate Storm Sewer Systems (MS4s) No. TXR040000 dated August 13, 2007, the City of Saginaw developed a Storm Water Management Program (SWMP). The SWMP was created to include a listing of detailed Best Management Practices (BMPs) that was implemented by the City over the five (5) year permit term (2008-2013). The BMPs implemented in the previous permit cycle (2008 – 2013) will continue to be implemented during the next permit cycle which began on December 13, 2013 and expires December 13, 2018. The BMPs selected to consists of the City's SWMP are performed in order to achieve the regulatory standard of reducing pollutants in the City's storm water to the "maximum extent practicable" (MEP). Measurable goals and an implementation schedule were outlined for each BMP based on their ability to reduce storm water pollution impacts. Existing storm water BMPs in action, requirements by the TPDES General Permit, budgetary requirements of each goal, and the current City staff capacity were all considerations in selecting the BMPs, measurable goals and the implementation schedule. Effectiveness of the selected BMPs and success in achieving the selected measurable goals will be reviewed annually. The City will continue to have the ability to change and/or select additional BMPs to increase the effectiveness of the program or ease the necessary budgetary constraints, as long as the General Permits requirements are being met.



2.0 TPDES General Permit Requirements

In December of 1999, the Environmental Protection Agency (EPA), through the National Pollution Discharge Elimination System (NPDES), introduced their Storm Water Phase II regulations to regulate small municipal storm water sewer systems (MS4s). These regulations took effect on March 10, 2003 in all designated small MS4s and expired in 2008. However, authority for developing the Storm Water Phase II regulations in the State of Texas was transferred to the Texas Commission on Environmental Quality. The TCEQ has developed their General Permit through the Texas Pollutant Discharge Elimination System (TPDES). This is the second issuance of the general permit. The General Permit issued on December 13, 2013 is located in Appendix A.

The TCEQ General Permit outlines six (6) Minimum Control Measures (MCMs). The MCMs are as follows:

- Public Education, Outreach and Involvement on Storm Water Impacts
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development and Redevelopment
- Pollution Prevention / Good Housekeeping for Municipal Operations
- Authorization for Municipal Construction Activities (Optional)

Best Management Practices (BMPs) with detailed measurable goals shall be selected to meet each of the MCMs. The MCMs, selected BMPS, and selected measurable goals, along with an implementation schedule for each, comprise the City's Storm Water Management Program (SWMP). According to the TPDES General Permit:

“The storm water management program must be developed to prevent pollution in storm water to the maximum extent practicable [and] effectively prohibit illicit discharges to the system.”

The following pages include an exhibit detailing the make-up of the City's SWMP.

3.0 Storm Water Management Plan Development Process

The City of Saginaw retained Kimley-Horn and Associates, Inc. (KHA) to provide consulting services regarding the Phase II regulations and to develop the City's 2013-2018 SWMP.



4.0 Best Management Practices (BMPs) for each Minimum Control Measure

The City of Saginaw has the flexibility to determine the BMPs and measurable goals, for each minimum control measure, that are most appropriate for the City of Saginaw's storm drainage system. The City has determined what benefits the storm water management program should achieve. Improving the receiving water, reduced flooding, improved citizen awareness and support, and improved access to financial resources are examples of the benefits that could be achieved along with obtaining regulatory compliance. Each BMP has been evaluated using appropriate, local criteria, including:

- How much will it cost? Who will bear the costs? How acceptable are costs likely to be affected stakeholders?
- What minimum control measures will this program element address?
- What is the likelihood of success (both technically and socio-politically) given local conditions?
- How easy or difficult will implementation be?
- Do we have the needed expertise, authority, and control?
- Is this alternative compatible with community values?
- Is there potential for cooperation with other agencies?
- What are the potential "unintended consequences" (environmental and otherwise)?

5.0 Evaluation Process of Measurable Goal Achievement

The City's Environmental Specialist, Matt Regan, will be responsible for evaluating the selected BMPs and measurable goals for the SWMP on an annual basis. Each measurable goal and BMP implemented will be tracked and documented throughout the year, as appropriate. Each BMPs success or failure will be evaluated and the overall effectiveness of the SWMP will be assessed. Based on the evaluation of the existing SWMP, the City staff may choose to alter the BMPs or measurable goals to be implemented the following year. This process will occur annually.



6.0 Enforcement of the Storm Water Management Program

The City of Saginaw has allocated time and resources for the enforcement of the requirements set forth in the City's SWMP. The City has adopted appropriate ordinances to enforce the SWMP program. The City will need to inspect the project sites (municipal and private) before, during, and after construction for compliance with the guidelines set forth in the SWMP. The City regulations, at a minimum, should reflect the TPDES General Permit regulations.

Construction projects with a disturbed area greater than 1 acre will be required to develop a Storm Water Pollution Prevention Plan (SWPPP) to be kept onsite and a Construction Site Notice to be sent to the City. This will serve as a formal notification to the City regarding the start of construction, the location of the SWPPP, and a commitment that the contractor is going to take the necessary precautions to limit the amount of site erosion and storm water pollution. As a BMP in the City's SWMP, the City will need to inspect the construction sites for compliance with the SWPPP and for compliance with City regulations. If a site is determined non-compliant by the City, the City will need to remedy the situation. If a site is determined non-compliant by the TCEQ and the City has met the General Permit regulations, the TCEQ will be responsible for enforcement and penalties and/or fines.

7.0 Additional Entities also Participating in the City's SWMP

Due to the relative size of the staff and budget of the City of Saginaw, implementation of portions of the City's SWMP will rely upon activities to be performed or previously performed by the North Central Texas Council of Governments (NCTCOG), and/or the EPA. Information regarding the type of assistance provided by these additional entities has been provided in the descriptions for the BMPs for each MCM in Appendix C.

8.0 Non-Storm Water Discharges

As required by the TPDES General Permit Part II.B., the City of Saginaw has assessed the following non-storm water discharges in order to determine whether they are known to be significant contributors of pollutants within the City's storm water system. There is no knowledge of adverse impacts to the City's storm water quality from any of these discharges.

- (a) water line flushing;
- (b) runoff from return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
- (c) discharges from potable water sources;
- (d) diverted stream flows;
- (e) rising ground waters and springs;



- (f) uncontaminated ground water infiltration;
- (g) uncontaminated pumped ground water;
- (h) foundation and footing drains;
- (i) air conditioning condensate;
- (j) water from crawl space pumps;
- (k) individual residential vehicle washing;
- (l) flows from wetlands and riparian areas;
- (m) dechlorinated swimming pool discharges;
- (n) pavement and exterior building wash water conducted without the use of detergents or other chemicals; and
- (o) discharges or flows from fire fighting activities.

9.0 City of Saginaw's Storm Water Management Program

The following pages list descriptions for the selected BMPs, measurable goals, and an implementation schedule for six (6) of the Minimum Control Measures as required by the TPDES General Permit. Please refer to Appendix A for the actual TPDES General Permit text.

Please note the City does not want to implement the 6th MCM.

10.0 City of Saginaw's Authorization for Municipal Construction Activities

The City will not implement this MCM (6th) for this permit year.



APPENDIX

Appendix A
TPDES General Permit TXR040000

Appendix B
Notice of Intent (NOI) for Storm Water Discharges
Associated with Construction Activity

Appendix C
Detailed Descriptions of BMPs Selected
by the City of Saginaw

Appendix D
City of Saginaw BMP Implementation Schedule

Appendix E
City of Saginaw and other Storm Water Contacts



Appendix A
TPDES General Permit TXR040000



Appendix B
Notice of Intent (NOI) for Storm Water Discharges
Associated with Construction Activity



Appendix C
Detailed Descriptions of BMPs Selected
by the City of Saginaw



BMP 1-A:

Storm Drain Marking

Minimum Control Measure(s) Addressed:

Public Education, Outreach and Involvement

BMP Description:

Obtain assistance to epoxy a previously developed Storm Drain disk to each of the storm drains throughout the City. These markers advise against storm water pollution. The City may use volunteer groups to complete this BMP.

Supplies / Equipment / Personnel Needs:

Storm drain discs and adhesive.

Source of More Information:

<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=15>

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year1-Year 5: Continue to identify existing unmarked inlets. Require new development to mark new inlets.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Public Education Program Required/BMP Suggested

Estimated Cost to Implement BMP:

Costs will depend on the method of stenciling chosen. Typically, \$10-15 per stencil plus paint. If markers are affixed to inlet, the cost ranges from \$1 to \$7 each plus glue. Shipping not included.



BMP 1-B:

Storm Water Quality, Illegal Dumping, and Erosion Control Educational Brochures

Minimum Control Measure(s) Addressed:

Public Education, Outreach and Involvement; Illicit Discharge Detection and Elimination

BMP Description:

The NCTCOG, and the TCEQ have previously developed brochures explaining the effects of pollution in regards to Storm Water Quality. These government entities have stated that adjacent cities may use the existing brochures as long as their name and address remain on the brochure. The City will obtain a copy of the desired brochures, have them reprinted, and distribute the brochures in the following ways:

- Include the brochures in with each water bill,
- Maintain a supply of brochures for the public at the City government buildings and the City Library (if applicable), and
- Maintain an ample supply of brochures at hotels / motels within the City

Source of More Information:

<http://cfpub.epa.gov/npdes/stormwatermonth.cfm>

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-Year 5: Obtain brochures. Distribute to public facilities. Count the number of brochures before and after distribution.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Public Education Program Required/BMP Suggested Suggested

Estimated Cost to Implement BMP:

Costs will involve reprinting of brochures and continue paying NCTCOG yearly fee (if NCTCOG material is used).



BMP 1-C:

SmartScape™ Brochure Distribution

Minimum Control Measure(s) Addressed:

Public Education, Outreach and Involvement
Post-Construction Storm Water Management

BMP Description:

The NCTCOG has developed a brochure that advises the reader on aesthetically-pleasing, environmentally-friendly landscaping that will reduce residential lot erosion. The brochure may be distributed once a year, and may be in conjunction with a City-designated “SmartScape™ Month”. The brochures will need to be distributed in at least one of the following ways:

- Include the brochures in with each water bill,
- Maintain a supply of brochures for the public at the City government buildings and the City Library (if applicable), and
- Maintain an ample supply of brochures at hotels / motels within the City

Source of More Information:

<http://www.nctcog.org/envir/SEEclean/stormwater/pubs/brochures/NEW-smartscape-handout-march06.pdf>

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1 through 5 – Obtain a copy of the brochure and distribute to public places. Count the number of brochures before and after distribution.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Public Education Program Required/BMP Suggested

Estimated Cost to Implement BMP:

Costs will involve reprinting of brochures and continue paying NCTCOG yearly fee (if NCTCOG materials are used).



BMP 1-D:

Present Storm Water Information in Public Setting

Minimum Control Measure(s) Addressed:

Public Education, Outreach, and Involvement

BMP Description:

The TCEQ has previously developed informative posters regarding storm water pollution and storm water regulations. The City may obtain a copy of these posters to post within city government buildings and/or in public places. The posters will be periodically updated depending on available materials.

Source of More Information:

<http://cfpub.epa.gov/npdes/stormwatermonth.cfm>

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1 through 5 – Obtain a copy of previously developed posters by the TCEQ or other organization or agency. Reprint and display in any or all of the above mentioned locations. Remove and replace poster as necessary.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Public Education Program Required/BMP Suggested

Estimated Cost to Implement BMP:

Costs will involve purchasing (if fees apply) and reprinting posters.



BMP 1-E:

Storm Water Insert in Water Bill

Minimum Control Measure(s) Addressed:

Public Education and Outreach

BMP Description:

The City currently distributes a monthly water bill to all residents and businesses within the City and the City's ETJ. The City will add a small column or "advertisement" regarding storm water pollution and related issues in the bill, or include one of the informational brochures. The City will also make available the storm water inserts to the General Public at the City Library and City offices. Although utility bills are distributed each month, the storm water inserts will **only be placed in the bills once a year.**

Suggested Measurable Goal and Timeframe for Progress and Completion:

Years 1 through 5 – The City will count the number of inserts sent out to various people.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Public Education Program Required/BMP Suggested

Estimated Cost to Implement BMP:

Since the City currently sends out the bill to water users, costs will be minimal and will include the limited amount of time necessary to write the article or create the "advertisement."



BMP 1-F:

Establish a Link on the City's website for "Storm Drain Information"

Minimum Control Measure(s) Addressed:

Public Education, Outreach and Involvement
Illicit Discharge Detection and Elimination
Post-Construction Storm Water Management

BMP Description:

The City will continue to maintain a website with a stormwater page. The page will allow citizens to report illegal dumping. The link will also provide viewers with storm drain educational information. The website will allow citizens to provide feedback and input on the stormwater program.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-5: Continue to manage the website and post stormwater related information.

Responsible Staff Person: IS Department Head /Environmental Specialist

BMP Required / Suggested by TCEQ: Public Education, Outreach and Involvement, Illicit Discharge, Post Construction Monitoring Required/BMP Suggested

Estimated Cost to Implement BMP:

Costs will involve any costs associated with the time and effort to update the website and answer citizens' questions and complaints through the website's illicit discharge reporting phone number.



BMP 1-G:

Local Clean-Up

Minimum Control Measure(s) Addressed:

Public Education, Outreach, and Involvement

BMP Description:

Annually the City has a local Clean-Up program for residents and businesses to participate to clean up the City.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-5: Host local Clean-Up

Responsible Staff Person: Operations Superintendent/Building Inspector

BMP Required / Suggested by TCEQ: Public Involvement Required/BMP Suggested

Estimated Cost to Implement BMP:

Potential cost for advertisement.



BMP 2-A:

Storm Water Quality, Illegal Dumping, and Erosion Control Educational Brochures

Minimum Control Measure(s) Addressed:

Public Education, Outreach, and Involvement
Illicit Discharge Detection and Elimination

BMP Description:

See BMP 1-B for description and distribution practices for this BMP.



BMP 2-B:

Establish a Link on the City's website for "Storm Drain Information"

Minimum Control Measure(s) Addressed:

Public Education, Outreach, and Involvement
Illicit Discharge Detection and Elimination
Post-Construction Storm Water Management

BMP Description:

See BMP 1-F for description and distribution practices for this BMP.



BMP 2-C:

Mapping of Storm Sewer System

Minimum Control Measure(s) Addressed:

Illicit Discharge Detection and Elimination

BMP Description:

The City will continue to map the storm drain systems throughout the City. The city currently has a map of the major streams/creeks.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-5: The City will continue to map new storm drain systems and major outfalls.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ:

Mapping locations of storm drains that discharge into the waters of the U.S. are required. Additional mapping of storm drains, inlets, and manholes are suggested.

Estimated Cost to Implement BMP:

Costs of mapping of municipally-owned storm sewer system will be negotiated at a later date.



BMP 2-D:

Review of Site Plan submittal and SWPPP prior to construction.

Minimum Control Measure(s) Addressed:

Illicit Discharge Detection and Elimination
Post-Construction Storm Water Management

BMP Description:

The City has contacted an outside consultant to review the Site Plan for proposed developments. With this storm water management program, the City will also require a review of the Site Plan, Erosion Control Plans, and SWPPP paying close attention to potential causes of runoff and anticipate illicit discharge due to increased storm water regulations.

Part of the review will be to ensure the City's current detention pond ordinance is being implemented in the design. The detention ponds will serve as a post-construction BMP for the City.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-5– Increase submittal requirements to include the submission of Erosion Control Plans and an SWPPP with all construction plan sets. Reviewer will check discharges from site to prevent/prohibit illicit discharges. Also, require all sites to follow construction general permit in regards to allowable discharges and gaining authorization to discharge storm water.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ:

Required

Estimated Cost to Implement BMP:

Costs of on-going Development Review may increase due to review of the Erosion Control Plans and the SWPPP.



BMP 2-E:

Implement Ordinance and Enforcement Procedures for Eliminating Sources of Illicit Discharges

****Develop procedures for tracing and managing illicit discharges**

Procedures to inspect complaints

Minimum Control Measure(s) Addressed:

Illicit Discharge Detection and Elimination

BMP Description:

An ordinance was developed during the previous permit cycle. The City will continue to implement the ordinance.

In addition, procedures will be developed to properly record and follow up/inspect any complaints.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-5: Continue to implement the ordinance.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ:

Required

Estimated Cost to Implement BMP:

No cost.



BMP 2-F:

Training of City Employees – Illicit Discharges (if specific training is available)

Minimum Control Measure(s) Addressed:

Illicit Discharge Detection and Elimination

BMP Description:

Send one staff member to NCTCOG training, 3rd party training, or on line training.

Comments:

The training by the NCTCOG deals primarily with looking at flows coming off of an industrial site. However, this training will teach valuable information in regards to finding illicit discharges and what to do about them.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-5: Each year send one employee to training.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ:

Required

Estimated Cost to Implement BMP:

Costs approximately \$130 to \$150 per training session per person (if NCTCOG training is selected) plus City man-hours set aside.



BMP 3-A:

Training of City Employees – BMP Inspections (if specific training is available)

Minimum Control Measure(s) Addressed:

Construction Site Storm Water Runoff Control

BMP Description:

Send at least one inspector to one of the two inspector trainings performed by NCTCOG in regards to inspection of construction BMPs. The training will consist of assisting the cities with ideas and initiatives to more effectively inspect required BMPs during construction.

Comments:

NCTCOG staff will coordinate with NCTCOG's Regional Training Center to offer, market, and track participation in the inspector training course. NCTCOG staff will ensure that the curriculum is kept up-to-date by making any necessary revisions and can explore customization of the curriculum for other target audiences. NCTCOG staff will seek assistance from participants in monitoring the content, structure, and effectiveness of the training program as well as cooperatively identifying and evaluating other available training resources.

Source of More Information:

http://www.nctcog.org/cs/rtc/admin_services.asp

Suggested Measurable Goal and Timeframe for Progress and Completion:

Years 1 through 5 – Send at least one (1) inspector for training with NCTCOG each year. Training is available two (2) times per year. The number of individuals trained may be increased at any time.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Site inspection and enforcement of construction activities is required/BMP is suggested

Estimated Cost to Implement BMP:

Costs approximately \$130 to \$150 per NCTCOG training session per person plus City man-hours set aside. Cost for training provided by city staff is minimal.



BMP 3-B:

Continue to implement the Erosion and Sediment Control Ordinance

Minimum Control Measure(s) Addressed:

Construction Site Storm Water Runoff Control

BMP Description:

Continue to enforce the erosion control ordinance

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1 –5: Continue to implement the erosion control ordinance.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ:

Required

Estimated Cost to Implement BMP:

No cost.



BMP 3-C:

Continue to Inspect Construction Sites

Minimum Control Measure(s) Addressed:

Construction Site Storm Water Runoff Control

BMP Description:

Establish a schedule with a frequency for inspecting construction sites, not just for construction purposes, but also for erosion control compliance.

Comments:

The schedule and frequency of inspections will continually vary as projects start and finish. However, the City will need to have a general inspection time frame, whether it is every other day, weekly or biweekly. More visits should be given to the larger construction sites or the sites that will have the most impact on water quality and the environment. Record keeping of visits is also very important.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1 – 5: Continue to inspect construction sites.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Site inspection and enforcement of construction activities is required/BMP is suggested to assist in record keeping and annual reporting activities

Estimated Cost to Implement BMP:

No cost.



BMP 3-D:

Continue to use the Standard Inspection Form

Minimum Control Measure(s) Addressed:

Construction Site Storm Water Runoff Control
Post-Construction Storm Water Management

BMP Description:

Continue to use the standard inspection form that was developed during the previous permit year.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-5: Continue to use the standard inspection form, keep for annual reporting purposes

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Site inspection and enforcement of construction activities is required/BMP is suggested to assist in record keeping and annual reporting activities

Estimated Cost to Implement BMP:

No cost.



BMP 4-A:

SmartScape™ Brochure Distribution

Minimum Control Measure(s) Addressed:

Public Education, Outreach and Involvement
Post-Construction Storm Water Management

BMP Description:

See BMP 1-C for description and distribution practices for this BMP.



BMP 4-B:

Establish a Link on the City's website for "Storm Drain Information"

Minimum Control Measure(s) Addressed:

Public Involvement / Participation
Illicit Discharge Detection and Elimination
Post-Construction Storm Water Management

BMP Description:

See BMP 1-F for description of this BMP.



BMP 4-C:

Review of Site Plan submittal and SWPPP prior to construction.

Minimum Control Measure(s) Addressed:

Illicit Discharge Detection and Elimination
Post-Construction Storm Water Management

BMP Description:

See BMP 2-D for description of this BMP.



BMP 5-A:

Training of City Employees – Municipal Pollution Prevention

Minimum Control Measure(s) Addressed:

Pollution Prevention / Good Housekeeping of Municipal Operations

BMP Description:

If training is available, the City will send at least one inspector to trainings performed by NCTCOG in regards to municipal pollution prevention. The training will consist of assisting the cities with ideas and initiatives to more effectively prevent pollution during municipal operations.

The City will provide internal training to appropriate City staff. Information, presentation information and training material will be obtained from local, state, and federal websites.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Years 1-5: send one staff member to training each year or use online training

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ:

Required

Estimated Cost to Implement BMP:

Costs approximately \$130-\$150 per training session per person (if NCTCOG training is used) plus City man-hours set aside. Training costs provided by city staff is minimal.



BMP 5-B:

Develop Maintenance Schedule for Municipal Inspections

Minimum Control Measure(s) Addressed:

Pollution Prevention / Good Housekeeping of Municipal Operations

BMP Description:

Establish a schedule of fleet inspection, machinery inspection, cleaning of catch basins and municipally-owned inlets, and cleaning of the litter in the maintenance yard, park areas, and streets.

Comments:

Develop a schedule to track the frequency of fleet and machinery inspections for leaks, the number of catch basins cleaned on a certain schedule, the inspection and cleaning of grease traps and oil / water separators. Some of these schedules already exist which if they do, the City will gather the records for annual reporting purposes.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-Year 5: Keep track of the maintenance activities and submit with the annual report.

Responsible Staff Person: Operations Superintendent/Chief Mechanic

BMP Required / Suggested by TCEQ: Structural control maintenance is required/BMP is suggested

Estimated Cost to Implement BMP:

Costs include time for making the general list and creating the schedule.



BMP 5-C:

Develop Maintenance Schedule for items discussed in MCM- Pollution Prevention / Good Housekeeping of Municipal Operations

Identify Pollutant of Concern and develop measures to prevent

Minimum Control Measure(s) Addressed:

Pollution Prevention / Good Housekeeping of Municipal Operations

BMP Description:

Establish an inspection and maintenance schedule for the municipally-responsible structural control devices.

Comments:

The inspection and maintenance schedule will include addresses the following areas:

1. parks and open space
2. streets and roads
3. fleet and building maintenance
4. storm water systems
5. new construction
6. parking lots
7. vehicle and equipment maintenance

The City currently performs general cleanup and maintenance in these seven areas. The City will continue to perform maintenance and evaluate the current maintenance program. The City will observe the condition of all of the facilities in each of these particular areas. The City will then develop a schedule to ensure the facilities are being appropriately maintained. Documentation will be maintained for annual reporting purposes.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-Year 5: Continue to implement the maintenance program and keep track of the activities for annual reporting purposes.

Responsible Staff Person: Operations Superintendent/Chief Mechanic

BMP Required / Suggested by TCEQ: Implementing Good House keeping procedures to reduce pollutants is required/BMP is suggested

Estimated Cost to Implement BMP:

Costs include time for making the general list and creating the schedule.



BMP 5-D:

Develop Proper Disposal Procedures for Waste

Minimum Control Measure(s) Addressed:

Pollution Prevention / Good Housekeeping of Municipal Operations

BMP Description:

Establish procedures for picking up spills (fuel, oil, chemical) and disposing of waste (floatables, accumulated sediments, dredge soils).

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-Year 5: Continue to implement the proper disposal procedures and keep track of the procedures for annual reporting purposes.

Responsible Staff Person: Operations Superintendent

BMP Required / Suggested by TCEQ: Developing procedures for waste disposal is Required.

Estimated Cost to Implement BMP:

Costs include time for developing procedures and training employees.



BMP 5-E:

Develop Recycling Program for Municipal Operations

Minimum Control Measure(s) Addressed:

Public Education, Outreach and Involvement

Pollution Prevention / Good Housekeeping of Municipal Operations

BMP Description:

Establish schedule, procedures, and contract for collecting and discarding of recyclables. It is possible to work with adjacent cities to accomplish these tasks.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-5: Continue to participate in the recycling program

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Implementing Good House keeping procedures to reduce pollutants is required/BMP is suggested

Estimated Cost to Implement BMP:

Costs include time for researching ideas and paying for recycling.

If the program is offered to the City, costs will include contracting a company to pickup and dispose of the recyclables.



BMP 5-F:

Parking Lot and Street Cleaning

Minimum Control Measure(s) Addressed:

Pollution Prevention / Good Housekeeping of Municipal Operations

BMP Description:

The City will clean municipally owned parking lots and streets.

Comments:

The City currently cleans and sweep parking lots and streets with street sweeper.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-Year 5 Continue to sweep and clean parking lots and streets

Responsible Staff Person: Operations Superintendent

BMP Required / Suggested by TCEQ: Implementing Good House keeping procedures to reduce pollutants in parking lots and streets are required/BMP is suggested

Estimated Cost to Implement BMP:

Costs include the time for City staff to clean the facilities.



BMP 5-G:

Storm Drain Cleaning

Minimum Control Measure(s) Addressed:

Public Education, Outreach and Involvement

Pollution Prevention / Good Housekeeping of Municipal Operations

BMP Description:

The City will clean municipally owned storm drain inlets, manholes, and culverts.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1- Year 5: Continue the storm drain cleaning program.

Responsible Staff Person: Environmental Specialist

BMP Required / Suggested by TCEQ: Implementing Good House keeping procedures to reduce pollutants in the storm drain system are required/BMP is suggested

Estimated Cost to Implement BMP:

Costs include the time for City staff to clean the facilities.



BMP 5-H:

Municipal Vehicle and Equipment Washing and Maintenance

Minimum Control Measure(s) Addressed:

Pollution Prevention / Good Housekeeping of Municipal Operations
Public Education, Outreach and Involvement
Illicit Discharge Detection and Elimination

BMP Description:

The City will evaluate the current methods used to wash and maintain City owned equipment, machinery, and motor vehicles. The City will provide training to appropriate staff to communicate and educate the importance of storm drain pollution and illicit discharges. City staff will be required to document BMP techniques when used for reporting purposes.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Year 1-Year 5 Provide training to appropriate City staff to educate them on BMPs for washing, servicing, and maintaining machinery, equipment, and motor vehicles.

Responsible Staff Person: Chief Mechanic/Operations Superintendent

BMP Required / Suggested by TCEQ: Implementing Good House keeping procedures to reduce pollutants regarding vehicle and equipment maintenance is required/BMP is suggested

Estimated Cost to Implement BMP:

Costs include the time to train City staff.

BMP 5:I

Prepare an Inventory of Permittee-Owned Facilities and Control Inventory

Minimum Control Measure(s) Addressed:

Pollution Prevention / Good Housekeeping of Municipal Operations

BMP Description:

The permit requires the City to develop and maintain an inventory of facilities and stormwater controls.

Suggested Measurable Goal and Timeframe for Progress and Completion:

Years 4 through 5 – develop an inventory list and update it in Year 5

Responsible Staff Person: Public Works Director

BMP Required / Suggested by TCEQ:

Required

Estimated Cost to Implement BMP: No Cost



Appendix D
City of Saginaw BMP Implementation Schedule



Appendix E
City of Saginaw and other Storm Water Contacts



Storm Water Contacts

CITY OF SAGINAW

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