

# **STORMWATER MANAGEMENT PROGRAM**

for the Town of



**Developed to Comply with the Requirements of the  
Texas Pollutant Discharge Elimination System**

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*Prepared by*



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# I. INTRODUCTION

## A. Regulatory Requirements

Polluted stormwater runoff from urbanized areas is a major cause of impairment to our Nation's waterways. Efforts to improve water quality came with the passage of the Clean Water Act (CWA) in 1972. Under the authority of the CWA, the Environmental Protection Agency (EPA) developed a storm water permitting program with the goal of significantly reducing the pollution source.

Phase I of the EPA's stormwater program was promulgated in 1990. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address stormwater runoff from:

- (1) "medium and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater,
- (2) construction activity disturbing 5-acres of land or greater, and
- (3) ten categories of industrial activity.

According to 40 CFR 122.26(b)(8), "**municipal separate storm sewer**" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States.
- (ii) Designed or used for collecting or conveying storm water;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2."

The Stormwater Phase II Final Rule was the next step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted storm water runoff.

An **urbanized area (UA)** is a densely settled core of census tracts and/or census blocks that have a population of at least 50,000, along with adjacent territory containing non-residential urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core. It is a calculation used by the Bureau of the Census to determine the geographic boundaries of the most heavily developed and dense

***See Appendix A – Urbanized Area Map***

The Town of Shady Shores has been designated by the EPA as having "urbanized areas" and therefore must make application to discharge stormwater to waters of the United States. Specifically, the Town of Shady Shores is defined as a Level 1 small MS4 since the Town as operator serves a population of less than 10,000 within an urbanized area.

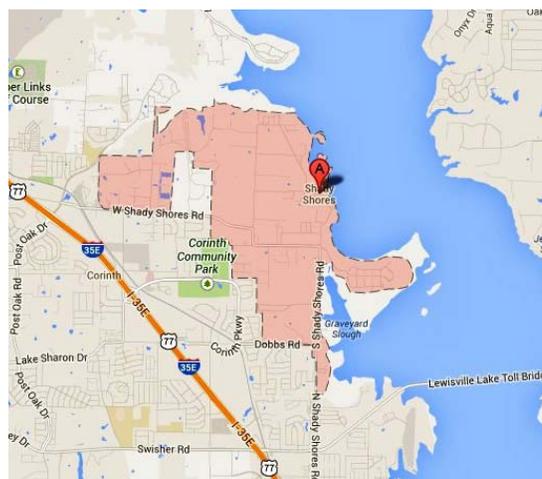
The Texas Commission on Environmental Quality (TCEQ) was delegated the responsibility by the EPA for implementing the regulations and does so through its Texas Pollutant Discharge Elimination System (TPDES) program. The TCEQ first issued the TPDES General Permit No. TXR040000 on August 13, 2007 to allow small MS4s located in the State of Texas to discharge directly to surface water in the State. Since that time the TCEQ has amended and renewed its general permit which became effective December 13, 2013 and will be in effect for 5-years from that date. Application for coverage under this permit includes the submittal of a Notice of Intent (NOI) and preparation of a Stormwater Management Program (SWMP) along with annual reporting requirements. The objective of the Shady Shores SWMP is to reduce the discharge of pollutants to the maximum extent practicable (MEP) and meet the requirements of the general permit.

## B. Town of Shady Shores General Information

The Town of Shady Shores is located in Denton County approximately 30 miles north of Dallas, Texas and approximately 10 miles south of Denton, Texas. See map to right courtesy of Google Maps.

The Town Hall is located at the intersection of Lake Shore Road, Cielo Drive, and Shady Shores Road.

Shady Shores is bounded by surrounding cities and Lewisville Lake. According to U.S. Census Bureau figures, the population of the Town of Shady Shores was 813 in 1980 with approximately 2.6 square miles of land area contained within the corporate limits. By 2000, the population had increased to 1,461 within a land area of 2.9 square miles. According to North Central Texas Council of Governments 2010 Population Estimates, the Town of Shady Shores has an estimated population of 2,612. The Town of Shady Shores has no commercially zoned areas.



The Lake Cities Municipal Utility Authority (LCMUA) was created in 1963 by the State of Texas as a water conservation and reclamation district. LCMUA serves Lake Dallas, Shady Shores, and Hickory Creek with water and wastewater services. LCMUA owns, installs, maintains and operates the wastewater collection system in the Town of Shady Shores. Therefore, LCMUA is responsible for the prevention and cleanup of sanitary sewer overflows from the MS4. The Town of Shady Shores and LCMUA have a long-standing contract addressing the authority, response, and applicability of activities pertaining to water and wastewater services provided within the Town limits.

The Town of Shady Shores stormwater drains to 4 major streams; PEC-1, LC-1, Lynchburg Creek and GS-1. These streams ultimately discharge to Lewisville Lake. Lewisville Lake is on the east side of the community. Lynchburg Creek, which flows from west to east through Corinth and Shady Shores, and into Lewisville Lake, has a drainage area of approximately 3.7 square miles at South Shady Shores Road. Stream LC-1 flows southeast through the Town of Shady Shores into Lynchburg Creek. The portion of this creek that is in the Town is approximately 1.8 stream miles long. This stream has a drainage area of approximately 1.3 square miles at its confluence with Lynchburg Creek. Stream PEC-1 flows from west to east into Pecan Creek. It is approximately 4.1 miles long, with a drainage area of approximately 4.1 square miles immediately upstream of its confluence with Pecan Creek below SCS Dam No. 16. Stream GS-1 has a drainage area of 0.61 square miles at Shady Shores Drive (inflow into Lewisville Lake).

Fire protection is provided by Lake Cities Fire Department. The Lake Cities Fire Department performs the cleanup of minor spills as a result of auto accidents within the town.

Police services are provided by the City of Corinth. Police vehicles are maintained by the City of Corinth.

Library services are provided through Lake Cities Library.

Building plan reviews and inspections are outsourced to independent contractors.

Trash collection is performed by contract services, currently Waste Management.

Public education is provided by both Denton ISD and Lake Dallas ISD.

The Town of Shady Shores does not have municipal operations or equipment other than an ATV operated by the Corinth Police Department in case of emergencies. This ATV is maintained by an independent contractor. All of the work done to the grounds surrounding the Town Hall, roads, ditches and culverts are provided by independent contractors that do not operate out of Town owned or operated facilities.

The Town of Shady Shores does not own or operate any facilities that are subject to industrial permitting requirements, including but not limited to landfills, wastewater treatment plants, vehicle maintenance facilities, airports, print shops and auto salvage yards as outlined under Part II.A of the TPDES Multi-Sector General Permit No. TXR050000. If the Town does own or operate such a facility in the future a copy of each facility's permit authorization will be added to this plan and communicated by way of annual reports. The Town of Shady Shores does not discharge surface water to an impaired water body (a water body identified as not meeting Texas Surface Water Quality Standards pursuant to the latest TCEQ and EPA approved CWA §303(d) list). See Appendix C – Regional 303d and Impaired Waters.

Hidden Valley Airpark is a private subdivision within the Town boundaries. One underground storage tank (UST) with a capacity of six thousand (6,000) gallons exists in this subdivision. The UST is owned and operated by Fuel 4 Fun which is owned by Hidden Valley Airpark Association. Fuel 4 Fun is responsible for all environmental and regulatory compliance and has a spill prevention plan in place (See Exhibit B).

No portion of Shady Shores is in Indian Country Lands.

## **II. PROGRAM RATIONALE**

### **A. Minimum Control Measure Requirements**

The TCEQ has specified the following six (6) required "minimum control measures" (MCM) for inclusion in a permittee's SWMP:

- A. Public Education, Outreach and Involvement
- B. Illicit Discharge Detection and Elimination (IDDE)
- C. Construction Site Stormwater Run-off Control
- D. Post-Construction Stormwater Management in New Development and Redevelopment
- E. Pollution Prevention and Good Housekeeping for Municipal Operations
- F. Industrial Stormwater Sources

The TCEQ has specified one (1) optional MCM, Authorization for Construction Activities where the Small MS4 is the Site Operator, and the Town has elected not to include this optional seventh MCM in this SWMP.

A description of MCMs with measurable goals, including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action for each MCM is to be included in the SWMP. The Town has identified numerous existing and supplemental best

management practices (BMPs) that will be used to satisfy the permit requirements which are discussed in Section IV, Minimum Control Measures.

## **B. Best Management Practice Selection Process**

To select BMPs to include in the Town's SWMP involved the following steps:

- Identifying existing BMPs used by the Town
- Assessing the effectiveness of the BMPs in meeting regulatory requirements
- Developing a comprehensive inventory of additional BMPs
- Evaluating all BMPs
- Selecting BMPs to satisfy MCM requirements

The comprehensive inventory of BMPs was developed using various BMP resources including:

- The North Central Texas Council of Governments' *A Menu of Management Plan Options for Small MS4s in North Central Texas*
- The EPA's *National Menu of Storm Water Best Management Practices*
- The Texas Commission on Environmental Quality and Texas State Soil and Water Conservation Board's *Texas Nonpoint Source Management Program (Chapter 6 Best Management Practices)*
- The Texas Commission on Environmental Quality's *Draft BMP Finder*, a supplement to the BMPs section of the Management Program

Each existing and inventoried BMP was considered and evaluated based on the following criteria:

- Which MCM requirements does the BMP satisfy?
- How does the BMP integrate with the Town's existing goals, operations, demographics, land uses, activities and vision?
- What is the anticipated effectiveness of the BMP?
- What is the estimated cost range to implement the BMP and does it fit within the Town's forecasted budgets?

## **C. Selection of Measurable Goals**

Measurable goals were developed to evaluate the success of the Town's SWMP toward reaching the goal of reducing pollutants and protecting water quality to the maximum extent practicable. Measurable goals were selected factoring in the following:

- Providing a baseline for future measurements
- Assessing the effectiveness and appropriateness of BMPs
- Achieving steady implementation
- Working within budgetary constraints
- Achievability

## **D. Implementation Schedule**

The General Permit stipulates that the SWMP include a schedule for the implementation of all SWMP requirements. Best management practices may be performed or phased into the Town's program over the five-year period of permit coverage such that there is complete implementation by the permit expiration date. As appropriate, the SWMP must include the months and years in which the Town will undertake required actions. Interim milestones and the frequency of the action throughout the permit term shall also be included.

The Town is dedicated to protecting the quality of its stormwater runoff and has developed and selected BMPs in the past which are still being practiced. Such activities, programs and methods will continue to be practiced throughout the Town. Opportunities for improvement of these BMPs along with implementation of additional BMPs shall take place over the permit term with the intent of continually improving the Town's stormwater quality to the maximum extent practical during that time.

## **E. Measurable Goals Evacuation Process**

Measurable goals for BMPs are effective in helping the Town administer a successful SWMP only if the goals are tracked and evaluated on a regular basis. As such, the Town will document the implementation of the selected BMPs and assess their effectiveness in achieving the measurable goals as appropriate during each permit year. To this end the responsible person selected to implement each BMP shall provide updates on implementation and progress towards meeting the annual measurable goals to the Town's Mayor.

## **III. ALLOWABLE NON-STORMWATER DISCHARGES**

Per Section C. Allowable Non-stormwater Discharges of TPDES General Permit TX040000, the following non-stormwater sources may be discharged from the Town as a small MS4 and are not required to be addressed in the Town's Illicit Discharge and Detection or other minimum control measures, unless they are determined by the Town or the TCEQ to be significant contributors of pollutants to the small MS4, or they are otherwise prohibited by the Town:

1. Water line flushing (excluding discharges of hyper-chlorinated water, unless the water is first de-chlorinated and discharges are not expected to adversely affect aquatic life);
2. Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
3. Discharges from potable water sources that do not violate Texas Surface Water Quality Standards;
4. Diverted stream flows;
5. Rising ground waters and springs;
6. Uncontaminated ground water infiltration;
7. Uncontaminated pumped ground water;
8. Foundation and footing drains;
9. Air conditioning condensation;
10. Water from crawl space pumps;
11. Individual residential vehicle washing;
12. Flows from wetlands and riparian habitats;
13. De-chlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
14. Street wash water excluding street sweeper waste water;
15. Discharges or flows from emergency firefighting activities (firefighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
16. Other allowable non-stormwater discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
17. Non-stormwater discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) TXR050000 or the TPDES Construction General Permit (CGP) TXR150000;
18. Discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
19. Other similar occasional incidental non-stormwater discharges such as spray park water, unless the TCEQ

develops permits or regulations addressing these discharges.

## **IV. MINIMUM CONTROL MEASURES**

### **A. Public Education, Outreach and Involvement**

#### **1.0 Regulatory Requirement**

##### (a) Public Education and Outreach

- (1) All permittees shall develop, implement, and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that storm water discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in storm water.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. The program must, at a minimum:

- a. Define the goals and objectives of the program based on high priority community-wide issues (for example, reduction of nitrogen in discharges from the small MS4, promoting previous techniques used in the small MS4, or improving the quality of discharges to the Edwards Aquifer);
  - b. Identify the target audience(s);
  - c. Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, and websites;
  - d. Determine cost effective and practical methods and procedures for distribution of materials.
- (2) Throughout the permit term, all permittees shall make the educational materials available to convey the program's message to the target audience(s) at least annually.
  - (3) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.
  - (4) MS4 operators may partner with other MS4 operators to maximize the program and cost effectiveness of the required outreach.

##### (b) Public Involvement

All permittees shall involve the public, and, at minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP, except that correctional facilities are not required to implement this portion of the MCM.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. At a minimum, all permittees shall:

- (1) If feasible, consider using public input (for example, the opportunity for public comment, or public

- meetings) in the implementation of the program;
- (2) If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer “Adopt-A-Highway” programs, and educational activities;
  - (3) Ensure the public can easily find information about the SWMP.

## 2.0 Current Programs

The Town of Shady Shores provides public education on stormwater issues to its residents, employees, visitors, businesses, contractors and general public by a variety of methods. Such information can be found on the Town’s website and through pamphlets and literature available in the Town Hall lobby, at Town Council meetings, and at community events such as the Town’s Christmas Celebration, community garage sales, the Halloween Hoot ‘n Holler chili cook-off, and clean-up events. The Town website includes a Stormwater Management drop down menu that includes links to its Stormwater Management Program, the Town’s community newsletter (Shady Shores News), Denton County’s Stormwater web page, the Town’s Community Events page, and links to EPA, NCTCOG and TCEQ websites, which provide additional information on stormwater management. Information concerning hazardous waste disposal opportunities through a partnership with Denton County Public Works and the Upper Trinity Regional Water District is also found on the Town’s website. On the website, residents can sign up to receive blast emails; news flashes; and Council, committee, and P&Z agendas. The Town uses these email blasts to communicate with its residents on a variety of issues, including stormwater, and these emails reach approximately two-thirds of the residents. The Town also posts to its community bulletin board the TCEQ’s quarterly pamphlet, “The Advocate”, which provides updates on rules and compliance tips for small businesses and local governments. At the Town Hall location a monument sign with changeable messages communicate public meetings, banners advertise community events.

The Town of Shady Shores provides Public Outreach and Involvement by means of active committees and community outreach events. The Town’s Community Events Committee and the Keep Shady Shores Beautiful Committee meet every other month to coordinate events that allow volunteers to contribute to clean up activities. Committee updates are presented at each monthly Town Council meeting. Recent 2014 community events include the Great American Clean-up held on May 3 and two trash pick-up events held on July 16 and August 13. The Town also works with the Army Corps of Engineers to promote non-litter campaigns around the Big Sandy boat ramp.

## 3.0 Selected BMPs

Public Education, Outreach and Involvement				
BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
BMP 1	Stormwater Education Materials			
	Distribute brochures, fact sheets and other educational materials from federal, state and local agencies to residents.	Town Secretary	Identify budget requirements.	1-5
			Research and collect additional educational materials.	1
			Develop an outline of the information to be communicated over a 5-year period.	2
			Provide current materials at Town Hall, Town Council meetings and community events.	1 -5

**Public Education, Outreach and Involvement**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
			Provide new materials at Town Hall, Town Council meetings and community events.	2-5
<b>BMP 2</b>	<b>Website</b>			
	Provide and maintain accessible stormwater information on the Town's website.	Town Secretary	Identify budget requirements	1-5
			Revise and update the stormwater management page on the Town's website as needed.	1-5
			Solicit input and feedback from the public for storm water quality issues and opportunities in the Town.	2-5
<b>BMP 3</b>	<b>Keep Shady Shores Beautiful Program</b>			
	Promote a variety of pollution prevention, cleanup and education programs/activities through the Keep Shady Shores Beautiful Committee.	Town Council	Identify budget requirements.	1-5
			Continue to support the Town's existing volunteer program.	1-5
			Schedule and conduct every other month committee meetings.	1-5
			Schedule and conduct at least 2 regular clean-up events.	1-5
			Provide committee updates at Town Council meetings.	1-5
			Evaluate opportunities, public receptiveness and budgetary requirements for additional trash cleanup and other events.	1-5
<b>BMP 4</b>	<b>Community Events Committee</b>			
	Promote a variety of stormwater education programs/activities through the Community Events Committee.	Town Council	Identify budget requirements.	1-5
			Continue to support the Town's existing volunteer program.	1-5
			Schedule and conduct every other month committee meetings.	1-5
			Schedule and conduct at least 2 community outreach events at which stormwater management issues area addressed or information provided.	1-5
			Provide committee updates at Town Council meetings.	1-5
			Develop a volunteer program and/or event for inspecting and clearing of debris from stormwater ditches and culverts.	3

**Public Education, Outreach and Involvement**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
			Conduct at least one (1) annual stormwater ditch and culvert cleanup event.	3-5
			Evaluate opportunities, public receptiveness and budgetary requirements for additional trash cleanup and other events.	1-5
<b>BMP 5</b>	<b>Household Hazardous Waste Program</b>			
	Provide an opportunity for residents to safely dispose of common residential household pollutants such as pesticides, cleaning chemicals, automotive products and pool chemicals. Educate the community about the hazards associated with improper disposal of household hazardous wastes and the negative effects on the environment from illicit discharges.	Town Council	Identify budget requirements.	1-5
			Continue the recycling program provided by Waste Management for curbside pickup of household paints, chemicals and medications.	1-5
			Work to continue partnership with Denton County Public Works and Upper Trinity Regional Water District for additional household hazardous waste disposal opportunities for the community.	1-5
			Research and collect educational materials.	3
			Provide educational information to the public at Town Hall, Town Council meetings and community events.	4-5
<b>BMP 6</b>	<b>Stormwater Reporting Line</b>			
	Establish a stormwater reporting line for the public to report illegal dumping and other stormwater control issues to the appropriate personnel for proper response.	Town Council	Identify budget requirements	3-5
			Develop a plan for the stormwater reporting line program	3
			Identify procedures for receiving calls, routing calls to appropriate personnel for proper response and documenting subject of call for future analysis.	3
			Establish the stormwater reporting line and educate the public about its availability.	4
			Document each call and dispatch to appropriate department for proper response, as necessary.	4-5
			Conduct annual review of calls to identify trends, the need for reporting line improvements, and issues requiring	4-5

Public Education, Outreach and Involvement				
BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
			additional education and/or enforcement action to protect storm water quality.	
<b>BMP 7</b>	<b>Public Meetings</b>			
	Promote public meetings at which the Town informs the community about the Stormwater Management Program and invites the community to participate in the development and implementation process.	Town Council	Invite the public to a Town Council meeting to learn more about the SWMP and invite input.	1-5
			Provide an item on at least one (1) Town Council agenda per year to inform the community on the SWMP and provide an opportunity or feedback and input.	2-5

## B. Illicit Discharge Detection and Elimination (IDDE)

### 1.0 Regulatory Requirement

#### (a) Program Development

- (1) All permittees shall develop, implement and enforce a program to detect, investigate, and eliminate illicit discharges into the small MS4. The program must include a plan to detect and address non-stormwater discharges, including illegal dumping to the MS4 system.

Existing permittees must assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1(c).

The Illicit Discharge Detection and Elimination (IDDE) program must include the following:

- a. An up-to-date MS4 map (see Part III.B.2.(c)(1));
  - b. Methods for informing and training MS4 field staff (See Part III.B.2.(c)(2));
  - c. Procedures for tracing the source of an illicit discharge (see Part III. B.2.(c)(5));
  - d. Procedures for removing the source of the illicit discharge (see Part III.B.2.(c)(5));
  - e. For Level 2, 3 and 4 small MS4s, if applicable, procedures to prevent and correct any leaking on-site sewage disposal systems that discharge into the small MS4;
  - f. For Level 4 small MS4s, procedures for identifying priority areas within the small MS4 likely to have illicit discharges, and a list of all such areas identified in the small MS4 (See Part III.B.2.(g)(1));
  - g. For Level 4 small MS4s, field screening to detect illicit discharges (See Part III.B.2.(g)(2)).
- (2) For non-traditional small MS4s, if illicit connections or illicit discharges are observed related to another operator's MS4, the permittee shall notify the other MS4 operator within 48 hours of discovery. If notification to the other MS4 operator is not practicable, then the permittee shall notify the appropriate TCEQ regional office of the possible illicit connection.

- (3) If another MS4 operator notifies the permittee of an illegal connection or illicit discharge to the small MS4, then the permittee shall follow the requirements specified in Part III.B.2.(c)(3).
- (4) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.

(b) Allowable Non-Stormwater Discharges

Non-stormwater flows listed in Part II.C do not need to be considered by the permittee as an illicit discharge requiring elimination unless the permittee or the TCEQ identifies the flow as a significant source of pollutants to the small MS4.

(c) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.2(c)(1)-(6)

(1) MS4 mapping

All permittees shall maintain an up-to-date MS4 map, which must be located on site and available for review by the TCEQ. The MS4 map must show at a minimum the following information:

- a. The location of all small MS4 outfalls that are operated by the permittee and that discharge into waters of the U.S;
- b. The location and name of all surface waters receiving discharges from the small MS4 outfalls;
- c. Priority areas identified under Part III.B.2.(e)(1) if applicable.

(2) Education and Training

All permittees shall implement a method for informing or training all the permittee's field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained on site and made available for review by the TCEQ.

(3) Public Reporting of Illicit Discharges and Spills

To the extent feasible, all permittees shall publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the small MS4. The permittee shall provide a central contact point to receive reports; for example by including a phone number for complaints and spill reporting.

(4) All permittees shall develop and maintain on site procedures for responding to illicit discharges and spills.

(5) Source Investigation and Elimination

- a. Minimum Investigation Requirements – Upon becoming aware of an illicit discharge, all permittees shall conduct an investigation to identify and locate the source of such illicit discharge as soon as practicable.
  - (i) All permittees shall prioritize the investigation of discharges based on their relative risk of pollution. For example, sanitary sewage may be considered a high priority discharge.
  - (ii) All permittees shall report to the TCEQ immediately upon becoming aware of the occurrence of any illicit flows believed to be an immediate threat to human health or the environment.
  - (iii) All permittees shall track all investigations and document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.

- b. Identification and Investigation of the Source of the Illicit Discharge –All permittees shall investigate and document the source of illicit discharges where the permittees have jurisdiction to complete such an investigation. If the source of illicit discharge extends outside the permittee’s boundary, all permittees shall notify the adjacent permitted MS4 operator or TCEQ’s Field Operation Support Division according to Part III.A.3.b.
  - c. Corrective Action to Eliminate Illicit Discharge
    - (i) If and when the source of the illicit discharge has been determined, all permittees shall immediately notify the responsible party of the problem, and shall require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.
- (6) Inspections –The permittee shall conduct inspections, as determined appropriate, in response to complaints, and shall conduct follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party.

## **2.0 Current Programs**

The Town of Shady Shores currently conducts a variety of programs to detect, investigate and eliminate illicit discharges into its MS4. Illicit discharges are generally any discharge into the stormwater drainage system that is not composed entirely of stormwater excluding those outlined in Section III – Allowable Non-Stormwater Discharges of this SWMP.

The Town of Shady Shores is in the process of preparing an up-to-date MS4 map to show the location of the small MS4 outfalls that are operated by the Town and that discharge into waters of the U.S. along with the location and name of all surface waters receiving discharges from the small MS4. The MS4 map is being built from a base map for the Town which incorporates high resolution aerial imagery and also identifies roadway names and Town limits. This base mapping has been used to identify roadway improvement projects and localized drainage issue projects.

Waste Management provides trash collecting services for the Town’s residents along with a recycling program which includes separate bins and collection service. Waste Management also provides for the curbside pickup of household paints, chemicals and medications. An additional opportunity for the Town’s residents to dispose of household hazardous waste is currently available through Denton County Public Works’ partnership with Upper Trinity Regional Water District to offer free drop off opportunities which are advertised on the Stormwater Management page of the Town’s website.

The Town currently has in place a Nuisance Ordinance 255 which identifies a variety of illicit discharges and outlines abatement procedures and includes a penalty clause for violations.

Illicit discharges are reported by residents to the Town Secretary who forwards the information to the Town’s Code Enforcement Officer who investigates the issue. Based on the investigation the Code Enforcement Officer notifies the proper response personnel; Public Works, Waste Management or Lake Cities Fire Department. Any occurrence of illicit flows believed to be an immediate threat to human health or the environment would be reported to TCEQ.

Educational materials concerning illicit discharge detection and elimination are made available to the public at Town Hall, Town Council meetings and community events.

## **3.0 Selected BMPs**

**Illicit Discharge detection and Elimination**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
<b>BMP 8</b>	<b>MS4 Map</b>			
	Develop an up-to-date map of the Town's Municipal Separate Storm Sewer System to aid in detection and elimination of illicit discharges. The location of the Town's MS4 outfalls that discharge into waters of the U.S. shall be shown along with the name and locations of all surface waters receiving discharges from those outfalls.	Town Engineer	Identify budget requirements.	1-5
			Research and collect additional mapping information.	1
			Add existing Town mapping information, including 2-foot contours and names and locations of waters of the U.S. receiving discharges, to the MS4 map currently being developed.	1
			Perform field investigation and mapping for 20% of the Town's MS4 outfalls.	1
			Perform field investigation and mapping for 40% of the Town's MS4 outfalls	2
			Perform field investigation and mapping for 60% of the Town's MS4 outfalls.	3
			Perform field investigation and mapping for 80% of the Town's MS4 outfalls.	4
			Perform field investigation and mapping for 100% of the Town's MS4 outfalls.	5
			Continually update the MS4 map as new development occurs.	1-5
<b>BMP 9</b>	<b>Illicit Discharge and Connection to Storm Sewer System Ordinance</b>			
	Develop a separate Illicit discharge ordinance to regulate the potential contribution of pollutants to the MS4 by any user to prohibit illicit discharges and connections to the MS4 and to establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.	Town Attorney, P&Z Commission, & Town Council	Identify budget requirements.	3-5
			Review existing ordinances to determine need for additional ordinance requirements to meet the need of this MCM.	3
			Draft revised/new illicit discharge ordinance, if necessary. Solicit input from the public on the draft ordinance.	3
			Issue final illicit discharge ordinance, if necessary.	4
			Educate the public on the new ordinance requirements.	4
			Begin education-focused enforcement	4

**Illicit Discharge detection and Elimination**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
			of the new ordinance.	
			Begin penalty-based enforcement of the illicit discharge ordinance.	5
<b>BMP 10</b>	<b>Staff Education and Training</b>			
	Provide education and training for field staff that may come into contact with or otherwise observe illicit discharges or illicit connections to the Towns MS4 as part of their normal job responsibilities.	Town Council & Code Enforcement	Identify budget requirements.	1-5
			Identify the applicable staff members.	3
			Provide training program materials and/or support the staff member(s) in attending/participating in training classes.	4-5
<b>BMP 6</b>	<b>Stormwater Reporting Line</b>			
	Establish a stormwater reporting line for the public to report illegal dumping to the appropriate personnel for proper response.	Town Council	Identify budget requirements	3
			Develop a plan for the stormwater reporting line program	3
			Identify procedures for receiving calls, routing calls to appropriate personnel for proper response and documenting subject of call for future analysis.	3
			Establish the stormwater reporting line and educate the public about its availability.	4
			Document each call and dispatch to appropriate department for proper response, as necessary.	4-5
			Conduct annual review of calls to identify trends, the need for reporting line improvements, and issues requiring additional education and/or enforcement action to protect storm water quality.	4-5
<b>BMP 5</b>	<b>Household Hazardous Waste Program</b>			
	Provide an opportunity for residents to safely dispose of common residential household pollutants such as pesticides, cleaning chemicals, automotive products and pool	Town Council	Identify budget requirements.	1-5
			Continue the recycling program provided by Waste Management for curbside pickup of household paints, chemicals and medications.	1-5

Illicit Discharge detection and Elimination				
BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
	chemicals. Educate the community about the hazards associated with improper disposal of household hazardous wastes and the negative effects on the environment from illicit discharges.		Work to continue partnership with Denton County Public Works and Upper Trinity Regional Water District for additional household hazardous waste disposal opportunities for the community.	1-5
			Research and collect educational materials.	3
			Provide educational information to the public at Town Hall, Town Council meetings and community events.	4-5
<b>BMP 11</b>	<b>Illicit Discharge Inspections</b>			
	Establish a storm sewer system inspection program for illicit connections, illegal dumping and dry weather discharges.	Code Enforcement	Identify budget requirements	4
			Develop a plan to inspect the storm sewer system for illicit connections, illegal dumping and dry weather discharges.	4
			Identify inspection staff, inspection schedules and training procedures.	4
			Begin scheduled inspections.	5
			Establish procedure to eliminate detected illicit discharges.	5

## C. Construction Site Stormwater Runoff Control

### 1.0 Regulatory Requirement

#### (a) Requirements and Control Measures

- (1) All permittees shall develop, implement and enforce a program requiring operators of small and large construction activities, as defined in Part I of this general permit, to select, install, implement, and maintain storm water control measures that prevent illicit discharges to the MEP. The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term.

If TCEQ waives requirements for storm water discharges associated with small construction from a specific site(s), the permittee is not required to enforce the program to reduce pollutant discharges from such site(s).

#### (b) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.3(b)(1)-(7)

- (1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be included in the annual report. Such written procedures must be maintained on site or in the SWMP and made available for inspection by the TCEQ.
- (2) All permittees shall require that construction site operators implement appropriate erosion and sediment control BMPs. The permittee's construction program must ensure the following minimum requirements are effectively implemented for all small and large construction activities discharging to its small MS4.
  - a. Erosion and Sediment Controls - Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants.
  - b. Soil Stabilization - Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permittee. In arid, semiarid, and drought-stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee.
  - c. BMPs – Design, install, implement, and maintain effective BMPs to minimize the discharge of pollutants to the small MS4. At a minimum, such BMPs must be designed, installed, implemented and maintained to:
    - (i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters;
    - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to storm water; and
    - (iii) Minimize the discharge of pollutants from spills and leaks.
  - d. As an alternative to (a) through (c) above, all permittees shall ensure that all small and large construction activities discharging to the small MS4 have developed and implemented a storm water pollution prevention plan (SWP3) in accordance with the TPDES CGP TXR150000. In arid, semiarid, and drought-stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee. As an alternative, vegetative stabilization measures may be implemented as soon as practicable.
- (3) Prohibited Discharges - The following discharges are prohibited:
  - a. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;
  - b. Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;
  - c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,
  - d. Soaps or solvents used in vehicle and equipment washing;
  - e. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.
- (4) Construction Plan Review Procedures

To the extent allowable by state, federal, and local law, all permittees shall maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction. For those permittees without legal authority to enforce site plan reviews, this requirement is limited to those sites operated by the permittee and its contractors and located within the permittee's regulated area. The site plan procedures must meet the following minimum requirements:

- a. The site plan review procedures must incorporate consideration of potential water quality impacts.
- b. The permittee may not approve any plans unless the plans contain appropriate site specific construction site control measures that, at a minimum, meet the requirements described in Part III.B.3.(a) or in the TPDES CGP, TXR150000.

The permittee may require and accept a plan, such as a SWP3, that has been developed pursuant to the CGP, TXR150000.

#### (5) Construction Site Inspections and Enforcement

To the extent allowable by state, federal, and local law, all permittees shall implement procedures for inspecting large and small construction projects. Permittees without legal authority to inspect construction sites shall at a minimum conduct inspections of sites operated by the permittee or its contractors and that are located in the permittee's regulated area.

- a. Inspections must occur at a frequency determined by the permittee, based on the evaluation of factors that are a threat to water quality, such as: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; and past record of non-compliance by the operators of the construction site.
- b. Inspections must occur during the active construction phase.
  - (i) All permittees shall develop, implement, and revise as necessary, written procedures outlining the inspection and enforcement requirements. These procedures must be maintained on site or in the SWMP and be made available to TCEQ.
  - (ii) Inspections of construction sites must, at a minimum:
    1. Determine whether the site has appropriate coverage under the TPDES CGP, TXR150000. If no coverage exists, notify the permittee of the need for permit coverage.
    2. Conduct a site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the small MS4's requirements.
    3. Assess compliance with the permittee's ordinances and other regulations.
    4. Provide a written or electronic inspection report.
- c. Based on site inspection findings, all permittees shall take all necessary follow-up actions (for example, follow-up-inspections or enforcement) to ensure compliance with permit requirements and the SWMP. These follow-up and enforcement actions must be tracked and maintained for review by the TCEQ.

For non-traditional small MS4s with no enforcement powers, the permittee shall notify the adjacent MS4 operator with enforcement authority or the TCEQ's Field Operations Support Division according to Part III.A.3(b).

#### (6) Information submitted by the Public

All permittees shall develop, implement and maintain procedures for receipt and consideration of information submitted by the public.

#### (7) MS4 Staff Training

All permittees shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by the permittee or by outside trainers.

## 2.0 Current Programs

As part of the platting process for major subdivisions and as required for minor subdivisions and replats, the Town Engineer reviews Preliminary Drainage Plans, which include a preliminary erosion and sedimentation plan, to assure the owner and/or developer account for and understand what will be required during construction. Per the Town of Shady Shores' Subdivision Ordinance No. 130, all construction projects shall include temporary erosion and sedimentation controls in accordance with NCTCOG standard specifications, and Stormwater Pollution Prevention Plans (SWP3) are submitted to the Town for approval by the Town Engineer prior to approval of construction projects. The Town Engineer coordinates with the developer or developer's engineer to ensure all requirements are addressed. The Town Engineer then makes recommendations to the P&Z Commission and ultimately Town Council. Both the Council and the Commission review the plans and the Town Engineer's recommendations during the plat approval process outlined in Subdivision Ordinance No. 130. Building permits are not issued until construction plans and the SWP3 are approved. In addition, the contractor must provide evidence of compliance with TPDES Construction General Permit (CGP) TXR150000, including but not limited to payment of required permit fees, submission of a Notice of Intent to TCEQ, posting of a Construction Site Notice (CSN), implementation of the SWP3 and other items, as required. The Town Engineer and the Building Official perform periodic inspections of construction activities to help ensure the erosion control measures are in place and being maintained. Although not an official role, the nearly 3,000 Town residents are sensitive and dedicated to ensuring contractors effectively address stormwater control measures throughout construction and are often helpful in spotting and reporting items that may need to be addressed.

## 3.0 Selected BMPs

Construction Site Stormwater Runoff Control				
BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
BMP 12	Erosion Control Ordinance and Requirements for Construction Site Contractors			
	A Town ordinance requiring the implementation of appropriate erosion and sediment control best management practices as well as enforcement procedures for TCEQ regulated construction activities.	Town Attorney, P&Z Commission, & Town Council	Identify budget requirements.	2-5
			Evaluate the Town's existing ordinances to identify the adequacy of erosion and sedimentation control requirements and enforcement mechanisms for construction activity.	2
			Develop a modified/updated draft ordinance, if necessary, to meet permit conditions.	3
			Issue final ordinance, if necessary.	4
			Conduct education activities to inform the public about the details of the new ordinance, as necessary.	4
			Begin penalty-based enforcement of the new ordinance, as necessary.	4

**Construction Site Stormwater Runoff Control**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
<b>BMP 13</b>	<b>Site Plan Review</b>			
	Conduct site plan reviews for compliance with TCEQ requirements.	Town Engineer	Continue to conduct site plan reviews for development and redevelopment projects to ensure compliance with TCEQ Stormwater Runoff Control requirements for construction and post-construction stormwater management.	1-5
			Evaluate need for and provide MS4 staff training, as necessary.	1-5
<b>BMP 14</b>	<b>Construction Plan Review</b>			
	Conduct construction plan reviews for compliance with TCEQ requirements.	Town Engineer	Continue to conduct construction plan reviews for new developments and redevelopments to ensure compliance with TCEQ Stormwater Runoff Control requirements for construction and post-construction stormwater management.	1-5
			Evaluate need for and provide MS4 staff training, as necessary.	1-5
<b>BMP 15</b>	<b>Construction Site Inspection and Enforcement</b>			
	Conduct site inspection and enforcement of construction activities and permanent improvements to ensure compliance with TCEQ requirements.	Town Engineer and Code Enforcement	Identify budget requirements.	1
			Continue to conduct construction site inspections.	1-5
			Evaluate existing construction site inspection procedures for compliance with permit requirements.	2
			Revise site inspection procedures, as necessary.	3
			Evaluate need for and provide MS4 staff training, as necessary.	1-5
<b>BMP 6</b>	<b>Stormwater Reporting Line</b>			
	Establish a stormwater reporting line for the public to report illegal dumping and other stormwater control issues to the appropriate personnel for proper response.	Town Council	Identify budget requirements.	3
			Develop a plan for the stormwater reporting line program.	3
			Identify procedures for receiving calls, routing calls to appropriate personnel for proper response and documenting subject of call for future analysis.	3
			Establish the stormwater reporting line	4

Construction Site Stormwater Runoff Control				
BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
			and educate the public about its availability.	
			Document each call and dispatch to appropriate department for proper response, as necessary.	4-5
			Conduct annual review of calls to identify trends, the need for reporting line improvements, and issues requiring additional education and/or enforcement action to protect storm water quality.	4-5

## D. Post-Construction Stormwater Management in New Development and Redevelopment

### 1.0 Regulatory Requirement

#### (a) Post-Construction Stormwater Management Program

- (1) All permittees shall develop, implement and enforce a program, to the extent allowable under state, federal, and local law, to control storm water discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of the permit term.

- (2) All permittees shall use, to the extent allowable under state, federal, and local law and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The permittees shall establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structures is not feasible due to space limitations, health and safety concerns, cost effectiveness, or highway construction codes, the permittee may propose an alternative approach to TCEQ. Newly regulated permittees shall have the program element fully implemented by the end of the permit term.

#### (b) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.4.(b)(1)-(3)

- (1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be included in the annual report. Such written procedures must be maintained either on site or in the SWMP and made available for inspection by TCEQ.
- (2) All permittees shall document and maintain records of enforcement actions and make them available for review by the TCEQ.

(3) Long-Term Maintenance of Post-Construction Stormwater Control Measures

All permittees shall, to the extent allowable under state, federal, and local law, ensure the long-term operation and maintenance of structural storm water control measures installed through one or both of the following approaches:

- a. Maintenance performed by the permittee. See Part III.B.5
- b. Maintenance performed by the owner or operator of a new development or redeveloped site under a maintenance plan. The maintenance plan must be filed in the real property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or redeveloped site to develop and implement a maintenance plan addressing maintenance requirements for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner or operator, and made available for review by the small MS4.

**2.0 Current Programs**

The Town of Shady Shores uses grass-lined roadway ditches as its method for conveyance of stormwater. In fact, currently there are no public roads in the Town that use curb & gutter and underground storm sewer systems to collect and convey runoff. The Town outlines its Post Construction Stormwater Management requirements in its Drainage Requirements and Design Standards outlined its Subdivision Ordinance which include such controls as detention facilities, vegetation requirements, protection requirements for natural drainageways, and easement requirements. In addition, per the Subdivision Ordinance, the Town has adopted the City of Denton Drainage Design Criteria Manual which includes the NCTCOG ISWM™ Hydrology and Hydraulics Technical Manuals. Furthermore, Section 7.2, Preservation of Trees and Natural Vegetation, of the Town’s Subdivision Ordinance also requires that development be “designed to fit harmoniously with the natural environment and to minimize the necessity for removing trees, native vegetation, and soil, or the addition of fill”. Prior to the release of any financial assurance provided by a contractor, including performance bonds, the Town Engineer inspects and must approve improvements to public infrastructure.

**3.0 Selected BMPs**

Post-Construction Stormwater Management in New Development and Redevelopment				
BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
BMP 16	Post-Construction Stormwater Management Ordinance	Town Attorney, P&Z Commission, & Town Council	Identify budget requirements	3
			Evaluate the Town’s existing ordinances to identify the adequacy of regulation of discharge requirements associated with development and redevelopment projects.	3
			Develop a modified/updated draft ordinance, if necessary, to meet permit conditions.	4
			Issue final ordinance, if necessary.	5

**Post-Construction Stormwater Management in New Development and Redevelopment**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
	will result in disturbance of one or more acres that discharge into the Town’s MS4. This ordinance should require design, installation, implementation and maintenance of a combination of structural and non-structural BMPs appropriate for the community and that protect water quality, including documentation requirements of operation and maintenance.		Conduct education activities to inform the public about the details of the new ordinance, as necessary.	5
			Begin penalty-based enforcement of the new ordinance, as necessary.	5
			Document and maintain records of enforcement actions.	5
<b>BMP 14</b>	<b>Construction Plan Review</b>			
	Conduct construction plan reviews for compliance with TCEQ requirements.	Town Engineer	Continue to conduct construction plan reviews for new developments and redevelopments to ensure compliance with TCEQ Stormwater Runoff Control requirements for construction and post-construction stormwater management.	1-5
<b>BMP 15</b>	<b>Construction Site Inspection and Enforcement</b>			
	Conduct site inspection and enforcement of construction activities and permanent improvements to ensure compliance with TCEQ requirements.	Town Engineer and Code Enforcement	Identify budget requirements	1
			Continue to conduct construction site inspections.	1-5
			Evaluate existing construction site inspection procedures for compliance with permit requirements, including documentation and maintaining records of enforcement actions.	2
			Revise site inspection procedures, as necessary.	3
<b>BMP 17</b>	<b>Tree Preservation</b>			
	Educational information and regulations to preserve and protect existing trees within the Town of Shady Shores, including mitigation requirements for regulated development projects	Town Council	Develop a draft ordinance to require a tree survey and mitigation plan for regulated development projects.	1
			Issue final ordinance, if necessary.	2
			Provide educational information to the public about the details of the new ordinance.	2

**Post-Construction Stormwater Management in New Development and Redevelopment**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
	requiring tree removal.		Begin penalty-based enforcement of the new ordinance, as necessary.	3

**E. Pollution Prevention and Good Housekeeping for Municipal Operations**

**1.0 Regulatory Requirement**

(a) Program development

(1) All permittees shall develop and implement an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; storm water system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharges of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1.(c)

(b) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.5.(1)-(6) in the program:

(1) Permittee-owned Facilities and Control Inventory

All permittees shall develop and maintain an inventory of facilities and storm water controls that it owns and operates within the regulated area of the small MS4. If feasible, the inventory may include all applicable permit numbers, registration numbers, and authorizations for each facility or controls. The inventory must be available for review by TCEQ and must include, but is not limited to, the following, as applicable:

- a. Composting facilities;
- b. Equipment storage and maintenance facilities;
- c. Fuel storage facilities;
- d. Hazardous waste disposal facilities;
- e. Hazardous waste handling and transfer facilities;
- f. Incinerators;
- g. Landfills;
- h. Materials storage yards;
- i. Pesticide storage facilities;
- j. Buildings, including schools, libraries, police stations, fire stations, and office buildings;
- k. Parking lots;
- l. Golf courses;
- m. Swimming pools;
- n. Public works yards;
- o. Recycling facilities;
- p. Salt storage facilities;
- q. Solid waste handling and transfer facilities;
- r. Street repair and maintenance sites;
- s. Vehicle storage and maintenance yards; and

t. Structural storm water controls.

(2) Training and Education

All permittees shall inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices. All permittees shall maintain a training attendance list for inspection by TCEQ when requested.

(3) Disposal of Waste Material - Waste materials removed from the small MS4 must be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.

(4) Contractor Requirements and Oversight

a. Any contractors hired by the permittee to perform maintenance activities on permittee-owned facilities must be contractually required to comply with all of the storm water control measures, good housekeeping practices, and facility-specific storm water management operating procedures described in Parts III B.5.(2)-(6).

b. All permittees shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be developed before the end of the permit term and maintained on site and made available for inspection by TCEQ.

(5) Municipal Operation and Maintenance Activities

a. Assessment of permittee-owned operations

All permittees shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in storm water, including but not limited to:

(i) Road and parking lot maintenance may include such areas as pothole repair, pavement marking, sealing, and re-paving;

(ii) Bridge maintenance may include such areas as re-chipping, grinding, and saw cutting;

(iii) Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and

(iv) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.

b. All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).

c. All permittees shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in storm water from the above activities. These pollution prevention measures may include the following examples:

(i) Replacing materials and chemicals with more environmentally benign materials or methods;

(ii) Changing operations to minimize the exposure or mobilization of pollutants to prevent them from entering surface waters; and

(iii) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.

d. Inspection of pollution prevention measures - All pollution prevention measures implemented at permittee-owned facilities must be visually inspected at a frequency determined by the permittee to ensure they are working properly. A log of inspections must be maintained and made available for review by the TCEQ upon request.

(6) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency

determined by the permittee and consistent with maintaining the effectiveness of the BMP.

(7) Inspections

Permittees who operate level 3 or 4 small Ms4s shall develop and implement an inspection program, which at a minimum must include periodic inspections of high priority permittee-owned facilities. The results of the inspections and observations must be documented and available for review by the TCEQ.

**2.0 Current Programs**

The Town of Shady Shores does not own or operate any municipal facilities other than Town Hall. All significant operation and maintenance work performed to the grounds surrounding Town Hall and to public roads, ditches and culverts throughout the Town is provided by independent contractors that do not operate out of Town owned or operated facilities. However, Public Works does patch potholes with cold mix asphaltic concrete. Crack sealing was previously performed by Public Works, but beginning in 2013 the Town elected to contract out these services when it began a Town-wide crack sealing program. In addition, other than an All Terrain Vehicle (ATV) operated by the Corinth Police Department in case of emergencies, the Town does not own or operate any equipment. The ATV is maintained by an independent contractor.

**3.0 Selected BMPs**

<b>Pollution Prevention and Good Housekeeping for Municipal Operations</b>				
BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
<b>BMP 18</b>	<b>Municipal Activities</b>			
	Develop a list of all municipal operations conducted by the Town which are subject to TPDES stormwater regulations, if any, and a plan to assess potential impacts.	Public Works	Identify budget requirements.	1-5
			Develop a list of any municipal operations subject to TPDES stormwater regulations.	1
			Develop a plan to assess the listed operations and develop recommendations for BMPs to minimize impacts to stormwater.	2
			Implement the BMPs.	3
			Continue the implementation of the BMPs.	4-5
<b>BMP 19</b>	<b>Employee Training</b>			
	Conduct BMP training for the municipal employees responsible for activities that may impact stormwater quality.	Town Council	Identify budget requirements.	1-5
			Identify the level of effort and methods necessary to properly conduct affected employee training for the BMPs identified as part of BMP 18.	2
			Conduct BMP training for the municipal employees responsible for activities that may impact stormwater quality,	3-5
<b>BMP 20</b>	<b>Contractor Requirements and Oversight</b>			
	Develop requirements for	Town	Identify budget requirements	1-5

**Pollution Prevention and Good Housekeeping for Municipal Operations**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
	contractors and oversight procedures to ensure that contractors are using appropriate control measures and standard operating procedures to comply with TPDES stormwater requirements on municipal activities.	Engineer	Continue current standard construction contract requirements and oversight procedures to ensure contractors are using appropriate control measures to comply with TPDES stormwater requirements, as appropriate.	1-5
			Evaluate standard construction contract requirements and revise, as necessary, to ensure contractor requirements for use of appropriate control measures and standard operating procedures to comply with TPDES stormwater requirements are being met.	3
			Evaluate oversight of contractor procedures and revise, as necessary, to ensure contractors are using appropriate control measures and operating procedures.	3
			Implement revised contract requirements and oversight procedures, as necessary.	4-5
<b>BMP 21</b>	<b>Structural Control Maintenance</b>			
	Develop procedures for the maintenance of structural control BMPs, if present, used to prevent or reduce pollutant runoff from municipal operations.	Public Works & Town Engineer	Identify budget requirements.	1-5
			Develop a list of maintenance activities, maintenance schedules and long-term inspection procedures for structural control BMPs used, if any, to reduce pollutant discharges from municipal operations.	3
			Initiate structural control program, if needed.	4-5
			Revise inspection procedures, as necessary.	5
<b>BMP 3</b>	<b>Keep Shady Shores Beautiful</b>			
	Promote a variety of pollution prevention, cleanup and education programs/activities through the Keep Shady Shores Beautiful Committee.	Town Council	Identify budget requirements.	1-5
			Continue to support the Town's existing volunteer program.	1-5
			Schedule and conduct every other month committee meetings.	1-5
			Schedule and conduct at least 2 regular clean-up events.	1-5
			Provide committee updates at Town Council meetings.	1-5

**Pollution Prevention and Good Housekeeping for Municipal Operations**

BMP ID	Best Management Practice	Responsible Department	Measurable Goal	Implementation Year(s)
			Evaluate opportunities, public receptiveness and budgetary requirements for additional trash cleanup and other events.	1-5

**F. Industrial Storm Water Sources**

**1.0 Regulatory Requirement**

(a) Permittees operating a level 4 small MS4 shall include the requirements described below in Part III.B.6.(1) – this requirement is only applicable to level 4 MS4s

(1) Permittees who operate level 4 small MS4s shall identify and control pollutants in stormwater discharges to the small MS4 from permittee’s landfills; other treatment, storage, or disposal facilities for municipal waste (for example, transfer stations and incinerators); hazardous waste treatment, storage, disposal and recovery facilities and facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge the permittee determines are contributing a substantial pollutant loading to the small MS4. The program must include priorities and procedures for inspections and for implementing control measures for such discharges.

**2.0 Current Programs**

The Town of Shady Shores does not operate a small level 4 MS4 (traditional small MS4s that serve a population of 100,000 or more within a UA).

**3.0 Selected BMPs**

No BMPs are included since the Town of Shady Shores does not operate a small level 4 MS4.

**G. Authorization for Construction Activities Where the Small MS4 is the Site Operator**

**1.0 Regulatory Requirement**

The development of this MCM for construction activities, where the small MS4 is the site operator, is optional and provides an alternative to the MS4 operator seeking coverage under TPDES CGP, TXR150000 for each construction activity. Permittees that choose to develop this measure will be authorized to discharge storm water and certain non-storm water from construction activities where the MS4 operator meets the definition of a construction site operator in Part I of this general permit. When developing this measure, permittees are required to meet all requirements of, and be consistent with, applicable effluent limitation guidelines for the Construction and Development industry (40 CFR Part 450), TPDES CGP TXR150000, and Part III.B.3 of this permit. The authorization to discharge under this MCM is limited to the regulated area, such as the portion of the small MS4 located within a UA or the area designated by TCEQ as requiring coverage. However, an MS4 operator may also utilize this MCM over additional portions of their small MS4 that are also in compliance with all of the MCMs listed in this general permit. This MCM must be developed as a part of the SWMP that is submitted with the NOI for permit coverage. If this MCM is developed after submitting the initial NOI, a NOC must be submitted notifying the executive director of this change, and identifying the geographical area or boundary where the activities will be conducted under the provisions of this general permit. Utilization of this MCM does not preclude a small MS4 from obtaining coverage under the TPDES CGP, TXR150000, or under an individual TPDES permit.

This MCM is only available for projects where the small MS4 is a construction site operator or owner, and

the MCM does not provide any authorization for other construction site operators at a municipal project.

Controls required under this MCM must be implemented prior to discharge from a municipal construction site into surface water in the state.

(a) The MCM must include:

- (1) A description of how construction activities will generally be conducted by the permittee so as to take into consideration local conditions of weather, soils, and other site specific considerations;
- (2) A description of the area that this MCM will address and where the permittee's construction activities are covered (for example within the boundary of the urbanized area, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary);
- (3) Either a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the SWP3 requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for storm water discharges;
- (4) A general description of how a SWP3 will be developed for each construction site, according to Part VI of this general permit, "Authorization for Municipal Construction Activities"; and
- (5) Records of municipal construction activities authorized under this optimal MCM, in accordance with Part VI of this general permit.

## **2.0 Current Programs**

The Town of Shady Shores does not operate as site operator for construction projects over one (1) acre or part of a larger common plan of development, and the Town contracts with other construction site operators for projects that do.

## **3.0 Selected BMPs**

The Town of Shady Shores declines the option for the seventh (optional) minimum control measure.

# ***V. REPORTING REQUIREMENTS***

The following reporting requirements will be followed:

## **A. General Reporting Requirements**

### **1. Noncompliance Notification**

According to 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment, must be reported by the permittee to the TCEQ. Report of such information must be provided orally or by electronic facsimile transmission (FAX) to the TCEQ regional office within 24 hours of becoming aware of the noncompliance. A written report must be provided by the permittee to the appropriate TCEQ regional office and to the TCEQ Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written report must contain:

- a. A description of the noncompliance and its cause;
- b. The potential danger to human health or safety, or the environment;
- c. The period of noncompliance, including exact dates and times;
- d. If the noncompliance has not been corrected, the anticipated time it is expected to continue; and

e. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

2. Other Information

When the Town becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT, or NOC, or any other report, the permittee shall promptly submit the facts or information to the executive director.

## **B. Annual Report**

The Town shall submit a concise annual report to the executive director within 90 days of the end of each reporting year. The Town has selected its reporting year to coincide with its fiscal year which ends on September 30 of each year. As such, the first reporting year will last until the end of the fiscal year following the end of the first permit year. Subsequent calendar years will begin at the beginning of the first reporting year and last for one (1) year. The Town shall also make a copy of the annual report readily available for review by TCEQ personnel upon request. The report must include all applicable items listed in Part IV, Section B, 2. Annual Report of the General Permit. The annual report must be submitted with the appropriate TCEQ reporting forms if available, or as otherwise approved by TCEQ.

The annual report must be submitted to the following address:

Texas Commission on Environmental Quality  
Storm Water & Pretreatment Team; MC-148  
P.O. Box 13087  
Austin, Texas 78711-3087

A copy of the annual report must be submitted to the TCEQ Regional Office that serves the area of the Town (Region 4, Dallas/Fort Worth) at the following address:

Texas Commission on Environmental Quality  
2309 Gravel Drive  
Fort Worth, Texas 76118-6951

If available, electronic submission of annual reports is encouraged. The Federal Waste Reduction Act and the Government Paperwork Elimination Act encourages governmental agencies to use electronic submission. See the TCEQ website at, [www.tceq.texas.gov](http://www.tceq.texas.gov) for additional information and instructions.

## Appendix A – Urbanized Area Map

**Appendix B – Letter from Hidden Valley Airport Association, Inc.**





