



TPDES PHASE II STORMWATER MANAGEMENT PROGRAM

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CITY OF DENISON
PUBLIC WORKS DEPARTMENT

TPDES Permit #TXR040230



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ACRONYMS

BMP	Best Management Practice
CMOM	Capacity, Management, Operations and Maintenance
CWA	Clean Water Act
EPA	Environmental Protection Agency
GIS	Geographic Information System
IDDE	Illicit Discharge Detection and Elimination
I/I	Inflow/Infiltration
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NCTCOG	North Central Texas Council of Governments
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
SOP	Standard Operating Procedure
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
SSES	Sewer System Evaluation Survey
TCEQ	Texas Commission on Environmental Quality
TMDL	Total Maximum Daily Load
TPDES	Texas Pollutant Discharge Elimination System

EXECUTIVE SUMMARY

The 1972 Clean Water Act (CWA) is a law enacted by Congress and signed by the President that provides a statutory basis for the National Pollutant Discharge Elimination System (NPDES) program and the basic structure for regulating the discharge of pollutants from point sources to waters of the United States. Section 402 of the CWA specifically required the U.S. Environmental Protection Agency (EPA) to develop and implement the NPDES program to protect the Nation's waters from pollution. It further allows the EPA to authorize the NPDES Permit Program to state governments, enabling states to perform many of the permitting, administrative, and enforcement aspects of the NPDES Program. Under the NPDES program, a municipal stormwater program was developed in two phases.

Phase I of the NPDES municipal stormwater program was issued in 1990 and required medium and large cities and certain counties with populations of 100,000 or more as based on the 1990 census, to obtain NPDES permit coverage for stormwater discharges. Generally, Phase I MS4s are covered by individual permits. On September 14, 1998, the Texas Commission on Environmental Quality (TCEQ) received from EPA, the authority to administer the NPDES permit program in Texas for those discharges under the regulatory authority of the agency. This program has been named the Texas Pollutant Discharge Elimination Program (TPDES). Under a memorandum of agreement between the two agencies, the TCEQ agreed to adopt any new rules or permits to comply with the Phase II stormwater regulations by the deadlines mandated in federal rules.

Phase II of the NPDES was issued in 1999 and requires regulated small municipal separate storm sewer systems (MS4s) in designated urbanized areas (UA), as well as small MS4s outside the UA that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. The 1990 U.S. Census defines an "urban area" as an area with a population density of at least 1,000 people per square mile. Phase II MS4s are covered by a general permit. Each regulated MS4 is required to develop and implement a stormwater management program (SWMP) to reduce the contamination of stormwater runoff and prohibit illicit discharges.

The TCEQ first issued the TPDES General Permit TXR040000 (General Permit) authorizing the discharge of stormwater to surface water in the state from small MS4s on August 13, 2007. The most recent amendment and permit renewal was issued on January 24, 2019. Denison stated their intention to implement a Stormwater Management Program (SWMP) in accordance with the requirements of the General Permit and submitted a Notice of Intent (NOI) in July 2019.

The SWMP has been developed to:

- reduce the discharge of pollutants from the City's MS4 to the maximum extent

- practicable (MEP);
- to protect water quality; and
- to satisfy the appropriate water quality requirements of the CWA and the Texas Water Code.

The SWMP describes specific actions that will be taken over the next five-year period to reduce pollutants and protect the City's stormwater quality. The SWMP includes a program that complies with state and local public notice requirements. Specific actions are listed as Best Management Practices (BMPs) that will be implemented by the City in support of each of the five Minimum Control Measures (MCMs), as required by the TCEQ General Permit and listed below.

1. Public Education, Outreach on Stormwater Impacts, Involvement and Participation
2. Illicit Discharge Detection and Elimination (IDDE)
3. Construction Site Runoff Control
4. Post-Construction Stormwater Management in New Development and Redevelopment, and
5. Pollution Prevention and Good Housekeeping for Municipal Operations.

These measures will be addressed by implementing BMPs appropriate for Denison's community. The BMPs will commence according to the schedules provided in this Program. The SWMP sets measurable goals, provides a schedule for the implementation of each of the BMPs and evaluations of effectiveness. Implementation of the BMPs is expected to result in reductions of pollutants discharged into Denison's streams, ponds, and lakes. The SWMP has the possibility of evolving over time as BMPs are monitored and adapted to accommodate more effective practices. Annual reports are completed to determine program status.

1.0 COMMUNITY PROFILE

Geography

The City of Denison was founded in 1872 by the Missouri-Kansas-Texas Railroad Company. The incorporated area covers approximately 23.26 square miles. The geographic center of Denison's MS4 is Latitude 33-45'-20" and Longitude 96-33'-45". The average elevation is approximately 750 feet above mean sea level. The terrain is classified as Texas cross timbers with rolling hills and dense growths of hardwoods along creek beds. Denison is bounded to its north and east by the Red River, the City of Sherman to the south, and by Lake Texoma to the northwest. Average annual precipitation is 39 inches with mean temperatures of an average temperature of 64 F. The 2010 U.S. Census determined Denison's population to be 22,682.

Organization

Denison is a chartered home-rule city that operates by the City Council/City Manager form of government. Council positions include four single-member districts plus the mayor and two members elected at-large.

Ordinances, Legal Authority and Enforcement

City of Denison ordinances and guidelines that may be affected by the Stormwater Management Program are:

- City of Denison Code of Ordinances
- Subdivision Ordinances
- Utilities Ordinances
- Nuisances Ordinances
- Flood Damage Prevention Ordinances
- Streets, Sidewalks, and Right-of-Way Ordinances
- Planning and Development Ordinances
- Storm Drainage Design Criteria Manual

The City of Denison will manage stormwater issues either through the enactment of new ordinances or the enforcement of existing ordinances. It is expected that current ordinances may need minor revisions to fully address the requirements of the Stormwater Management Program and as the regulatory environment evolves.

The City of Denison has a Building Code and conducts building inspections through the Community and Development Services Department, Building Inspections Department. Storm drainage, utilities and street inspections are done through the Public Works Division. The Environmental Services Division respond to cases of illicit discharges, dumping or spills and other environmental impact calls. Additionally, Environmental Services conducts inspections of construction sites and provides public education on erosion control and concrete truck washout and evaluates potential stormwater pollution during industrial user inspections required by the Pretreatment Program.

Denison's City Manager, Legal Firm, Public Works Director, Building Official, Code Enforcement Manager will be charged with responsibility to ensure applicable duties of inspection, monitoring and enforcement of new regulations is adequate to meet the minimum elements of the City's Stormwater Management Program. Violations may result in citations, fines and penalties or other action taken in Denison's Municipal Court or by its City Council.

Municipal Operations

The Director of Public Works is charged with maintenance of streets and drainage infrastructure. The Public Works Team is responsible for any mapping and inspection of all drainage improvements. Illicit discharges will be identified and corrected. The fleet maintenance building (which includes equipment storage, maintenance, material storage, vehicle storage, and fueling station), city parks, fire stations, library, police station, city hall and other office buildings, parking lots, the Waterloo pool, solid waste handling facilities, street repair and maintenance sites, structural stormwater controls, and wastewater facilities are to be evaluated against good housekeeping practices to protect storm water runoff quality from all city-owned operations.

Receiving Waters

MS4 discharges into unnamed tributaries; thence to Duck Creek and Iron Ore Creek. The City of Denison's Paw Paw Wastewater Treatment Plant and Maintenance Facility stormwater flows to an unnamed tributary, to Paw Paw Creek and then to the Red River below Lake Texoma in Segment 0202 of the Red River Basin. The City of Denison's North Texas Regional Airport Wastewater Treatment Plant stormwater flows into an unnamed tributary; thence to Big Mineral Arm of Lake Texoma in Segment 0203 of the Red River Basin.

Construction and Development

Denison's Community and Development Services and the Public Works Divisions oversee and help regulate development. New construction and post-construction controls and standards are developed, and both divisions are charged with distributing the rules to developers. It is expected that building permits will not be issued until an individual or developer has met all initial storm water protection requirements. Inspections personnel will periodically monitor compliance during and after construction.

Education and Outreach

The City of Denison as a MS4 Operator implements a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff as required in 40 CFR 122.34(b)(1).

2.0 ACCESSIBILITY INFORMATION

Copies of the Texas Commission on Environmental Quality Executive Director's General Permit TXR#040000, Fact Sheet, the Denison Stormwater Management Program and Annual Reports can be requested in person or in writing by contacting the Director of Public Works:

Carrie Jones
Director of Public Works
300 West Main Street
Denison, Texas 75020
903-465-2720, Extension 2441
cjones@cityofdenison.com

Copies of requested materials will be provided, or post marked, within 48 hours of request. Additionally, these documents can be viewed on the Denison website at:
<https://www.cityofdenison.com/es/page/stormwater-program>

Responsible elected official: Mayor Janet Gott
300 W. Main
Denison, Texas 75020
Email: jgott@cityofdenison.com

Interim City Manager: Bobby Attebury
300 W. Main
Denison, Texas 75020
Email: battbury@cityofdenison.com

3.0 REGULATORY BACKGROUND

Federal Regulation

The Federal Government addressed water pollution through the Federal Water Pollution Control Act (FWPCA) in 1948. The original statute has seen extensive revision since it was introduced. Section 402 of the 1972 Amendments to the FWPCA established the National Pollutant Discharge Elimination System (NPDES) authorizing the U.S. Environmental Protection Agency (EPA) to issue discharge permits for certain types of activities. The 1972 Amendments later became known as the Clean Water Act (CWA). Further Amendments to the FWPCA occurred in 1977. The 1977 Amendments established procedures for states to assume regulating authority of the NPDES program.

Citing the CWA as the legislative authority, Congress promulgated Phase I of the U.S. EPA's municipal stormwater program in 1990. Phase I relied on the NPDES permit coverage to address stormwater runoff from medium and large municipal separate storm sewer systems (MS4s), serving populations of 100,000 or greater. The Phase I requirements marked an attempt to address pollution from nonpoint sources.

The Stormwater Phase II Final Rule (promulgated December 8, 1999) was the next step in the EPA's efforts to preserve, protect, and improve the nation's water resources from polluted stormwater runoff. The Phase II program requires additional operators (small MS4s in urbanized areas) to implement programs and practices to control polluted stormwater runoff, through the NPDES permit program.

State Regulation

On September 14, 1998 the U.S. EPA and the Texas Commission on Environmental Quality (TCEQ) signed a memorandum agreement for the TCEQ to assume the regulatory authority for the NPDES as it applies to the State of Texas. This program has been named the Texas Pollutant Discharge Elimination System (TPDES). The TCEQ has already released permits applying to Industrial, Construction and Phase I of the Municipal stormwater programs. Each of these has a separate, applicable permit in which to comply with.

The first draft of the Phase II permit, TCEQ Proposed General Permit # TXR040000 was published in the September 27, 2002 issue of the Texas Register. Public meetings were held in Arlington, Houston and San Antonio in October and November of 2002 and the public was given the opportunity to respond with comments.

On September 15, 2003 the Ninth Circuit Court of Appeals issued a revised panel decision in a case challenging portions of the Phase II stormwater regulations. The ruling denied all petitions for rehearing and remanded portions of the rule affecting small MS4s. An EPA memorandum was released publicly on April 16, 2004 that responded to the partial remand of stormwater regulations.

The TCEQ reviewed the Ninth Circuit Court of Appeals decision and a second public comment period ended on September 29, 2005, with an additional public meeting held in Austin on the same day. The final TCEQ Permit No. TXR040000 was released on August 13, 2007. Additionally, the general permit was re-issued in five (5) year terms, with the last issuance date of, January 24, 2019. Small MS4s that meet regulated criteria for Phase II of the TPDES Stormwater Program via the TPDES General Permit were given one hundred and eighty (180) days to respond by submitting a Notice of Intent and Stormwater Management Program.

The State of Texas has regulatory authority in the State of Texas and regulates Stormwater for MS4s with a TPDES permit. The program requires Phase II municipalities to develop a Stormwater Management Program to outline actions taken to address stormwater pollution reduction.

The TPDES General Permit NO. TXR0400000 requires regulated MS4s to address stormwater pollution reduction using five Minimum Control Measures (MCMs). The five MCMs are: Public Education, Outreach on Stormwater Impacts and Involvement, Illicit Discharge Detection and Elimination (IDDE), Construction Site Stormwater Runoff Control, Post Construction Stormwater Management in New Development and Redevelopment, and Pollution Prevention and Good Housekeeping for Municipal Operations. Best Management Practices (BMPs) are schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

The SWMP describes the five MCMs and BMP) that the City will implement over a five-year period. The City will enhance existing activities that are designed to protect the environment and water quality and supplement those activities with new BMPs. The BMPs were selected based on the requirements of the TCEQ general permit, a general assessment of their effectiveness, applicability to the City, and implementation cost. The SWMP has been fully implemented and all BMPs will be completed prior to the permit expiration date of January 24, 2024.

The SWMP focuses on the bacteria, floatables, and sediment. These three areas of emphasis were chosen based on our unique community profile while considering our most sensitive areas, our current water quality opportunities and associated challenges.

By submitting its Stormwater Management Program and Notice of Intent (NOI) to comply with the TPDES Phase II regulations before the deadline of July 23, 2019, the City of Denison acknowledges the regulatory authority of the TCEQ and agrees to comply with TPDES TXR040000 permitting requirements to discharge directly into surface waters. This permit and authorization shall expire five years after the date of issuance.

Coverage Limitations

The City understands that other discharges requiring a TPDES permit may be authorized under this Stormwater Management Program, however, the City elects to file for those permits separately as they are needed and necessary.

The City has not had an application or permit denied, terminated, or revoked by the Executive Director as a result of enforcement or water quality related concerns. Also, the Executive Director has not determined that continued coverage under an individual permit is required based on consideration of an approved total maximum daily loading (TMDL) model and implementation plan, and backsliding policy, history of substantive non-compliance or other 30 TAC Chapter 205 considerations and requirements, or other site-specific considerations.

The City currently has no combined sanitary and storm sewer systems, nor will any be constructed in the foreseeable future. Any flows of combined sanitary and storm water shall be treated as an illicit discharge and corrected as soon as possible after such flows are discovered.

The City pledges to not knowingly discharge to surface waters of the State in a manner that would contribute to a violation of water quality standards or that would fail to protect and maintain existing uses as a part of this permit. The City is aware that discharges contributing to a violation of water quality standards are not covered by this general permit. Should the City find itself in a position where discharges of this nature occur, the City is aware that the Executive Director may require an application for an individual permit.

City staff members are aware that some stormwater discharges from the City flow into Iron Ore Creek, which is an impaired water body, as noted by a listing the Clean Water Act § 303(d) list. City staff shall maintain current knowledge of impaired water bodies as reported by the TCEQ or EPA to ensure that if designated impaired water bodies receive discharges from the City, so that staff is aware of any water quality standards implications and take appropriate actions to protect water quality.

No discharges from the City affect water quality within the Edwards Aquifer.

The City recognizes that coverage under this General Permit does not allow the City to have stormwater and nonstormwater discharges into areas already protected by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watershed. The City understands that coverage under this permit does not authorize the City to discharge into a stream or watershed that any flows that would violate another home rule municipality’s authority to protect said stream or watershed as granted by § 401.002 of the Texas Local Government Code.

The City has no discharges entering into Indian Country Lands.

The City is aware of the presence of the listed endangered species in the Red River Below Lake Texoma.

<u>Species</u>	<u>Water Species is in</u>
Least Tern (<i>Sterna antillarum</i>)	Red River Below Lake Texoma

4.0 ALLOWABLE NON-STORM WATER DISCHARGERS

1. Water line flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated 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 sources that do not violate Texas Surface Water Quality Standards;
4. Diverted stream flows;
5. Rising ground water 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. Dechlorinated 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.

5.0 DISCHARGES DIRECTLY TO IMPAIRED WATER BODIES WITHOUT AN APPROVED TMDL - IMPAIRMENT OF BACTERIA

Denison shall check annually, in conjunction with preparation of the annual report, whether an impaired water within its permitted area has been added to the latest EPA approved 303(d) list or the Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d) which lists the category 4 and 5 water bodies. Within two years following the approval date of the new

list(s) of impaired waters, the permittee shall comply with the requirements of Part II.D.4.(b) (with the exception of (b)(1)c), and shall identify any newly listed waters in the annual report (consistent with Part IV.B.2.f) and SWMP (consistent with Part III.A.2.f).

A portion of the MS4 discharges into the Iron Ore Creek. Iron Ore Creek is listed as an impaired water body for bacteria without an approved TMDL. Denison was required to determine whether the MS4 may be a source of bacteria and then determine if discharges from the MS4 would be likely to contain bacteria at levels of concern.

- (1) Denison shall ensure that the SWMP includes focused BMPs, along with corresponding measurable goals, that the permittee will implement, to reduce, the discharge of bacteria that contribute to the impairment of the water body.
- (2) Denison shall identify potential significant sources and develop and implement focused BMPs for those sources.
- (3) The annual report must include information on compliance with this section, including results of any sampling conducted.

6.0 MINIMUM CONTROL MEASURES

The Stormwater Management Program (SWMP) developed by the City of Denison is described in the following sections. The City has not opted to include the seventh minimum control measure (MCM) for municipal construction activities and instead will submit an individual Notice of Intent for each construction project as needed. The following sections describe the five MCMs and the best management practices (BMPs) employed by the city to accomplish the goals for the individual MCMs. An implementation schedule for each of the BMPs is included, as well as the measurable goals and responsible parties associated with individual BMPs.

MCM No. 1 -- PUBLIC EDUCATION, OUTREACH ON STORMWATER IMPACTS, INVOLVEMENT AND PARTICIPATION

Public Education and Outreach

The City of Denison elected to develop, implement, and maintain a stormwater education and outreach program to educate public employees, business, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.

The City of Denison annually assess program elements and modifies as necessary. Additionally, new elements are developed and implemented, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP.

Public Involvement and Participation

The City of Denison elected to involve the public in community clean-ups and storm drain stenciling events. Public involvement elements are reviewed and modified as necessary. Additionally, City of Denison will comply with state and local public notice requirements as required by the TCEQ's

Office of Chief Clerk. When required, notice will be published at least once in the Herald Democrat. The notice will provide opportunity for the public to submit comments on the NOI and SWMP. Public comment periods will last for at least thirty (30) days. The City of Denison will file with the Chief Clerk a copy and an affidavit of the publication of notice within 60 days of receiving the written instructions from the Chief Clerk.

MCM No. 2 -- ILLICIT DISCHARGE, DETECTION AND ELIMINATION

Regulatory Requirement

40 CFR 122.34 (b) (3) and TXR040000, Part III, Section B, 2 – Develop, implement, and enforce a program to detect and eliminate illicit discharges into your small MS4. Develop a storm sewer system map, showing the location of all outfalls and the names and locations of all water of the U.S. that receives discharges from those outfalls. To the extent allowable under state, tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions. Develop and implement a plan to detect and address non-storm water discharges including illegal dumping to your system. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

Illicit Discharge Detection and Elimination (IDDE)

The City of Denison has yet to map the drainage system from a previous survey of the storm drainage system. To complete this process, the City intends to obtain Geographic Information System to integrate the location of these structures into a map and identify outfalls.

The City of Denison has elected to develop methods for informing and training MS4 field staff on identifying and tracing sources of an illicit discharge. Procedures include measures for removing the source of discharge.

MCM No. 3 -- CONSTRUCTION SITE STORM WATER RUNOFF CONTROLS

Regulatory Requirement

40 CFR 122.34 (b) (4) and TXR040000, Part III, Section B, 3 – Develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. Program must include: the development and implementation of (at a minimum) an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance ensure that all small and large construction activities discharging to the small MS4 have developed and implemented a stormwater pollution prevention plan (SWP3) and comply with all applicable requirements contained in the TPDES Construction General Permit (CGP) TXR150000, requirements for construction site operators to implement appropriated erosion and sediment control BMPs, requirements for construction site operators to control waste at the construction site, procedures for site plan review which incorporate consideration of potential water quality impacts, and procedures for receipt and consideration of information submitted by the public.

Construction Site Controls

The City of Denison is experiencing significant new development, therefore, the City established regulatory and enforcement authorities for both erosion and sediment controls at construction sites. Stormwater inspectors review applications for new construction and development to determine permitting requirements under the general permit, provide education on concrete truck washout, erosion control and site tracking. Stormwater inspectors conduct site inspections and issue enforcement as needed. Stormwater inspectors receive annual inspector training.

MCM No. 4 -- POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT/REDEVELOPMENT

Regulatory Requirement

40 CFR 122.34 (b) (5) and TXR040000, Part III, Section B, 4 – Develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects that are less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Develop and implement strategies that include a combination of structural and/or non-structural BMPs appropriate for your community. Use an ordinance or other regulatory mechanism to address post-construction runoff. Ensure adequate long-term operation and maintenance of BMPs.

Post Construction Management

The City of Denison has developed and implemented a stormwater design manual that includes performance standards designed to control runoff impacts. The City of Denison regulates discharges from new development and redevelopment and adopts legal authority in Code of Ordinances, Chapter 22, Article IV – Division 5. The City has yet to inventory and map structural runoff controls from new development and redevelopment areas. To initiate this process, the City intends to obtain Geographic Information System to integrate the location of these controls into a map. Records will be organized and managed throughout its life cycle, from the time of creation or inscription to its eventual disposition. This includes identifying, classifying, storing, securing, retrieving, tracking and destroying or permanently preserving records.

MCM No. 5 -- POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Regulatory Requirement

40 CFR 122.34 (b) (6) and TXR040000, Part III, Section B, 5 - Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations such as parks and open space maintenance; street, road or highway maintenance; fleet and building maintenance; stormwater 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.

Pollution Prevention and Good Housekeeping

The City of Denison continually assess program elements and modifies as necessary as well as develops and implements new elements as necessary to continue reducing the discharge of pollutants from the MS4.

Denison developed an inventory of facilities and stormwater controls that it owns and operates within the regulated area of its small MS4. Said inventory is maintained as a minimum element of this plan. Where applicable, permit numbers, registration numbers, and authorizations for each facility or controls was included. The inventory was developed using the minimum list of facility types provided in the permit and employee knowledge of facilities. The assessment included 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 stormwater controls.

DENISON FACILITIES AND CONTROL INVENTORY

Facility	Address	Division	Registration, Authorization or Permit Number
Fairview Cemetery	1501 Hwy 75A	Cemetery	
City Hall	300 W Main	Administration	
Community-Senior Center	531 Chestnut St	Parks	
Fire Station	700 W Chestnut St	Fire	
Animal Adoption	3307 S Eisenhower Pkwy	Code	
West End Fire Station #2	2720 W Morton St	Fire	

Public Library	300 W Gandy St	Library	
Culpepper Ball Fields	1601 Loy Lake Rd	Parks	
Waterloo Ball Fields	1901 S Fairbanks	Parks	
Waterloo Pool	1500 W Brock	Parks	
T-Bar Ball Fields	Hwy 69	Parks	
Police Station	108 W Main St	Police	
Southside Fire Station	3500 S. Park Avenue	Fire	
Paw Paw Wastewater Treatment Plant	1500 E Sears St	Sewer	TXR05X608
NTRA Wastewater Treatment Plant	5401 Grayson Co Airport	Sewer	TXR05X609
Fleet Maintenance Facility	810 N Travis Ave	Vehicle Maintenance	
Water Treatment and Lab	4631 Randell Lake Rd	Water	
Environmental Services	1500 E Sears St	Sewer	

Staff Training

Appropriate employees are informed or trained in implementing pollution prevention and good housekeeping practices. A training attendance list is maintained for inspection by the TCEQ, when requested.

Disposal of Waste Material

Waste materials removed from the Denison small MS4 are disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.

Contractor Requirements and Oversight

Any contractors hired by Denison to perform maintenance activities on city facilities must be contractually required to comply with all the stormwater control measures, good housekeeping practices, and facility specific stormwater management operating procedures described herein.

Oversight of contractor activities is provided to ensure that contractors are using appropriate control measures and SOPs.

Municipal Operation and Maintenance Activities

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

Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by Denison and consistent with maintaining the effectiveness of the BMP.

APPENDIX A

**STORMWATER MANAGEMENT PROGRAM
BEST MANAGEMENT PRACTICES (BMP's)**

**PUBLIC EDUCATION, OUTREACH ON STORMWATER IMPACTS, INVOLVEMENT
AND PARTICIPATION – MCM No. 1**

Introduction

The Phase II Regulations require MS4 permittees to develop programs to educate the public about the impact of stormwater discharges on local waterways and the steps that citizens, businesses, and other organizations can take to reduce the contamination of stormwater. As the public gains a greater understanding of the benefits of stormwater management, an MS4 is likely to gain more support for the SWMP and increased compliance with the applicable regulatory requirements as the public understands how their actions influences water quality. Education and awareness programs help change human behavior with respect to reducing the amount of pollution generated from stormwater sources within the MS4 system. In addition to education, encouraging public participation in local stormwater programs can lead to program improvement as well as enabling people to identify and report a pollution-causing activity, such as spotting an illicit discharge.

Summary

During the previous permit term, the City began educating the public about stormwater quality issues using a variety of methods such as brochures, website information, and printed materials. During the new permit term, the City will continue outreach and involvement efforts by developing a comprehensive outreach campaign targeting Bacteria, Floatables, and Sediment. Public employee and construction community education are addressed under Good Housekeeping and Construction and Post Construction BMPs, respectively.

BMP'S	BMP Description	Deadline	Frequency	Responsible Party
1. Public Education & Outreach	Social media campaign on stormwater	Dec. 31	Semi-annual	City of Denison Community Engagement Division
Measurable Goal: The City of Denison will produce and post at least 1 public service announcement on stormwater and what the public can do to prevent stormwater impacts. Social media post will be conducted twice per year.				
	Brochures, fact sheets and mail outs	Dec. 31	Semi-annual	City of Denison Environmental Services Division
Measurable Goal: The City of Denison will produce and mail-out specific stormwater pollution prevention twice per year to 100% of those that receive a City Utility bill. The specific audience will include; restaurants, automotive repair/fuel stations and residential.				
	Watershed Signs	12/31/23	N/A	City of Denison Environmental Services Division
Measurable Goal: The City of Denison will produce and install five watershed signs to educate the public on the impact to the watershed from stormwater pollution.				

	City website stormwater page	Dec. 31	Annually	City of Denison Environmental Services Division
Measurable Goal: The City of Denison will review the websites stormwater page annually and revise as necessary to ensure stormwater pollution resources are current.				
	New hire orientation stormwater and sanitary sewer system training	Third Thursday	Monthly	City of Denison Public Works Administration
Measurable Goal: The City of Denison will provide all new hires with at least one educational training class on stormwater pollution prevention.				
2. Public Involvement and Participation	Pet waste management program	Dec. 31	Annually	City of Denison Parks & Recreation Division
Measurable Goal: The City of Denison will provide at least one pet waste disposal stations at 100% of the city's parks for the public to properly dispose of pet waste.				
	Trash off community event	Dec. 31	Annually	City of Denison Community Engagement Division
Measurable Goal: The City of Denison will coordinate a community clean-up event at least once per year and invite the public to join in the gathering of trash from roadways and drainage areas.				
	Storm drain labeling	Dec. 31	Annually	City of Denison Environmental Services Division
Measurable Goal: The City of Denison will provide labeling for ten (10) storm drain inlets annually. Local Boy Scouts and additional organizations or groups will be invited to participate in the labeling.				
	Targeted bacteria information for Iron Ore Creek	Dec. 31	Annually	City of Denison Utility Billing Division
Measurable Goal: The City of Denison will provide public education one time per year on the water bill targeting was to reduce bacteria pollution in the Iron Ore Creek watershed.				
	Household hazardous waste event	Dec. 31	Annually	City of Denison Community Engagement Division
Measurable Goal: The City will participate in collaboration with the Texas Council of Governments, the DEA and other organizations to provide at least 1 training event annually as a means of properly disposing of unwanted pharmaceuticals and hazardous waste.				

	Stormwater pollution prevention ordinance	Dec. 31	Annually	City of Denison Environmental Services Division
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Measurable Goal: The City of Denison will Review 100% of the Stormwater Pollution Prevention Ordinance by December 2019, and then annually (during the 5 years of the permit).

	New construction site applications	Last Day of Month	Monthly	City of Denison Environmental Services Division
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Measurable Goal: The City of Denison will review 100% all new construction applications for stormwater pollution prevention measures. An inventory of 100% of all active construction sites will be maintained and updated monthly. Stormwater inspectors will respond to 100% of complaints and reports of stormwater pollution. Additionally, periodic inspections of large subdivisions or construction sites will be done to determine any prohibited discharges into the MS4.

	Tours of treatment plants by school programs	Dec. 31	Annually	City of Denison Wastewater Treatment Division
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Measurable Goal: The City of Denison will lead at least one tour of the wastewater treatment plant operations. Annually, the City website will be reviewed and updated to ensure proper contact and scheduling procedure information.

	Keep Denison beautiful campaign	Mar. 31 Jun. 30 Sept. 31 Dec. 31	Quarterly	City of Denison Community Engagement Division
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Measurable Goal: The City of Denison will participate in Keep Denison Beautiful Campaign. The City will participate in at least one meeting, and swag will be purchased and distributed to advertise the campaign. The campaign website will be reviewed quarterly and updated as needed to include stormwater pollution prevention.

ILLICIT DISCHARGE DETECTION AND ELIMINATION – MCM No. 2

Introduction

Phase II stormwater management programs are required to address illicit discharges into the MS4 system. An illicit discharge is defined as any discharge to a municipal separate storm sewer system that is not composed entirely of stormwater, except allowable discharges pursuant to the TPDES general permit. In addition to requiring permittee to have the legal authority to prohibit non-stormwater and discharges from entering storm drains, MS4 permits must also require the development of an Illicit Discharge Detection Elimination (IDDE) program. In order to trace the origin of a suspected illicit discharge or connection, the permittee must have an updated map of the storm drain system and a formal plan of how to locate illicit discharges and how to respond to them once they are located or reported. The permittee must provide a mechanism for public reporting of illicit discharges and spills. Proper investigation and enforcement procedures must be in place to eliminate the sources of the discharges as well. In order for the permittee to adequately detect and eliminate sources of illicit discharges, field staff must be properly trained to recognize and report the discharges to the appropriate parties.

Summary

During the previous permit term, the City adopted an Illicit Discharge ordinance, and began training employees and responding to complaints. During this permit term, the City will document and revise, as necessary, the processes and procedures for illicit discharges including investigation and enforcement, implement the follow-up investigation for illicit discharges, and continue training employees.

OSSF Permitting Program

Grayson County administers and OSSF permitting and inspection program for Denison. State law requires property owners and on-site sewage facility installers to possess an on-site sewage facility permit issued by Grayson County before an on-site sewage facility is constructed, altered or repaired. Wastewater generated from commercial facilities must comply with the definition of sewage promulgated in State OSSF rules.

BMP	BMP Description	Deadline	Frequency	Responsible Party
1. ID Detection	SSO response plan	Dec. 31	Annually	City of Denison Environmental Services Division
Measurable Goal: The City of Denison developed a sanitary sewer overflow response plan. The SSO Response Plan is reviewed annually and conduct at least 1 training class on the SSO response plan for employees responsible for implementing the SSO Plan.				
	Storm drain mapping	12/31/2023	Year Three	City of Denison GIS Division
Measurable Goal: The City of Denison will develop a storm drain system map in the third year of this permit cycle.				
	SWPPP	Dec. 31	Annually	City of Denison Environmental Services Division
Measurable Goal: The City of Denison wastewater treatment plants will conduct a comprehensive site inspection and annually review the sites stormwater pollution prevention plan.				
	Smoke testing	Dec. 31	Annually	City of Denison Utilities Division
Measurable Goal: The City of Denison will conduct smoke testing of 29% of the sanitary sewer system to prevent illicit connections in a problem area annually.				
2. ID Elimination	Ordinance and enforcement procedures	Dec. 31	Annually	City of Denison Environmental Services Division
Measurable Goal: The City of Denison will review the Illicit Discharge Ordinance and the enforcement procedures by December 2019, and then annually (during the 5 years of the permit).				
	Dry weather monitoring/survey	12/31/2022	Year Four	City of Denison Environmental Services Division
Measurable Goal: The City of Denison will initiate the process of identify problems and illicit connections through dry weather monitoring of the Iron Ore watershed (locations to be determined in year three above). Once the monitoring is complete, areas detected suspicious will be further investigated.				

CONSTRUCTION SITE STORM WATER RUNOFF CONTROLS – MCM No. 3

Introduction

MS4 permittees must ensure that construction site operators select and implement appropriate erosion and sediment control measures to reduce or eliminate the impacts to receiving waters. The permit can require that permittees develop their own standards and specifications, but often it is preferable to require the permittees to utilize existing guidance that is approved by the permitting authority. The permittee must establish review procedures for construction site plans to determine potential water quality impacts and ensure the proposed controls are adequate. These procedures must include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. In addition, the permit must include requirements for inspection and enforcement of erosion and sediment control measures once construction begins. Educational materials for construction site operators can be useful in achieving cooperative compliance and minimize the necessity for enforcement actions.

Minimum Construction Site Operator Procedures

Erosion and sediment controls must be designed to retain sediment on-site to the extent practicable with consideration for local topography, soil type, and rainfall. Control measures must be properly selected, installed, and maintained according to the manufacturer's or designer's specifications. Construction General Permit TPDES General Permit TXR150000 Part III. F.(b). ~~Page 33~~. Controls must be developed to minimize the offsite transport of litter, construction debris, and construction materials.

Erosion control and stabilization practices may include but are not limited to: establishment of temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, slope texturing, temporary velocity dissipation devices, flow diversion mechanisms, and other similar measures. Erosion control and stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days. Stabilization measures that provide a protective cover must be initiated immediately in portions of the site where construction activities have permanently ceased. The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next workday, following the day when the earth-disturbing activities have temporarily or permanently ceased.

The City of Denison shall ensure that all small and large construction activities discharging to the small MS4 have developed and implemented a stormwater pollution prevention plan (SWP3) in accordance with the TPDES CGP TXR150000 and comply with all of the applicable requirements of TXR150000

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;
- d. Soaps or solvents used in vehicle and equipment washing; and
- e. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

Summary

During the previous permit term, the City adopted an Erosion Control and Illicit Discharge Ordinance, updated plan review and inspection procedures, trained inspectors, and developed educational material for site operators. During this permit term, previous program elements will be continued and enhanced, an inventory will be established, and procedures documented and revised as necessary. Code of Ordinance, Chapter 26, Article II – Division 6, requires operators of construction sites one acre and greater (including larger common plans) to select, install, implement, and maintain stormwater controls. These management elements are monitored for compliance to the extent allowable under state and local law.

BMP	BMP Description	Deadline	Frequency	Responsible Party
1. Construction Site Education	Contractor Training	Dec. 31	Annually	City of Denison Environmental Services Division

Measurable Goal: The City of Denison will provide contractors with at least one construction site educational training at time of new construction application. Additionally, refreshes will be sent out annually via email to all contractors. Refresher’s will include concrete washout barriers, erosion control, sediment tracking and construction site trash management.

	Storm Drainage Manual	Dec. 31	Annually	City of Denison Public Works Administration
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Measurable Goal: The City of Denison will review annually the stormwater drainage design standards manual for controlling stormwater pollution and flooding by December 31, then annually.

2. Builders and Developers	Meetings	Last Day of Month	Monthly	City of Denison, City Manager and DRT
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Measurable Goal: The City of Denison has a recurring open invitation for builders and developers to attend at least one meeting weekly with department heads in order to coordinate and obtain rules and requirements for control of construction site runoff. Additionally, builders are invited to a monthly meeting with the City Manager.

3. Tree Preservation Ordinance	Ordinance and enforcement procedures	Dec. 31	Annually	City of Denison Community Development Division
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Measurable Goal: The City of Denison will review ordinances and procedures for tree preservation by December 31, then annually.

POST CONSTRUCTION STORM WATER MANAGEMENT FOR NEW DEVELOPMENT/
REDEVELOPMENT – MCM No. 4

Introduction

Permittees are required to address new development and significant redevelopment in their SWMPs through controls to reduce pollutants in stormwater discharges after construction is completed. The Phase II regulations require regulated small MS4 operators to develop, implement, and enforce a program to address stormwater discharges from new development and redevelopment sites that disturb greater than or equal to one acre to the MS4 (including projects that disturb less than one acre that are part of a larger common plan of development or sale). The regulations also require that the MS4 ensure that control measures are installed and implemented that prevent or minimize water quality impacts.

As part of these Phase II requirements, the MS4 must:

- Develop and implement approaches to addressing post-construction stormwater discharges that include a combination of structural and/or non-structural controls;
- Adopt adequate legal authority to enable the MS4 to address post-construction stormwater discharges from new development and redeveloped sites; and
- Ensure adequate long-term operation and maintenance of applicable post-construction control measures.

Summary

During the previous permit term, the City adopted an Illicit Discharge Ordinance, updated plan review and inspection procedures, trained inspectors, and responded to complaints. During this permit term, previous program elements will be continued and enhanced, and procedures documented and revised as necessary.

BMP	BMP Description	Deadline	Frequency	Responsible Party
1. Ordinance Documents	Review Subdivision & Utility Ordinances and Design Manual	Dec. 31	Annually	City of Denison Environmental Services Division

Measurable Goal: The City of Denison will enforce the Subdivision and the Utility Ordinances annually to ensure that 100% post-construction stormwater management for new development and redevelopment compliance with the Subdivision and the Utility Ordinances.

2. Structural Controls	Develop a program for maintenance of structural stormwater controls	12/31/2022	Year Four	City of Denison Environmental Services Division
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Measurable Goal: The City of Denison will conduct an inventory of structural runoff controls, develop a GIS to integrate the location of these controls and conduct an inspection of 100% of structural stormwater controls.

3. Texas Smartscape Bookmarks/CD's	Distribute Texas Smartscape publications promoting post construction site maintenance	Dec. 31	Annually	City of Denison Environmental Services Division
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Measurable Goal: The City of Denison will order and distribute twenty-five (25) publications within 100% of the City offices where developers frequently are in and out.

POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS – MCM No. 5

Introduction

The TPDES General Permit requires the operator of a regulated MS4 community to develop a program to:

- Prevent or reduce the amount of stormwater pollution generated by municipal operations and conveyed into receiving waters.
- Train employees on how to incorporate pollution prevention/good housekeeping techniques into municipal operations.
- Identify appropriate control measures and measurable goals for preventing or reducing the amount of stormwater pollution generated by municipal operations.

The first step is to evaluate and assess the areas and municipal facilities that it controls in order to determine which activities may have a negative impact on water quality and to find solutions for these activities. The simplest solution is to limit the number of activities that are conducted outside and exposed to stormwater. Storm drain systems need maintenance to ensure that structures within the storm drain do not become sources of pollution. Regular maintenance of catch basins prevents the accumulation of pollutants that are later released during rain events as well as blockages, backups, and flooding. System mapping and regular maintenance are key to a successful pollution prevention program. It is also important for material that is collected to be disposed of in a responsible manner. Employee training to carry out these pollution prevention measures is a required component of the program. Specific pollution prevention requirements related to pollutant-generating activities such as landscaping techniques and operating and maintaining public streets, should also be considered. For example, typical pollutants associated with street repair and maintenance includes heavy metals, chlorides, hydrocarbons, concrete dust, sand, deicers, sediment, and trash. Training and educating staff is important to ensure that everyone is knowledgeable in the most effective approaches to minimize pollutant discharges from municipal facilities and activities.

Summary

During the previous permit term, the City performed structural control maintenance, street sweeping, and vehicle maintenance and began training employees. Spill Prevention and Response Plans were also implemented at appropriate facilities. This permit term, the City will continue previous program elements, amend contract language, and enhance its facility mapping.

BMP	BMP Description	Deadline	Frequency	Responsible Party
1. General employee training	New hire stormwater pollution prevention and annual refresher training	Dec. 31	Annually	City of Denison Environmental Services Division

Measurable Goal: The City of Denison will provide at least one training class for new hires on annual pollution prevention and good housekeeping measure for municipal operations.

2. Existing SWPPP	Good housekeeping and pollution prevention inspections	Dec. 31	Annually	City of Denison Wastewater Treatment Superintendent
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Measurable Goal: The City of Denison will conduct at least one annual comprehensive inspection of the NTRA and Paw Paw WWTPs to determine if current good housekeeping and pollution prevention is adequate. Any elements needing added or revised will be updated in the SWPPPs

3. Storm Sewer and Drainage Maintenance Program	Conduct inspections and maintenance of storm drain inlets	Dec. 31	Annually	City of Denison Street Maintenance Division
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Measurable Goal: The City of Denison will conduct annual inspections of 20% of the storm drain inlets and conduct maintenance.

4. Contractor Requirements and Procedures	Develop requirements and procedures for contractors	12/31/2022	Year Two	City of Denison Environmental Services Division
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Measurable Goal: The City of Denison will develop requirements and procedures for contractors working on site of municipal operations. These procedures will be developed in year two.

BEST MANAGEMENT PRACTICES FOR IRON ORE CREEK

Selected Bacteria Impairment BMPs

As required by the TPDES General Permit, the City has selected the following BMPs to specifically target bacteria loading reductions.

Sanitary Sewer System

Overflows from sanitary collection systems are infrequent, but when they occur, they can be a significant source of E. coli bacteria. Aging infrastructure in need of repair can also contribute to bacteria loadings. The City routinely inspects and repairs the sanitary sewer system in our most sensitive area which is along the Iron Ore Creek. Other areas of the cities are inspected and repaired as necessary.

Illicit Discharges and Dumping

The public can be our greatest ally in preventing illicit discharges, including sanitary sewer overflows, which can contribute to increased E. coli bacteria levels in the City’s waterways. Educating the public on the proper disposal of fats, oils, and grease can reduce the potential for overflows.

Animal Sources

Animals can be potential sources of E. coli bacteria. Within the City there is agricultural activity including cattle and other livestock. Species native to the Denison area are feral hogs, ducks, opossums, raccoons, turtles, skunks, etc. Household pets are present in numbers consistent with a primarily urban landscape. Denison provides pet waste stations throughout city parks.

BMP	BMP Description	Deadline	Frequency	Responsible Party
1. Sanitary Sewer System	Make improvements to the Iron Ore Interceptor to reduce I&I	December 31, 2021	N/A	The City of Denison Public Works Division
Measurable Goal: Contract for construction of sanitary sewer line and manholes.				
	Evaluate for adequate pumping capacity and/or storage at Iron Ore Lift Station	January 24, 2024	N/A	The City of Denison Public Works Division
Measurable Goal: A report on flow data and pumping efficiencies for Iron Ore Lift Station.				

	Conduct at least one class to train team members on reporting overflows	December 31	Annually	Assistant Director of Public Works
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Measurable Goal: Conduct at least 1 training class and maintain a training log for documenting events.

2. Ilicit Discharges and Dumping	Conduct Food Service Establishment inspections for proper documentation of grease waste removal.	December 31	Annually	The City of Denison Environmental Services Division
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Measurable Goal: A schedule for conducting inspections of 20% of know grease traps.

3. Residential Education – Animal Sources	Provide annual awareness of proper pet waste disposal on water bills.	December 31	Semi-Annually	The City of Denison Environmental Services Division
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Measurable Goal: A water bill insert will be mailed to 100% of the City’s residential customers two times per year customer.

4. Residential Education – FOG	Provide social media post to educate on the proper disposal of fats, oil and grease (FOG).	December 31	Semi-Annual	The City of Denison Environmental Services Division
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Measurable Goal: Post educational articles on the problems associated with FOG and ways to properly dispose of FOG using social media.

APPENDIX B

SWMP REVISION LOG

SWMP Version	Published Date	Pages Affected	Description of Revision	Notice of Change Required
2019	July 16, 2019	All	Original	No
2022 Revision	February 15, 2022	1	Revision Date	No
		4	Updated TPDES acronym	
		9	Updated personnel	
		10	Updated FWPCA acronym	
		12	Added endangered species	
		15	Revised MCM No. 3 to comply with TXR040000 Part III.B.3(a) and ..(b)(2)d	
		18	Updated Environmental Services address	
		21-31	Revised Measurable Goals to meet TXR040000 Part III.A.2.(c)	
		32	Revise permit expiration date	

This Table is used to register all changes made to the SWMP.

APPENDIX C

SWMP REVIEW LOG

SWMP Version	Review Date	Reviewer Name	Revision Needed	Notice of Change Required
2019	July 16, 2019	James Moon	NA	NA

This Table is used to register annual reviews of the SWMP.

