

Phase II
Stormwater Management Program
(SWMP)

for

City of Sapulpa, Oklahoma



Effective Date:
June 01, 2021

Revised April 2025

SIGNATURES OF RESPONSIBLE OFFICIALS

for the City of Sapulpa, Oklahoma

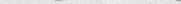
The following certification is hereby made in order to comply with the signatory requirements of the State of Oklahoma's Phase II Stormwater General Permit for Small Municipalities (OKR04).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Joan Riley
Sapulpa City Manager

4-28-25

Date


Sapulpa Public Works Director

4-28-25

Date

Amoolu Kononcuka

4-28-25

Date

EXECUTIVE SUMMARY

The City of Sapulpa has prepared this Stormwater Management Program (SWMP) document which provides descriptions of all activities that will be conducted on behalf of the City of Sapulpa to meet its obligations under the Oklahoma Department of Environmental Quality (ODEQ) General Permit for Phase II Small Municipal Separate Storm Sewer System Discharges Within the State of Oklahoma (OKR04), having an effective date of June 01, 2021.

Copies of this SWMP will be kept in-house for review by ODEQ upon request. Per OKR04 Part V.D, this SWMP document will be kept up to date during the term of the permit. Interim progress will be made in developing and implementing program elements during the term of the permit.

All six Minimum Control Measures (MCMs) have been addressed in this SWMP. In addition, the City of Sapulpa has elected to NOT participate in the “Optional Permit Requirements for Municipal Construction Activities.”

Each MCM has a number of Best Management Practices (BMPs) that constitute the core activities pertaining to each MCM. Appendices summarize the BMPs and provide Measurable Goals for each BMP, along with activity descriptions and implementation schedules. In addition, the SWMP text provides additional information about the MCMs.

Every reasonable effort has been made to comply with all requirements in the State’s OKR04 General Permit for Small Municipal Separate Storm Sewer Systems (SMS4s). This SWMP document will be amended as needed to reflect program and implementation changes per requirements of ODEQ and the OKR04 permit.

To help implement certain aspects of the Phase II requirements, particularly regarding public education, public participation, illicit discharge detection and elimination, training of city staff and crews, the City of Sapulpa will receive assistance from the Indian Nations Council of Governments (INCOG) as a member of INCOG’s Green Country Stormwater Alliance (GCSA). Through GCSA, INCOG will provide regional services related to stormwater education, employee training and technical support. INCOG’s activities are described where appropriate in the SWMP.

To help implement certain aspects of the Phase II requirements, particularly regarding public education and participation and illicit discharge detection and elimination, the City of Sapulpa will receive assistance from the City of Tulsa, Regional Household Pollutant Collection Facility. The City of Tulsa, Regional Household Pollutant Collection Facility activities are described where appropriate in the SWMP.

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I. INTRODUCTION

In 1990 the U.S. Environmental Protection Agency (EPA) promulgated regulations for establishing water quality based municipal stormwater programs to address stormwater runoff from certain industrial and construction activities and from medium and large Municipal Separate Storm Sewer Systems (MS4s) serving populations of 100,000 or greater. These “Phase I” regulations were incorporated into the existing National Pollutant Discharge Elimination System (NPDES) permit rules that address point source dischargers. As a result, urban nonpoint source runoff became regulated as point source discharges. On December 8, 1999, EPA published final “Phase II” stormwater regulations that addressed urban stormwater runoff from cities under 100,000 population and counties that lie within the Urbanized Area (UA) as designated by the latest US Bureau of Census. Phase II permits were also required for certain non-UA cities designated by the Oklahoma Department of Environmental Quality (ODEQ).

The current OKR04 permit cycle requires all permitted cities and counties to develop a comprehensive Stormwater Management Program (SWMP) that addresses six “Minimum Control Measures” (MCMs). These are:

1. Public Education and Involvement
2. Industrial Stormwater Runoff Control – This MCM applies only to Category 3 MS4s
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Management in New Development and Re-Development
6. Pollution Prevention/Good Housekeeping MS4 Operations

The ODEQ has primary jurisdiction over permitting and enforcement of the Phase II Stormwater Program for Oklahoma. The current permit has an effective date of June 1, 2021 and shall expire at midnight on May 31, 2026. The revised OKR04 permit reflects new requirements from EPA and the latest practices for controlling urban stormwater pollution.

OKR04 requires that each permittee submit a Notice of Intent (NOI) to apply for coverage and develop a Stormwater Management Program (SWMP) document that specifies, for each MCM, what activities will be performed as Best Management Practices (BMPs), along with BMP target audience, implementation schedules, Measurable Goals, and who will be responsible for implementing or coordinating the BMPs.

This SWMP document fulfills the OKR04 General Permit requirement to prepare a detailed plan of how the City of Sapulpa will address non-stormwater discharges within its permitted MS4 and Urbanized Area.

II. SWMP OVERVIEW AND SPECIAL REQUIREMENTS

II.A Regulatory Authority

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.) as required under Section 122.34(d)(2) of the Storm Water Phase II Rule, and with the provisions under the Oklahoma Pollutant Discharge Elimination System, OAC 252:606-1-3(b)(3) incorporating by reference 40 CFR §122.26 and 122.30 through 122.35, operators of Small Municipal Separate Storm Sewer Systems (SMS4s) are authorized to discharge in accordance with the conditions and requirements set forth in the OKR04 permit and this SWMP. The Phase II regulations issued by the EPA can be found in FR Vol. 64 No. 235, December 8, 1999, beginning on page 68722, and became effective on February 7, 2000.

The 2021 OKR04 General Permit is a reissuance by the ODEQ with an effective date of June 01, 2021. The OKR04 General Permit and the authorization to discharge shall expire May 31, 2026. As provided in the permit, operators of SMS4s who submit a Notice of Intent (NOI) and a description of their Storm Water Management Program (SWMP) in accordance with PART V of the general permit are authorized to discharge pollutants to waters of the State in accordance with the conditions and requirements set forth in the general permit.

The OKR04 permit authorizes discharges of storm water and certain non-storm water discharges from SMS4s, as defined in OAC 252:606-1-3(b)(3) incorporating by reference 40 CFR §122.26(b) (16). This includes MS4s designated under 40 CFR §122.32(a)(1) and 40 CFR §122.32(a)(2) that describes the referenced area with a population of at least 10,000 but not exceeding 100,000, and SMS4s located in Urbanized Areas (UA). Other operators of SMS4s located outside of a UA have also been designated by ODEQ as a regulated MS4.

This SWMP document specifies all of the actions that the City of Sapulpa will take to comply with the stormwater regulations and address the six “Minimum Control Measures” and the special conditions compliance with water quality standards as required by EPA and OKR04 for a successful stormwater program.

The City of Sapulpa herein declares our commitment to ensure the implementation of all requirements in our Stormwater Management Program (SWMP) document regarding protection of water quality in the 303(d) impaired waterbodies within our MS4, and to implement all TMDL requirements specified in each TMDL document in which our MS4 has been included. The City of Sapulpa has no Aquatic Resource of Concern (ARC) or Outstanding Resource Waters (ORW) within city limits, therefore, no additional requirements as specified in SWMP and SWMP attachments. These three areas of special water quality protection in the SWMP address all requirements of OKR04’s Part III Special Conditions.

All information contained in this SWMP represents a good faith effort on the part of the City of Sapulpa to comply with all requirements of the ODEQ's Phase II General Permit for Small MS4s (OKR04). This SWMP will be reviewed annually and amended, as needed, to provide greater efficiency and for meeting additional requirements that may be forthcoming under OKR04 or from other regulatory changes.

II.B SWMP Organization

The City of Sapulpa will participate in INCOG's Green Country Stormwater Alliance (GCSA), a regional coalition of stormwater permitted cities and counties in Oklahoma. Members of INCOG's GCSA will collectively fund through annual membership dues certain regional activities and technical assistance provided by INCOG that are described in this SWMP. INCOG's support services will include assistance in the following areas:

Public education and participation;

Mapping of MS4s, 303(d) waterbodies and TMDLs;

Employee training on OKR04-required topics and technical, scientific and legal issues;

Sampling, monitoring and quality assurance;

GCSA member education about water quality, sensitive waterbodies, TMDLs, etc.

Educating local councils, commissions and management about OKR04 requirements.

Development of local codes and ordinances, and

Data management and reporting.

This SWMP addresses all elements of the ODEQ's General Permit for MS4s (OKR04). The six Minimum Control Measures from OKR04 Part V.C are addressed in the SWMP [Section III](#).

[Appendix A](#) is a summary table of all BMPs to be used in the City of Sapulpa's program, including year-by-year schedules of implementation and Measurable Goals for each BMP.

[Appendix B](#) documents the endangered species protection determination for the City of Sapulpa. [Section II.K](#) of the SWMP provides a Plan of how the City of Sapulpa will address the impairments of 303(d) listed waterbodies within the MS4. [Section II.L](#) of the SWMP discusses how the requirements under Total Maximum Daily Load (TMDL) studies or Watershed Plans within the MS4 area will be met by the permittee. [Appendix C](#) contains a map of the MS4 boundaries for the City of Sapulpa. The map also shows the Waters of the State, 303(d) waterbodies, ARC waterbodies, and completed TMDL waterbodies that are within the MS4.

II.C Authorized Allowable Non-Stormwater Discharges – OKR04 Part II.B

The City of Sapulpa has determined that the following non-storm water sources are not substantial contributors of pollutants to the MS4 or result from activities to protect public health and safety and are therefore allowed (see assessment summary table below):

- a. Water line flushing;
- b. Landscape irrigation;
- c. Diverted stream flows;
- d. Rising ground waters;
- e. Residential building wash water without detergents;
- f. Uncontaminated pumped ground water;

- g. Uncontaminated ground water infiltration;
- h. Discharges from potable water sources;
- i. Foundation drains;
- j. Air conditioning condensate;
- k. Irrigation water;
- l. Springs;
- m. Water from crawl space pumps;
- n. Footing drains;
- o. Lawn watering;
- p. Individual residential car washing;
- q. De-chlorinated swimming pool discharges;
- r. Street wash water;
- s. Fire hydrant flushings;
- t. Non-commercial or charity car washes;
- u. Discharges from riparian areas and wetlands;
- v. Discharges in compliance with a separate Oklahoma Pollutant Discharge Elimination System (OPDES) or National Pollutant Discharge Elimination System (NPDES) permit.
- w. Unless otherwise permitted or regulated by DEQ discharges of gray water from municipal splash pads (aka, spray parks or spray grounds) as defined in Oklahoma Statutes §27A-2-6-107 provided the discharges comply with all applicable municipal or county ordinances enacted pursuant to law, Discharges from recirculating systems shall be de-chlorinated prior to discharge; and
- x. Discharges or flows from emergency firefighting activities provided procedures are in place for the Incident Commander, Fire Chief, or other on-scene firefighting official in charge to make an evaluation regarding potential releases of pollutants from the scene. Measures must be taken to reduce any such pollutant releases to the maximum extent practicable subject to all appropriate actions necessary to ensure public health and safety. Discharges or flows from firefighting training activities are not authorized by this Permit.

Firefighting Activities: The local incident commander at the firefighting scene will report to the City of Sapulpa Environmental Administrator or Code Enforcement Officer any observed releases of chemicals into the MS4 and/or waterbodies. If local remediation is possible, the following will be implemented by City of Sapulpa, Fire Department and/or Public Works crews and consist of deploying absorbents, chemical neutralizers and/or booms and water skimmers to contain, neutralize and/or remove the chemicals. If the release is beyond the capability of local resources to safely and effectively remediate, then the City of Sapulpa will contact Sooner Emergency Service Inc., 2244 North 32nd, Muskogee, OK 74401, phone number; 918-683-2936 for large-scale hazardous waste remediation. Secondary Environmental Remediation Specialist, Inc. 1105 N. Peoria Avenue, Tulsa, OK 74106 1-800-700-0777 (alternate phone number) (918) 832-8888.

The list of occasional, incidental, allowable non-stormwater discharges will be periodically reviewed by the City of Sapulpa and updated, as needed, in this SWMP. Any local controls or

discharge conditions required by the City of Sapulpa on these incidental discharges will also be placed in this SWMP. The following table summarizes the assessments made by the City of Sapulpa for each of the allowable non-stormwater discharges.

ALLOWABLE DISCHARGE	SAFETY (1)	IMPACT (2)	NATURAL (3)	PERMIT (4)
a. Water line flushing	X			
b. Landscape irrigation		X		
c. Diverted stream flows	X		X	
d. Rising ground waters			X	
e. Residential building wash water, no detergents		X		
f. Uncontaminated pumped ground water		X	X	
g. Uncontaminated ground water infiltration			X	
h. Discharges from potable water sources	X			
i. Foundation drains	X			
j. Air conditioning condensate		X		
k. Irrigation water		X		
l. Springs			X	
m. Water from crawl space pumps	X			
n. Footing drains	X			
o. Lawn watering		X		
p. Individual residential car washing		X		
q. De-chlorinated swimming pool discharges		X		
r. Street wash water	X			
s. Fire hydrant flushings	X			
t. Non-commercial or charity car washes		X		
u. Discharges from riparian areas and wetlands			X	
v. Discharges with a OPDES or NPDES permit				X
w. Gray water from municipal splash pads	X	X		
x. Discharges or flows from emergency firefighting	X			

- (1) Overriding public health and safety concerns make this allowable.
- (2) Flow or source is intermittent or small; not considered to be a significant source.
- (3) Flow from natural processes, mostly intermittent; not considered a significant source.
- (4) Authorized and allowed under another OPDES or NPDES permit.

II.D Historic Preservation – OKR04 Part II.D

The Oklahoma DEQ's OPDES permitting activities are not Federal undertakings and, therefore, are not subject to review under Section 106 of the National Historic Preservation Act. However, applicants and permittees must comply with the Oklahoma State Register of Historic Places Act ([53 O.S. § 361](#)), where applicable, and the Burial Disturbance Law ([21 Oklahoma Statutes \(O.S.\) §§ 1168.0-1168.6](#)), as well as with any applicable local laws concerning the identification and protection of historic properties.

OKR04 permittees who receive Federal funding or other Federal assistance in the completion of their OKR04-related projects may have to comply with Section 106 of the Historic Preservation Act. For information about the Section 106 review process in Oklahoma, Oklahoma properties listed on or eligible for the National Register of Historic Places, and related topics, the following shall be contacted:

State Historic Preservation Office

Oklahoma Historical Society

Oklahoma History Center

800 Nazih Zuhdi Drive

Oklahoma City, OK 73105

Tel: (405) 521-6249

To identify historic properties, go to the following website at:

<http://www.okhistory.org/index>

Oklahoma Archeological Survey

111 East Chesapeake

Norman, OK 73019

Tel: (405) 325-7211

To identify archeological sites go to the following website at:

<http://www.ou.edu/cas/archsur/>

The City of Sapulpa will comply with OKR04 Part II.D (Historic Preservation) whenever permit related activities require such action. This will include communications with the State Historic Preservation Office and Oklahoma Archeological Survey to discuss what actions the City of Sapulpa may have to take to comply with rules governing preservation of historical sites and resources, including compliance with the Oklahoma State Register of Historic Places Act and the Burial Disturbance Law of Oklahoma. It is understood that normal OKR04 permit-compliance actions taken by the City of Sapulpa under OKR04 do not require Section 106 review under the National Historic Preservation Act.

II.E Meeting Eligibility Criteria for Endangered Species – OKR04 Part II.E

The City of Sapulpa has reviewed the eligibility criteria and requirements of OKR04's Part II.E and found no Aquatic Resources of Concern (ARC) within the Sapulpa city limits. No further

action is required at this time. If a waterbody is designated as ARC in the future, the City of Sapulpa will re-address this Section and criteria.

II.F Information on the MS4 – OKR04 Part III.B.2

Urbanized Area (UA) or Core Municipality: For permitted cities, the MS4 is all of the area within the city corporate boundaries. [Appendix C](#) contains a map of the City of Sapulpa's MS4 area. The following latitude-longitude coordinates are of the City of Sapulpa's City Hall:

Latitude: 35°59'55" N

Longitude: 96°06'51" W

Names of Major Receiving Waters: The City of Sapulpa's MS4 discharges to the following major receiving waters; the table notes the designations of 303(d), ORW, TMDL and ARC for each:

Waterbody Name	WBID (1)	303(d) (2)	ORW (3)	TMDL (4)	ARC (5)
Rock Creek	OK120420020060_00	X			
Nickel Creek	OK120420020040_00	X			
Sahoma Lake	OK120420020130_00	X			
Polecat Creek	OK120420020050_00	X		X	
Pretty Water Lake	OK120420020150_00				
Euchee Creek	OK120420020080_00				
Bivens Creek	OK120420020070_00				
Mooser Creek	OK120420010070_00	X			

(1) WBID = Waterbody ID identifier, used by ODEQ and other agencies in Oklahoma.

(2) 303(d) = Waterbody is on the 2014 303(d) list of impaired waterbodies.

(3) ORW = Waterbody is listed by the OWB as an Outstanding Resource Water.

(4) TMDL = Waterbody has a completed and EPA/ODEQ approved TMDL study.

(5) ARC = Aquatic Resources of Concern; see ARC list and map in OKR04 Exhibit 1.

303(d) and Completed TMDL Waterbodies: The City of Sapulpa has reviewed the latest lists of waterbodies from ODEQ within its MS4 boundaries that have 303(d) impairment and/or completed Total Maximum Daily Loads (TMDLs). The table above lists which of the major receiving waters are listed as 303(d) impaired, have a completed TMDL, are designated as Aquatic Resources of Concern (ARC), or are listed as Outstanding Resource Waters (ORW). The SWMP describes how each of these special conditions will be addressed by the City of Sapulpa.

II.G Relying on Another Government Entity – OKR04 Parts III.D, V.A.5, VI.C.1.i

OKR04 Part III.D allows you to partner with other MS4s to develop and implement your SWMP. Each co-permittee must complete a separate NOI form and your SWMP must clearly describe which permittees are responsible for implementing each control measure. Part V.A. 5 states that implementation of one or more of your stormwater MCMs may be shared with another government entity but only if there is a written agreement that they will implement the MCM on your behalf. This written agreement must be maintained as part of your SWMP. Part VI.C.1.i (regarding Annual Report contents) requires a written agreement with “another government entity” if you are relying on them “to satisfy some of your permit obligations”.

The City of Sapulpa herein indicates in the tables below all entities with whom we are working collaboratively. [Appendix D](#) contains copies of all written agreements from the entities identified below to accomplish MCMs and BMPs on behalf of the City of Sapulpa.

OKR04 Part II.B.3: Another Permitted Government Entity Already Regulated:

Government Entity	Permit Obligation to be Completed by Permitted Entity
none	none

OKR04 Part IV.A.5: Another Government Entity Responsible for MCMs:

Government Entity	MCM(s) to be Completed by Entity
City of Tulsa	Collect Household Hazardous Wastes & Report Totals to Sapulpa

OKR04 Part V.C.1.g: Another Government Entity Reported in Annual Report:

Government Entity	Permit Obligations to be Completed by Entity
INCOG	Host GCSA regional stormwater website: www.stormwaterok.net
INCOG	Conduct Employee Training on OKR04-required topics.
City of Tulsa	Household Pollutant Collection Facility Operations & Data Management

II.H Certification of Compliance with Part IV – OKR04 Part II.E.2.a

The City of Sapulpa hereby certifies compliance with all Part IV requirements by taking the actions as stated in the various parts of this signed SWMP. This certification declaration is required to be made under OKR04 Part II.E.2.a.

II.I Co-Permittees

The City of Sapulpa has elected not to share OKR04 compliance with another entity as a co-permittee.

II.J Compliance with Water Quality Standards - OKR04 Part IV.A

OKR04 Part IV.A.1 has eight action items (1.a through 1.h) that must be addressed in the SWMP to protect 303(d) listed waters. The MS4's 303(d) listed waters are covered in Section II.J of the SWMP and are referenced by their OKR04 Parts. [Appendix B](#) contains a map of the MS4 including the locations of 303(d) impaired waters, ARC and TMDL waterbodies.

II.K Addressing 303(d) Impaired Waterbodies and Pollutants of Concern (POCs)– OKR04 Part IV.A.1

In 2020, the 303(d) List was updated in Oklahoma. After reviewing this list, the City of Sapulpa identified the following impairments within the MS4 :

2020 303(d) Listed Waterbodies Within the City of Sapulpa MS4:

Waterbody Name	WBID	Impairment Causes
Rock Creek	OK120420020060_00	Benthic Macroinvertebrates
Nickel Creek	OK120420020040_00	E. coli
Sahoma Lake	OK120420020130_00	Mercury
Polecat Creek	OK120420020050_00	Benthic Macroinvertebrates
Mooser Creek	OK120420010070_00	E. coli

OKR04 Part IV.A.1.a: (303d & POCs Plan)

The City of Sapulpa has identified bacteria and sediment/turbidity as pollutants of concern (POCs). These POCs were determined utilizing 303(d) impairments, TMDLs, habitat assessments, IDDE, citizen complaints/work orders, and general staff knowledge of water quality within Sapulpa city limits.

In order to protect 303(d) impaired waters and not cause or contribute to a violation of water quality standards, the City of Sapulpa has created the following plan which lists BMPs to be implemented to reduce the 303(d) pollutants of concern. These special BMPs have been selected by the City of Sapulpa as being the most feasible and effective for reducing pollutants of concern in stormwater runoff. Appendix C contains a map of the MS4 with respect to 303(d) waterbodies.

The following table of BMPs represents the BMP implementation approach that the City of Sapulpa will take to address 303(d) impairment and POCs. These special BMPs will be

implemented to ensure that stormwater discharges from the MS4 will not cause, have the reasonable potential to cause, or contribute to an in-stream exceedance of water quality standards.

Table of BMPs and Pollutant Reduction Expectations for Addressing 303(d) Impairments and POCs:

303(d) Pollutant(s)	Best Management Practice (BMP)	Pollutant Reduction Expectations
Bacteria, Benthic Macroinvertebrates, DO, Turbidity	Develop a pollutant source inventory in 303(d) watersheds and set priority areas.	Pollutant source inventory will include private sanitary sewer systems, areas with deteriorating sanitary sewer infrastructure, RV dump sites, and businesses/properties with animal related activities. The City of Sapulpa will use the inventory to target businesses for pollution prevention education. The City will perform an inspection of target businesses and areas and will take appropriate actions as necessary.
Bacteria, Benthic Macroinvertebrates, DO, Turbidity	Prioritize dry weather field screening (DWFS) site inspections in 303(d) watershed priority areas.	Illicit discharges can be directly observed at time of DWFS and traced to the source for removal.
Bacteria	Reduce exposure of materials to rainfall at municipal facilities.	Pollutant reductions from municipal facilities will be significant. This BMP will require periodic inspections and employee education. Any materials that must be stored outdoors either temporarily or permanently will be sanitized prior to storage. All spoils from sanitary sewer maintenance will be disposed of in the WWTP sludge drying bed and subsequently hauled to a landfill.
Bacteria, Benthic Macroinvertebrates, DO, Turbidity	Conduct employee education for municipal inspectors on pollution in runoff.	This BMP will cover all potential pollution sources within a typical MS4 and the OKR04 compliance strategies required for reducing runoff contamination.
Bacteria, Benthic Macroinvertebrates, DO, Turbidity	Distribute print education materials to local businesses about controlling pollution in runoff.	This BMP effectiveness will rely upon how well the local business or facility uses the practices recommended in the education material.

Bacteria	Develop and mail a pet waste educational brochure to all Sapulpa Utility Billing account holders.	This BMP will target homeowners. It will provide information on controlling pet waste disposal on residential properties to reduce bacteria in runoff.
Bacteria	Install pet waste stations in city parks.	This BMP will target pet owners. It will provide the controlling of pet waste disposal on city park property to reduce bacteria in runoff.
Bacteria	Negotiate and implement an inspection program for private sanitary sewer systems within watershed priority areas.	An inspection program will ensure that new private sanitary sewer systems are installed correctly and permitted by ODEQ to reduce bacteria in runoff.
Bacteria	Televise and correct defective City of Sapulpa sanitary sewer system as needed.	Televising the City of Sapulpa sanitary sewer system will identify any defects in the infrastructure and lead to significant reductions in pollutant loading.
Bacteria	Implement and maintain a sanitary sewer system maintenance	All sanitary sewer system overflows/bypasses are corrected as soon as possible.
Bacteria	Review and update Engineering Design Criteria, Ordinances and Codes.	The City of Sapulpa will discuss and consider updating the Engineering Design Criteria, Ordinances and Codes to promote the use of structural stormwater BMPs that have been shown to be effective in bacteria removal.
Bacteria	Develop and enforce regulations for the use of portable toilets at events and construction sites.	Develop and enforce regulations that portable toilets must be anchored to the ground and located away from adjacent stormwater conveyances. This will prevent portable toilets from tipping over and subsequent spillage. The City will develop regulations that portable toilets will not be allowable in floodplain areas.
Benthic Macroinvertebrates	Educate SMAPC and City Council regarding the allowance of mining and/or sediment causing businesses and activities directly adjacent to waterbodies impaired for macroinvertebrates.	While more data/information is required for the cause of impairment, prevention of sedimentation may significantly aide in restoration of macroinvertebrate habitat.
D.O.	Distribute print education materials to lawn care businesses about controlling fertilizer applications.	This BMP will rely upon how well the local businesses use the practices recommended in the education material.

OKR04 Part IV.A.1.b: (Target Audiences)

The City of Sapulpa has selected its public education and outreach BMPs and activities based upon the types of residential, industrial, commercial and institutional pollutant sources that are known or anticipated to exist within the MS4 and also have the greatest potential to discharge pollutants in their stormwater runoff. By focusing the types of education materials on high priority target audiences, the City of Sapulpa will have greater success in reducing pollution through its education outreach program.

OKR04 Part IV.A.1.c: (Non-Stormwater Discharges)

At this time, the City of Sapulpa has not identified any specific non-stormwater discharges that contribute significant pollutants to Benthic Macroinvertebrates, DO, and Turbidity impaired waters.

The City of Sapulpa has examined potential non-stormwater discharges within its MS4 that could likely contribute significant pollutants to 303(d) impaired waters. The City of Sapulpa will continue to identify potential bacterial pollutant sources and update this table as necessary. The following potential discharge sources have been identified within the MS4:

Source Identifier	Location	303(d) Pollutants	Notes
Dirt/Mineral Mines	Polecat Creek Near 49 th West Avenue	Benthic Macroinvertebrates	Mining has occurred on the banks of Polecat Creek itself. The apparent/possible cause for Benthic macroinvertebrate impairment is lack of habitat due to depth and sedimentation. The mines are located in Creek County, not City
Illicit Connection to MS4	Dewey & Elm	Bacteria	Illicit connection project has been corrected.
Food Service Establishments	Various	Bacteria	Previous investigations have shown that the majority of SSOs were due to FOG blockages in the sanitary sewer

OKR04 Part IV.A.1.d: (Inspect Illicit Discharges in Priority Areas)

The City of Sapulpa has established a program to inspect and enforce illicit discharges within the MS4. Priority areas for potential pollutants of concern within the impaired watersheds have been established, and they are identified in SWMP Section III.C. Data from other agencies and sources, when available, will be obtained and used to assess potential sources. The City of Sapulpa has a BMP to prioritize and conduct inspections within these 303(d) priority areas to identify and characterize the sources of the 303(d) pollutants of concern. When illicit discharges are identified, the City of Sapulpa will utilize any of the following procedures to track the source: televising, dye testing, or smoke testing. Details of this inspection and enforcement program are presented in Section III.C of this SWMP.

OKR04 Part IV.A.1.e: (Operation & Maintenance; Assess New & Existing Flood Management Projects)

1. Operation and Maintenance (O&M) for Structural and Non-Structural Controls- :

The City of Sapulpa has developed the following procedures to address O&M of all city-owned flood management structural controls required in OKR04 Part IV.A.1.e. O&M of privately owned structures is discussed separately below, followed by a discussion of O&M of non-structural controls.

O&M of City Owned Structural Stormwater Controls:

The City of Sapulpa defines city owned structural stormwater controls to mean any physical structure owned and maintained by the City of Sapulpa, including: retention and detention basins/ponds, constructed wetlands, rain gardens, bioretention cells, and other physical stormwater structures owned by the City of Sapulpa that are designed for managing stormwater discharge.

The following table summarizes the O&M program for city-owned structures.

Summary of O&M Procedures for City-Owned Structures:

O&M Procedure	Frequency	Methods	Limitations
Detention / Retention Ponds	Visual inspections during DWFS; maintenance as needed. (1)	Visual inspection using city staff. Maintenance depending on factors (1).	Funding sources could be a limitation for maintenance on large-scale regional detention/
Outfalls and Channels (2)	Visual inspections performed during DWFS & regular maintenance; maintenance as needed. (1)	Visual inspection using city staff. Maintenance depending on factors (1).	Modifications to structure may need to be coordinated with other changes in the flood basin.

(1) Decision on repair / replacement of features will depend upon factors such as cost, age, future effectiveness of structure, and availability of materials and resources.

(2) Outfalls are defined here as being the point where storm sewer infrastructure discharges to waterbody. Large channels are those with hard surface lining, at least 5' bottom width and either vertical or sloped sides.

O&M of Privately Owned Structural Stormwater Controls:

The City of Sapulpa defines privately owned structural stormwater controls to mean any physical structure not owned and maintained by the City of Sapulpa, instead being owned and maintained by a private interest, such as a business, individual or Homeowners Association. Types of privately-owned stormwater structures will include: wet and dry retention and detention basins and ponds; culverts and open channels that are privately owned and for which the owner or association has an obligation under city ordinance to maintain; and physical stormwater structures privately owned that are designed for managing stormwater flow and direction.

The City reviews the O&M program language during the Plat review process to ensure that O&M procedures of privately owned structural stormwater controls are clearly delineated on the Plat as per listed requirements. This includes clear delineation of ownership, maintenance responsibility, annual inspection, and mowing during growing season. The City will use Code Enforcement actions and residential complaints to ensure proper operation and maintenance.

Summary of O&M Procedures for Privately Owned Structures:

O&M Procedure	Frequency	Methods	Limitations
Detention / Retention Ponds	Annual visual inspections; maintenance as needed. (1)	Visual inspection by owner. Maintenance depending on factors (1).	High priority given to structures that are new with a projected long life and greater usefulness. Owner must abide by all local codes and ordinances.
Other Stormwater Control Measures	Annual visual inspections; maintenance as needed. (1)	Visual inspection by owner. Maintenance depending on factors (1).	Modifications to structure will need to be coordinated with the city regarding how the project will impact the flood basin.

(1) Decision on repair / replacement of features will depend upon factors such as cost, age, future effectiveness of structure, and availability of materials and resources.

O&M of City Owned Non-Structural Stormwater Controls:

The City of Sapulpa defines city owned non-structural stormwater controls to mean any stormwater-related program implemented by the City of Sapulpa, including: preservation of open space; expanding disconnections of impervious surfaces; expansion of vegetation and natural systems; grass swales and other types of natural, vegetated infiltration areas; and protection and expansion of riparian stream buffers. The City of Sapulpa will not impose requirements of non-structural controls on private property. Hence there will be no O&M actions needed regarding privately owned non-structural controls. Instead, the City of Sapulpa will encourage and provide education about such programs as private development expands within the City of Sapulpa.

The following table summarizes the O&M program for city owned non-structural controls.

Summary of O&M Procedures for City-Owned Non-Structural Controls:

O&M Procedure	Frequency	Methods	Limitations
Preserving a 10-foot buffer/riparian area adjacent to city maintained creeks/ drainage channels.	Maintenance performed as needed.	The City will utilize a flail mower to mow the riparian area. The flail mower will allow vegetation to grow to a height of 12" and therefore act	Limiting factors would be easements and access.

2. Assess Water Quality Impacts from New Flood Management Projects:

The second requirement in OKR04 Part IV.A.1.f applies to proposed new flood management projects that will be within 303(d) watersheds, and it addresses the pollutants of concern in the 303(d) listings. The City of Sapulpa has prepared the following assessment procedures summary (below).

The City of Sapulpa will implement an assessment program for new flood management projects that must be completed prior to issuance of building permits. To make this pre-design process work smoothly, the City of Sapulpa will provide input to applicants of building permits so that they can have time to prepare their plans and specifications to

meet all requirements of the City of Sapulpa.

The City of Sapulpa will apply the assessments to MS4-owned projects initially. After the first few years of experience, the City of Sapulpa will expand the procedures to certain types of privately owned projects, which will be defined at that time.

The following methods will be used by the City of Sapulpa for making Part IV.A.1.e water quality impact assessments of new flood management projects:

- a. Identify the locations within the MS4 of all the 303(d) impairment watersheds, and identify the pollutants of concern (parameters) for each watershed.
- b. The following criteria will be used to select the types of new flood management projects that will be assessed:
 - 1) The project will be owned by the City of Sapulpa;
 - 2) The project is in the pre-design phase and just being proposed for development;
 - 3) The project will be a physical structure;
 - 4) The project will be designed to have an inlet structure for collecting runoff from the upstream watershed and an outlet structure for discharging collected runoff; and
 - 5) The project will be designed to collect runoff from five or more acres.
- c. For each new flood management project that will be assessed, the City of Sapulpa will review any documentation available through ODEQ, EPA and other sources on the potential for that type of project to reduce, have no effect on or possibly increase the 303(d) pollutant(s) in runoff.
- d. For each project, the City of Sapulpa will examine the location of the project and determine its potential for runoff from the project's outlet to enter a 303(d) impaired waterbody. The assessment of potential impact will include consideration of the following:
 - 1) Small projects several stream miles upstream from the impaired waterbody on small tributary channels will not likely have any significant effect on 303(d) impairment, whereas
 - 2) Large projects directly next to the waterbody may be more likely to contribute pollution.
- e. The City of Sapulpa will assess the new project's design and determine if there are some features that could be modified during construction to reduce pollutants in runoff. For example, can an LID structure or feature be constructed downstream of the project outlet? Can the project be altered to have greater pervious surface? Can the outlet flow be diverted to a pervious area for absorption of flow?
- f. The City of Sapulpa will submit its assessment findings to the building applicant in a timely manner so that any design changes can be made without unduly affecting project deadlines or schedules.

Within a few years of program initiation, the City of Sapulpa will expand the program to privately owned future projects.

3. Examine Existing Projects for Necessity of Additional Controls:

The third requirement in OKR04 Part IV.A.1.f addresses existing flood management projects in 303(d) watersheds. ODEQ allows flexibility for local OKR04 permittees to decide which types of existing flood management projects will need to be assessed under Part III.A.1.e for applicable 303(d) pollutants of concern. The City of Sapulpa will use the following criteria to select existing projects for examinations as required by Part III.A.1.e:

- a. The project is publicly owned;
- b. The project is a physical structure with definable inlet and outlet features;
- c. The project receives runoff from five or more acres upstream of the inlet;
- d. The project has a long projected life and function;
- e. The project has physical features that can be realistically modified to benefit WQ;
- f. The project is privately owned and the owners are willing to cooperate and assist with their own resources to make recommended modifications, and
- g. The project has a good benefit to cost ratio for making modifications.

The City of Sapulpa has developed criteria for completing the “*examination of existing projects to determine if incorporating additional water quality protection devices and practices are necessary*” to affect improvements in 303(d) watersheds. The following examination criteria will be used for rejecting existing projects that were selected using the criteria above:

- a. The project has old structures and features with no effectiveness remaining,
- b. The project offers little to no potential WQ benefit,
- c. The project has poor benefit to cost ratio of the proposed modifications needed,
- d. The project is or likely will be scheduled for demolition or upgrades in the near future,
- e. The project has an unknown or no clear ownership, and
- f. The project is privately owned, and there is no clear legal authority to require making water quality improvements to private structures.

OKR04 Part IV.A.1.g: (Selecting BMPs)

OKR04 Part IV.A.1.g, which applies to selecting 303(d)-related BMPs, requires that “*You must choose BMPs from EPA’s menu or select others that can be used for managing the identified pollutants (e.g., nitrogen or phosphorus, bacteria) in your discharges. The details of the BMPs can be viewed from EPA’s website at: <http://water.epa.gov/polwaste/npdes/swbmp/index.cfm>.*” The City of Sapulpa will rely upon several sources for selecting 303(d)-BMPs, including: 1) the EPA database; 2) recommendations from agencies such as ODEQ and INCOG; 3) recommendations from other permittees; and 4) an assessment of feasibility based upon BMP reliability, affordability and suitability to local conditions.

OKR04 Part IV.A.1.h: (BMPs to Address Bacteria 303(d) Waters)

OKR04 Part III.A.1.h requires that each permittee address five categories of activities regarding bacteria 303(d) pollutants. The City of Sapulpa will take the actions specified below to address these five categories. The categories and sub-categories used below are taken directly from OKR04.

Category 1: Sanitary Sewer Systems:

Sub-Category in OKR04	Selected BMP	Implementation Notes
(a) Make improvements to sanitary sewers	Camera inspection of sewer lines.	Inspect as part of CMOM Program
(a) Make improvements to sanitary sewers	Clean sewer lines	Clean based on work orders, areas with previous issues, as part of CMOM Program
(a) Make improvements to sanitary sewers	Repair and replace breaks in sewer lines and appurtenances.	Small repairs covered by annual budget; large projects must be special funded.
(b) Address lift station inadequacies	Prioritize & inspect lift stations in bacteria 303(d) watersheds.	Lift stations are inspected weekly and monitored 24 hours a day electronically
(b) Address lift station inadequacies	Assess structure, function and capacity of lift stations every 5 years.	Structure and functionality assessed throughout the year as information is gathered and annually with CMOM program. Capacity is assessed through contract with Tetra Tech.
(c) Improve reporting of violations	Training of Sewer Dept. and WWTP staff on timely reporting of sewer bypasses and upsets.	Violations are to be reported within a 24 hour time frame.
(d) Strengthen controls	Update spill response equipment and supplies as needed.	Equipment and supplies are restocked as needed within annual budget limitations.
(d) Strengthen controls	Annual training of spill response employees.	Document annual training.

Category 2: On-Site Sewage Facilities (OSSFs):

Sub-Category in OKR04	Selected BMP	Implementation Notes
(1) Identify and address failing system	Verify state permit was obtained for OSSF	If non-permitted, inform owner of requirement (Title 252. Chapter 641). Follow up with permit status.
(2) Identify and address failing system	Assess based on work order requests by staff or public and if pollutants found during DWFS	Visual inspection and information obtained from property owner or occupant
(3) Identify and address failing system	Distribute EPA's OSSF operation brochure to property owner.	If property owner is not local mail letter & brochure, distribute brochure to occupant also.
(4) Identify and address failing system	Assess based on work order requests by staff or public and if pollutants found during DWFS -Inspect OSSF for evidence of bypasses.	Verify state permit maintenance requirements (252:641-1-4 Operations, repairs and maintenance) are being met by system owner.
(5) Address inadequate maintenance of OSSF	Assess based on work order requests by staff or public and if pollutants found during DWFS- Inspect OSSF for proper maintenance.	Refer to state maintenance requirements (252:641-1-4 Operations, repairs and maintenance). Follow up with maintenance status.
(6) Address inadequate maintenance of OSSF	Obtain records from ODEQ and county agencies on OSSF inspections & enforcement actions. (Sapulpa has not been successful at obtaining old records)	Contact ODEQ & residing county for record information & possible enforcement action.

Category 3: Illicit Discharges and Dumping:

Sub-Category in OKR04	Selected BMP	Implementation Notes
Additional effort to reduce waste sources of bacteria	Distribute brochure on grease trap cleaning and maintenance to businesses with identified issues.	Distribute to food service establishments with grease traps through Sapulpa Code Enforcement & Pretreatment Program.

Additional effort to reduce waste sources of bacteria	Distribute brochure on grit trap cleaning and maintenance to businesses with identified issues.	Distribute to car wash & vehicle maintenance facilities with grit traps through Sapulpa Code Enforcement & Pretreatment Program.
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Category 4: Animal Sources:

Sub-Category in OKR04	Selected BMP	Implementation Notes
Expand existing management programs to identify and target new sources	Distribute pet waste brochures or door hangars to residential properties.	Distribute to all utility accounts annually.
Expand existing management programs to identify and target new sources	Inspect MS4-owned animal shelter for proper waste management.	Included as part of the MS4 facility annual inspection
Expand existing management programs to identify and target new sources	Develop a pet waste brochure.	Incorporate pet waste information into brochure or door hangar and place on website.
Expand existing management programs to identify and target new sources	Install and maintain pet waste stations and signs in MS4-owned parks.	Install in city parks

Category 5: Resident Education:

Sub-Category in OKR04	Selected BMP	Implementation Notes
Increase focus and resident education on bacteria discharges from residential sites.	Place web page or link to educational material on MS4's stormwater website about bacteria discharge types and amounts from residential properties either as direct discharge or in	Mailed to all Utility Accounts Annually
Increase focus and resident education on overflows from sewer line clogs from fats, oils and grease.	Place educational data or link to educational material on MS4's website about bacteria contamination from sewer overflows caused by fats, oils and grease disposal to sewer lines.	Develop in Year 3, Implement Year 4
Increase focus and resident education on bacteria from pet waste.	Distribute pet waste brochures or door hangars to residential properties.	100% of residential households annually beginning in 2021

II.L TMDL Allocations and/or Watershed Plans – OKR04 Part IV.B

Discharge of a pollutant into any water for which a TMDL or watershed plan in lieu of a TMDL for that pollutant has been either established or approved by the DEQ or the EPA is prohibited, unless the discharge is consistent with a TMDL or watershed plan. At this time, based on Table IV-2 of the OKR04, this MS4 does not have any TMDL obligations. The Arkansas River and Verdigris River Area-Bacteria and Turbidity TMDLs-2012 effective date was June 2022. The TMDL Plan is currently under development, and the City of Sapulpa will perform the SWMP review and evaluation by 2024,

TMDL Implementation: The OKR04 permit does not have specific requirements for meeting TMDL implementation. Rather, OKR04 defers to the TMDL document itself to provide implementation requirements for permitted MS4s. These are found in an Appendix of each TMDL document. These include requiring a Monitoring Plan, a TMDL Pollutant Reduction Plan, and reporting data and status in the MS4's Annual Report.

The City of Sapulpa has performed a review and evaluation of the SWMP to determine a plan for TMDL implementation. A TMDL Baseline Monitoring Plan is being developed and will be submitted to DEQ with the FY 2025 AR. The plan is designed to determine the existing levels of POCs in the City of Sapulpa's MS4 discharge(s) and identify high priority areas which may benefit from targeted BMPs.

At a minimum, the monitoring plan will provide:

- a. a detailed description of the program goals, monitoring plan, and sampling and analytical methods,
- b. a list and map of the selected TMDL pollutant monitoring sites,
- c. the frequency of data collection to occur at each station or site,
- d. the parameters to be measured relevant to the TMDL(s), and
- e. A Quality Assurance Project Plan that complies with EPA requirements.

TMDL Implementation Schedule

Action Item	Option B	Implementation Schedule Date
SWMP review and evaluation	No more than two years from TMDL effective date of June 1, 2022	June 1, 2024
TMDL pollutant baseline monitoring plan	No more than three years from TMDL effective date of June 1, 2022	June 1, 2025

TMDL pollutant reduction plan	No more than 5 years after implementation of the baseline monitoring plan.	June 1, 2030
TMDL pollutant monitoring plan	No more than 5 years after implementation of the baseline monitoring plan.	June 1, 2030

Due to the individual nature of requirements within each TMDL document, the City of Sapulpa will take the following actions regarding completed TMDLs within its MS4:

1. Review the latest list of completed TMDLs from ODEQ, and obtain all TMDL documents applicable to the MS4.
2. Determine the requirements placed upon the City of Sapulpa in each TMDL's Appendix.
3. For Notification TMDLs, begin formulating a strategy to begin meeting the TMDL requirements once notification is received from ODEQ.
4. For EPA Approved TMDLs, begin developing the resources and written plans required by the TMDL.
5. Research the feasibility of joining a regional monitoring program if allowed by the TMDL. Otherwise, develop a means of conducting local monitoring as required by the TMDL.
6. Seek assistance from agencies and other resources, as needed, to develop all written procedures and documentation required by the TMDL.
7. Research and adopt the most effective and reasonable BMPs to include in the pollutant reduction plan required by the TMDL, and identify resources for BMP implementation.
8. Seek assistance from outside resources and begin implementing all TMDL requirements on schedule.
9. Modify the SWMP to include any assigned WLA for the MS4 as a Measurable Goal.

II.M Discharges to Outstanding Resource Waters (ORWs) – OKR04 Part IV.C

The City of Sapulpa does not currently discharge to an Outstanding Resource Water (ORW).

III. MINIMUM CONTROL MEASURES - OKR04 Part V.

This SWMP provides information on the Best Management Practices (BMPs) and other activities that will be implemented to address each of the six Minimum Control Measures (MCMs). The City of Sapulpa has opted out of the optional MCM 7. Quotations of relevant passages from the OKR04 permit are inserted as needed *in italics text* in this SWMP to indicate the context of permit compliance.

The City of Sapulpa is an existing Permittee. As such, for each of the following Minimum Control Measures (MCMs) in the SWMP sub-sections A-F below, the City of Sapulpa will implement new and/or continue implementing existing BMPs, develop implementation schedules, and establish Measurable Goals for each BMP. Per OKR04 Part VI.C, an Annual Report will be submitted to ODEQ that documents implementation and BMP effectiveness under each of the six MCMs. Appendix A of the SWMP contains tables of the BMPs with assigned Measurable Goals, implementation schedules, and other BMP-related information.

All subsequent changes to BMPs and the SWMP must follow the requirements of OKR04 Part V.D. In addition, OKR04 Part V.A.1 requires that, “Modifications and updates shall be reflected in your SWMP and implemented within two (2) years of the effective date of this Permit, then as needed.”

III.A MCM 1: Public Education and Involvement:

Permit Requirements

OKR04 Part V.C.1.a requires MS4 to implement a program “to distribute information and educational materials to the community and MS4 staff, or conduct equivalent outreach activities to promote behavior changes to reduce pollutants in stormwater runoff and eliminate illicit discharges”, and to document a stormwater public outreach program by specifying BMPs and Measurable Goals for educating and involving the general public target audience.

III.A.1 Best Management Practices for Public Education and Involvement

The City of Sapulpa will use a variety of public education BMPs to inform individuals and groups within the community about the steps they can take to reduce stormwater pollution and become involved in the stormwater program. Appendix A summarizes all BMPs that will be used for this MCM. Appendix A also lists the Measurable Goals and schedule of implementation assigned to each BMP.

III.A.2 Target Audience

Education and Involvement efforts will address the general public being serviced by this MS4. The following target audiences were selected because the City of Sapulpa considers them most likely to be significant sources of stormwater pollutants:

BMP Category or Type	Target Audience
Residential chemical use and disposal	Homeowners, renters, multi-family residents.
Commercial chemical use and disposal	Commercial retailers selling chemicals and construction sites.
School education	Primary and secondary grade levels.

Pet Waste Disposal	All City Residents & Businesses
Neighborhood Associations	Homeowners, renters, multi-family residents.
Sediment & Erosion Control	Construction Developers & Home Builders.
Residential Pet Waste Disposal	Homeowners, renters, multi-family residents.
Good Housekeeping Measures & IDDE	City Public Works Staff
HHP Collection	The City of Tulsa
City Stormdrain Marking Program	OCC's Blue Thumb assistance

The school education program will use City of Sapulpa staff and/or school educators. The program will focus on basic water quality impacts and options for pollutant disposal (e.g. recycling and collection events, storm drain marking, Enviroscape watershed model).

Implement an Education Training Program for MCM 4 and MCM 5 and MCM 6 OKR04 Part V.C.1.a.ii.4

The City of Sapulpa will host (along with other municipalities in the Tulsa Regional Metroplex area) annual Construction and LID/ Post-Construction Training for engineers, developers and builders.

The City of Sapulpa implemented a remote training video through SmartGov and a Cloud Drive to track and host the sediment and erosion control training for all builders and developers that construct in the City of Sapulpa. Prior to issuance of Sediment & Erosion Control permits, all builders and developers are required to watch a 15 minute training video on construction site stormwater and pollution prevention regulations. Training is required of builders & developers annually.

The City of Sapulpa has purchased ExCal Visual Ground Control training video to educate on erosion control measures and post-construction measures. Prior to issuance of Sediment & Erosion Control permits, all builders and developers will have to watch a 15 minute training video on construction site stormwater and pollution prevention regulations. Training will be on an annual basis.

The City of Sapulpa has purchased stormwater and pollution prevention training videos from Excal Visual. The training video specific to illicit discharge detection & Municipal Good Housekeeping, "Storm Watch," was shown to the Public Works crews.

III.A.3 Target Pollutant Sources

The City of Sapulpa's Public Education program will primarily address pollutants from residential neighborhoods by educating individual homeowners on the proper disposal of such household chemicals as:

- Pesticides
- Pet waste
- Sanitary sewer overflows

- fertilizers
- detergents
- solvents
- motor oil
- antifreeze
- other motor and engine fluids
- oil-based paints
- rubbish (“floatable” materials)
- yard waste (grass clippings, leaves)
- Sediment

By encouraging the public to use the SHOW Recycle Center and the City of Tulsa Household Hazardous Waste Collection Facility (HHPCF), additional household chemicals such as heavy metals, solvents, acids and poisons can be safely disposed of. Proper storage, use and disposal of chemicals by local businesses will also be addressed in the education program. Local construction developers and builders will be educated on sedimentation and erosion control.

III.A.4 Outreach Strategy

The City of Sapulpa will participate in the regional stormwater education activities sponsored by INCOG's Green Country Stormwater Alliance (GCSA). Some education materials (i.e. brochures and give-away items) will be provided by INCOG from existing Federal, State or other sources while other materials will be developed collaboratively from all GCSA members. The City of Sapulpa will also develop some public education BMPs locally.

The City of Sapulpa's public education program will employ the following strategies:

- a. Homeowners will be educated on how to properly use and disposal of fertilizers and other household chemicals.
- b. The public education program will also provide information on how to get involved in stream cleanups, restoration activities and other local conservation efforts that may periodically be conducted within the City of Sapulpa.
- c. The City of Sapulpa will promote citizen participation in community cleanup days and the SHOW Recycling Center.
- d. INCOG's GCSA regional stormwater web site (www.stormwaterok.net) will provide information to the general public about local and regional water quality and program issues as well as numerous web links to water quality resources.
- e. School classes and other organizations can learn about water quality and urban sources of pollution through using the Enviroscape classroom programs and storm drain marking for school children.
- f. The City of Sapulpa's public education program will develop written materials that target commercial and industrial enterprises that have business activities that may negatively impact the stormwater quality of the MS4.

- g. The City of Sapulpa will be conducting presentations during public meetings on the Stormwater Management Program as well as to local organizations about water quality protection.
- h. Prior to issuance of Sediment & Erosion Control permits, all builders and developers will have to watch a 15 minute training video on construction site stormwater and pollution prevention regulations. Training will be on an annual basis.
- i. INCOG's Green Country Stormwater Alliance (GCSA) website contains web pages for the public about the Phase II stormwater permit program, including invitations to contact local stormwater managers of each GCSA member to learn more about their own local program.
- j. The City of Sapulpa will present information about the Phase II program in public meetings.
- k. City staff will respond to questions from the public, and the city will distribute information to the community upon request.
- l. As part of its existing Public Education and Outreach MCM, the City of Sapulpa has provided information about the MS4 program to citizens, and encouraged them to contact the Environmental Administrator for additional information.
- m. The City of Sapulpa will continue to promote public participation through utilization of the City of Tulsa Household Pollutant Collection Facility (HHPCF).
- n. City Council agenda items dealing with aspects of the program (e.g. budget approvals, approval of program activities, public comments) will be open to the public and receive public comment.
- o. The City of Sapulpa website is accepting spill episode and pollution information from the public through the “Report a Concern” link.
- p. The City of Sapulpa will also be installing Pet Waste Stations at the city parks.
- q. The City of Sapulpa has placed signs on park benches throughout the City stating how to report pollution.

The City of Sapulpa's Public Education program has a goal of providing stormwater education material to all of its homeowner residents and businesses by the end of the five-year permit cycle. This public education program will include an Enviroscape Watershed Model, storm drain marking, brochures, commercial, and give-away items. The program will also include posting pollution prevention signs on park benches in city owned parks and the Golf Course.

Receipt of Information OKR04 Part V.C.1.a.ii.3.b

The City of Sapulpa will establish the following administrative process for taking input from the public:

- a. The City of Sapulpa has designated one MS4 staff as the primary contact person for stormwater communications from the general public;
- b. Creating and periodically updating as needed a written and/or computer based form that allows efficient collection of the information being provided from the public;
- c. Educating MS4 staff on how to coordinate contacts from the public with the designated MS4 staff person.

- d. Processing of input from the public will be allowed from all sources, including emails, letters, phone calls and personal contacts;
- e. Creating a stormwater webpage on the City of Sapulpa website that clearly details the process for reporting an incident;
- f. The MS4 will document the response actions taken to resolve each request for assistance; and
- g. The public input program will be part of the annual program assessment for the Annual Report and include evaluating success and follow-up actions taken on unresolved problems

Public Comment

The public is encouraged to understand and provide input in the development of the stormwater program. City stormwater staff will continue to distribute information to the public and respond to their questions or input.

Public Notice Requirements

The ODEQ has placed all relevant information about the Phase II program on their public website, hosted public meeting and held a formal 30 day public comment period.

Records Available to Public

All documents are available, to the public, at City Hall. There is currently a link to these documents on the City's website with a call for Public Comment.

Targeted 303(d) Impairments

As outlined in Section II.J of our SWMP, we have established a 303(d) Plan to address pollutants of concern. Selected BMPs will address pollutant sources that are known or anticipated to exist within the MS4.

III.A.5 Management Responsibility

The City of Sapulpa has overall project management responsibility for implementing the Public Education and Outreach MCM. The Environmental Consultant/Administrator will coordinate all local activities and implementation of all program elements for this MCM. INCOG's GCSA program will be managed by the Environmental and Energy Division at INCOG. The City of Sapulpa will provide sufficient funds for INCOG to provide assistance to its GCSA members' educational programs. INCOG will submit an annual written scope of services to the City of Sapulpa that will specify INCOG's role in providing technical support and various kinds of education materials, as well as maintenance of the GCSA stormwater web site on behalf of the City of Sapulpa and other GCSA members.

III.A.6 Evaluating Program Effectiveness

The program is evaluated annually and compliance verified through the Annual Report preparation and SWMP review. Changes in behavior, a decrease in illicit discharges caused by the general public, feedback from the public, and public reporting of targeted pollution sources is used to evaluate success of the program. The City of Sapulpa will employ the following strategy to assess program effectiveness in the Annual Report:

Measurable Goals have been established for each Public Education BMP. These are summarized in Appendix A and include implementation schedules and milestones for each BMP. The Measurable Goals and target dates for the BMPs were selected by the City of Sapulpa to accommodate local resources with the intent of establishing BMPs efficiently and cost effectively. Sufficient time was built into the implementation schedules to allow for corrective actions to be taken to have an improved program by the end of the permit cycle.

BMP effectiveness will be demonstrated by keeping records of feedback from individuals and stakeholders in the general public and from local businesses. Feedback from the public (email, phone call, fax, letter or personal visit) will include requests for more information and any follow-up actions taken by MS4 staff to address problems or concerns. If pollution sources are abated as a result of the contact, then the abatement action will be logged as a BMP success for public education as well as removal of illicit discharges. Changes in types of issues reported by the general public and businesses over several years of BMP implementation should demonstrate effectiveness of this MCM.

III.B MCM 2: Industrial Stormwater Runoff Control:

The City of Sapulpa is a Category 2 and therefore has no MCM 2 requirements.

III.C. MCM 3: Illicit Discharge Detection and Elimination (IDDE):

The City of Sapulpa will implement a comprehensive program to detect and eliminate illicit discharges following the requirements in the OKR04 General Permit. The program will rely upon a number of methods of pollutant detection. There are two categories of pollutants that will be addressed in different ways: 1) episodic incident with no determinable source, and 2) chronic or frequent incident with a potentially determinable source.

Untraceable Sources: The first category covers pollutants introduced into the MS4 from individuals in a one-time episode at a discrete point of entry in which the responsible party or source is not traceable. Examples of these are dumping of yard waste, motor oil, antifreeze or trash into a creek or stormdrain. The sources for these types of pollutants, when discovered in the MS4 or local stream, cannot be determined (e.g., finding the individual causing the pollution). Discovery of this type of pollution will be from incident reports from citizens, city crews, police and fire workers, businesses, and State and Federal agency field crews. Prevention of future episodic pollution incidents will rely upon implementation of the Public Education and Public Participation programs as defined in this SWMP.

Traceable Sources: The second category covers pollutants from sources that are frequently occurring or otherwise traceable through stream channels and the MS4 system using one or more methods of visual inspections, use of simple chemical field test kits and/or formal chemical sampling via laboratory analysis. Pollutants from these sources will be dispersed

downstream as a detectable odor, visual color, increased turbidity, excessive algae growth, or changes in water chemistry (e.g. pH or conductivity) when compared to uncontaminated water elsewhere in the stream or MS4. These potentially traceable pollutants are amenable to “source tracking” inspections, and the sources are more likely to be found and remediated. The source tracking investigation methods are discussed below in the Dry Weather Field Screening (DWFS) Plan.

Types of Inspections: There are several parts of OKR04 Part IV.C.3.a that require conducting some type of field inspections under the IDDE MCM (underlines added for emphasis):

- a. OKR04 Part V.C.3.a(2) requires the MS4 to “*implement a Dry Weather Field Screening [DWFS] Plan to detect, investigate, and eliminate illicit discharges.*”
- b. OKR04 Part V.C.3.a(2)(c) (which is within the DWFS Plan requirements) requires the MS4 to develop “*procedures for tracing the source of an illicit discharge, including the specific techniques you will use to detect the location of the source.*”
- c. OKR04 Part V.C.3.a(5) requires the MS4 to “*Develop ... and implement a plan to detect and address non-stormwater discharges, including illegal dumping to your system.*”

The City of Sapulpa has developed a DWFS Plan, presented below, that addresses all three of these requirements in OKR04 Part V.C.3.a. While this SWMP text covers these three requirements, in the future the City of Sapulpa may prepare more detailed and formal Standard Operating Procedures (SOPs) as experience is gained in performing these permit requirements. If SOPs are prepared, they will be referenced in an update to the SWMP and replace the existing text.

III.C.1 Best Management Practices for Illicit Discharge Detection and Elimination

The City of Sapulpa will use a number of Best Management Practices (BMPs) to implement an effective detection and elimination program for illicit discharges. All sources will be investigated and traced within 72 hours of discovery (OKR04 Part V.C.3.a.ii). Appendix A lists the BMPs that will be used for this MCM. Some BMPs will address administrative actions, such as adopting an ordinance to address pollution occurring locally, while other BMPs will address public education, pollution inspection program, employee training and protection of special waters such as 303(d) listed waterbodies.

III.C.2 Map Development and Update

OKR04 Part V.C.3.a(3) requires the MS4 to develop and periodically update a map of the MS4. As part of ODEQ’s program evaluations (audits), the following map attributes are expected:

- a. Outfall locations;
- b. Names and locations of Waters of the State receiving MS4 outfall discharges;
- c. Inlet locations;
- d. Locations of MS4 pipes and conduits;
- e. Location of public stormwater facilities; and
- f. Location of private stormwater facilities (currently under development).

The City of Sapulpa has completed a map of the MS4 system showing major drainage system features, major outfalls and prominent receiving streams. The MS4 system map is presently in GIS format. Periodic updates of map data from substate planning agencies and State and Federal agencies will be used to make future changes to the MS4 map as needed. Map features will also be amended in the future as more system inspections are performed by MS4 staff, more system is developed, and more system is annexed. Updated map information, such as outfall locations and site descriptions, will be reviewed annually by city staff and reflected in the map updates. The City is currently working on the private stormwater facility map layer.

The mapping process for both creating new maps and updating existing maps will involve:

- a. Collecting initial and updated map data from agencies and organizations;
- b. Collecting field data during inspections by city crews to verify locations and descriptions of MS4 spatial map attributes;
- c. Periodic review of MS4 system map data by the City Engineer and other city and outside professional staff, and updating maps as needed;
- d. Global Positioning System (GPS) will be used when needed to provide coordinate data for the MS4 system, facility locations and sampling sites, while other coordinate data will be collected using aerials and GIS map layers that show structures and sites;
- e. Digital and paper aerial photography, and USGS 7.5 Minute Quadrangle maps will be used to assist with locating outfalls and updating their positions; and
- f. INCOG will provide GIS data and digital and paper aerial photos of the City's MS4 upon request.

III.C.3 Ordinance

OKR04 Part V.C.3.a(4) requires that an ordinance or other regulatory mechanism be adopted by the MS4 to effectively prohibit non-stormwater discharges. The City of Sapulpa has adopted and updated an ordinance prohibiting illicit discharges to the MS4, which will be evaluated periodically for potential modifications. Development and maintenance of a local illicit discharge ordinance is a BMP listed in Appendix A along with the intended implementation schedule and Measurable Goals. The ordinance development and maintenance process will involve taking the following actions per the schedule presented in Appendix A:

- a. Obtain and review model stormwater pollution ordinances from other permitted MS4s and agencies;
- b. Compare model ordinances to existing local codes and ordinances and make modifications to local codes;
- c. If needed, adopt a new local ordinance or modify an existing ordinance to address illicit discharge detection and elimination;
- d. Periodically evaluate ordinance effectiveness and make changes when needed to the illicit discharge ordinance or codes.

III.C.4 Plan to Detect and Eliminate Illicit Discharges

OKR04 Part V.C.3.a(2) requires the MS4 to develop a Dry Weather Field Screening (DWFS) Plan. Item (c) of this passage requires the MS4 to conduct “tracing the source” inspections. OKR04 Part V.C.3.a(5) requires development of a more general plan to detect and address non-stormwater discharges. All three of these requirements are based upon conducting field inspections to look for pollution and their sources, and to take actions to eliminate the pollutant discharges from these sources.

IDDE Plan: The City of Sapulpa has determined that the following actions will satisfy the OKR04 requirements to have an effective Illicit Discharge Detection and Elimination (IDDE) program. The IDDE Plan action items follow the OKR04 steps presented in OKR04 Part V.C.3.a (2) items a – e.

a. Locating Priority Areas:

- (1) Examine maps of MS4 area to locate sites with high potential for pollutant discharges.
- (2) Delineate MS4 areas within each of the 303(d) watersheds, and identify high priority areas that have sources most likely to cause or have the reasonable potential to contribute the 303(d) pollutants of concern to the 303(d) listed waterbody.
- (3) Collect data on pollutant spills that have occurred in the MS4 within the past 5 years.
- (4) Identify areas in which there have been sewer system bypasses within the past 5 years.
- (5) Identify areas having the oldest sewer system lines and appurtenances and areas with septic systems.
- (6) Identify industrial, commercial and residential areas having the greatest potential to discharge pollutants (i.e. industrial facilities with previous NOVs).
- (7) Compile results of any ambient sampling and DWFS inspections that indicate potential pollutants being discharged.
- (8) Compile all of these data, and generate a map and description of areas in the MS4 having the greatest potential to discharge pollutants.
- (9) Of the overall MS4 high priority areas, identify high priority areas specifically associated with 303(d) waterbodies.

b. On-Site Sewage Disposal Systems:

- (1) The City of Sapulpa only allows on-site disposal systems (OSSDS) within the City limits if the sanitary sewer is unavailable.
- (2) The following BMP's will be implemented for OSSDS within Sapulpa City limits;
 - a. Determine if State permit (Title 252, Chapter 641) was obtained for OSSDS.
 - b. Obtain records from ODEQ and county agencies on OSSDS inspections and enforcement actions regarding system bypasses or failures and pollution episodes.

c. Tracing the Source of Illicit Discharges:

- (1) Develop Dry Weather Field Screen (DWFS) Standard Operating Procedures (SOPs) documents that list the methods to be used by field crews to conduct the DWFS inspections. The DWFS SOPs will include steps for selecting DWFS sites, making visual observations at each site, using simple field test kits, recording data on field forms, and what to do if pollutants are found above the action levels.

- (2) The DWFS SOPs and program will include special attention to 303(d) waters.
- (3) Conduct DWFS inspections at least once per permit cycle at the sites identified in the SOPs, with special emphasis on all high priority areas in 303(d) watersheds.
- (4) Upon discovery or after receiving a report of a pollutant in the MS4 or in a receiving water, prepare a Work Order to begin administratively tracking progress of the investigation and enter the data into the IDDE spreadsheet.
- (5) Perform an initial visual observation at the site of the reported pollution event.
- (6) If pollutants are not found, log out the Work Order noting the inspection results.
- (7) If Pollutants are found, determine if it will be possible to trace the source by looking for evidence of pollutants upstream or coming from a discharge pipe or channel. **All sources shall be traced within 72 hours of discovery (Part V.C.3.a.ii).** Tracing the source will be conducted through one of the following methods: pulling storm sewer manholes to test for the pollutant, smoke testing, dye testing, and/or televising.
- (8) If the pollutants appear to be due to an episodic, one-time discarding action with no traceability, note the findings in the Work Order and proceed with cleanup.
- (9) If the pollutant source(s) can be traced, conduct further inspections using visual indicators and simple field test kits as necessary to trace the pollutant source. Document your inspection results carefully.

d. Removing the Source:

- (1) If the source is found, present your findings to the owner of the pollution source and proceed with enforcement steps as provided in the local IDDE ordinances and codes. Enter into the IDDE spreadsheet.
- (2) Depending upon the severity of the pollution event, an emergency meeting with the owner may be needed. Consult ODEQ for assistance if needed.
- (3) Consult with ODEQ if faced with refusal by owners of the pollutant source or if additional technical expertise is needed to help document pollution severity or extent.
- (4) Upon completion of all inspection and enforcement actions, close Work Order.

e. Program Evaluation and Assessment:

- (1) The assessment of the IDDE Plan and program will be the assessment required for the Annual Report, with special attention to all inspections and pollutant reduction actions taken within the high priority areas in 303(d) watersheds.
- (2) Factors and information to consider include identification and elimination of illicit discharges, numbers of IDDE Work Orders performed, successful completion of Work Orders, resolution of problems, estimated quantities of pollutants eliminated from the MS4, documentation of any public health problems or complaints, input from ODEQ and county health department, and input from citizens concerning success of program effectiveness or unresolved issues.
- (3) Using the factors cited above, perform an overall assessment of the program.
- (4) Identify program changes needed in the future to increase effectiveness.

Administrative Actions to Support the IDDE Program: To facilitate the successful implementation of the IDDE Plan defined above, the following additional administrative actions will be taken by the City of Sapulpa:

- a. Ensure that maps are effective by collecting map feature data during inspections to verify accuracy;
- b. Evaluate existing land uses in the MS4, and delineate high priority areas that have the greatest potential to discharge pollutants, with special consideration for 303(d) watersheds;
- c. Solicit and compile illicit discharge and pollution information from citizens, police and fire units, city public works crews, local businesses, other municipalities, non-profit organizations, volunteer stream monitors, students and educational institutions, construction contractors and workers, local building officials, floodplain administrator, and State and Federal agencies;
- d. Ensure that field and facility data are compiled in a manner that facilitates the inspection process (e.g. information about possible pollutants and/or sources are provided to MS4 inspectors in a timely fashion);
- e. Ensure that inspection results and field data are properly documented with a level of quality assurance appropriate to the use of the data;
- f. Participate in INCOG's GCSA regional employee training on quality assurance, data management, use of field kits, analysis of chemical data and more;
- g. Implement procedures for helping with enforcement, including how to approach owners of potential sources for on-sight inspections, how to present field data to owners that confirms the source, and what procedures the owner must take to remove the discharge; and
- h. Periodically evaluate the inspection and enforcement program, and make modifications as necessary to improve program effectiveness.

Details of IDDE Inspections: The Dry Weather Field Screen (DWFS) and source tracking programs for potentially traceable sources will be described more fully in the City of Sapulpa's DWFS SOPs. The SOPs will include methods to conduct a visual inspection program performed by MS4 crews, which may include use of one or more field test kits for parameters that monitor the most likely type of stormwater pollution that is indicated (e.g. chlorine residual, pH, conductivity, detergents, ammonia, etc.). The visual inspection will describe and/or quantify the extent of pollution (e.g. floatables, excess algae growth, dead or stressed stream vegetation and organisms, color of water, odors, sediments, etc.).

If source tracking requires scientifically defensible data for possible litigation and/or enforcement action, then the City of Sapulpa will use either its properly trained field collection crews or contract professionals to conduct appropriate sampling and information gathering to locate sources and characterize pollution events. Outside agencies will be contacted, if necessary, to report potentially illegal discharges or to protect health, safety or the environment. All samples collected for transport to laboratories for analysis shall be collected under written Quality Assurance (QA) protocols, including use of Chain of Custody forms, appropriate sample bottles with labels, field forms describing sample collection sites and conditions, and proper sample preservation. All laboratory analyses will follow 40 CFR Part 136 methods.

Standard paper field forms and/or electronic field data recording devices (e.g. laptops, PDAs, GPS or Tablet PCs) will be used to make data collection systematic. Data will be entered and/or downloaded into computer databases for analysis, sharing and reporting. If requested to do so by ODEQ, certain monitoring data will be reported to ODEQ on ODEQ's Discharge Monitoring Report (DMR) forms.

III.C.5 Administrative Procedures for Source Control

Untraceable Pollution: When episodic incidental pollution is reported to the City of Sapulpa (e.g. motor oil dumped into a stormdrain), the MS4 stormwater staff will record the date, location, information source, and description of the event in a work order. If necessary, a public works crewman will be sent to investigate to determine if the site should be cleaned (e.g. removal of yard waste, oil spill cleanup, etc.). After inspection and/or cleanup, MS4 staff will update the work order of all actions taken regarding the pollution incident. These data will be included in the City of Sapulpa's Annual Report and used to evaluate program effectiveness. Dependent upon the nature and location of the incident, site may be periodically monitored to ensure there has not been a repeat incident.

Traceable Pollution: When potentially traceable pollution is reported, the same incident information will be recorded in a work order, and MS4 staff will be sent to investigate. If the source is not immediately obvious, the MS4 staff will initiate a source tracing inspection and/or hire professional investigation of the site and attempt to trace the source upstream from the pollutant incident. If the source is located, MS4 staff will contact the owner / responsible party to request that the source be abated within a reasonable time in accordance with local ordinance.

The MS4 will perform a follow-up inspection to confirm that the source of pollution has been abated. If not, then the MS4 will take increasingly more strict action leading up to assessment of penalties, and possibly to include ODEQ and EPA enforcement as well. Throughout the administrative and investigative process, MS4 staff will document all major actions in writing to permanent files. Data from all such incidents will be included in the City of Sapulpa's Annual Report and used to evaluate program effectiveness.

III.C.6 Inform Employees and the Public

OKR04 Part V.C.3.a(6) requires the MS4 to, "*Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Promote, publicize and facilitate the reporting of illicit discharges*". Appendix A lists the types of education and outreach BMPs that will be used for the public community and municipal employees. Those activities specifically targeting the requirements in OKR04 Part V.C.3.a(6) are listed below.

- a. Distribute brochures to encourage proper use and disposal of household chemicals, maintenance of on-site sewage disposal systems, and recycling;
- b. Support a regional public seminar dealing with one or more Phase II stormwater issues;

- c. Discuss the Phase II program in a meeting open to the public;
- d. Provide information on INCOG's GCSA and the City of Sapulpa websites about pollutant reduction;
- e. Support local stream clean-up events conducted by non-profits, organizations or agencies;
- f. Support local stormdrain marking program;
- g. Support regional household pollutant collection; and
- h. Support local and regional recycling of wastes.
- i. Post pollution prevention signs at city parks.
- j. Provide employee training through INCOG's GCSA improper waste disposal, inspecting and identifying pollution, reporting pollution, and permit requirements.
- k. Implement Spill Response and Prevention Plan.

III.C.7 Authorized Occasional Incidental Non-Stormwater Discharges

OKR04 Part V.C.3.a.viii requires the MS4 to “*Maintain a list of occasional incidental non-stormwater discharges or flows as allowed in [OKR04] Part II.B.2 that will not be addressed as illicit discharges.*” The City of Sapulpa’s list of allowable non-stormwater discharges is presented at the beginning of Section III.C of this SWMP, along with a description of the actions to be taken to address pollutant releases from firefighting activities.

III.C.8 Management Responsibility

The City of Sapulpa has overall project management responsibility. The Environmental Administrator will coordinate all local activities and implementation of all program elements. The Mapping Department, under the direction of the Public Works Director, will be responsible for all mapping and updating. The Environmental Administrator will assist in developing 303(d) priority areas, O&M Program, and identification of significant non-stormwater discharges of 303(d) pollutants. INCOG’s GCSA program will be managed by the Environmental and Energy Division at INCOG. The City of Sapulpa will provide sufficient funds for INCOG to assist its GCSA members with their Illicit Discharge Detection and Elimination program. INCOG will submit an annual written scope of services to the City of Sapulpa that will specify INCOG’s role in providing technical support and activities, as well as maintain the GCSA stormwater web site on behalf of the City of Sapulpa and other GCSA members. The City of Tulsa will manage its Household Hazardous Pollutant Collection facility, and data tracking. The City of Sapulpa will provide funds for Sapulpa residential disposal at the facility.

III.C.9 Evaluating Program Effectiveness

The program is evaluated annually to ensure that measurable goals are met, to determine if additional priority areas need to be delineated, for success of public and city employee illicit discharge reporting, and for assessing pollutant removal successes. The IDDE program is also evaluated for removing sources of pollutants of concern in 303(d) and TMDL watersheds.

OKR04 requires the MS4 to, “*Evaluate the appropriateness of your identified BMPs for this minimum control measure. Your evaluation shall verify compliance with permit requirements and more importantly, document that efforts have been made towards achieving your identified measurable goals and reducing the impacts of stormwater runoff from the small MS4. Document the evaluation of your illicit discharge detection and elimination program annually as required by this Permit*”, the requirement to submit an Annual Report. The City of Sapulpa will employ the following strategy to assess program effectiveness in the Annual Report:

Measurable Goals have been established for each IDDE BMP. These are listed in Appendix A and include implementation schedules and milestones for each BMP. The Measurable Goals and target dates for the BMPs were selected by the City of Sapulpa to accommodate local resources with the intent of establishing BMPs efficiently and cost effectively. Sufficient time was built into the implementation schedules to allow for corrective actions to be taken to have an improved program by the end of the permit cycle.

BMP effectiveness will be demonstrated by keeping records of feedback from individuals and stakeholders in the general public and from agencies and organizations involved with the IDDE program. Feedback from the public, agencies and organizations (email, phone call, fax, letter or personal visit) including outputs and outcomes of education events will be recorded in writing. Effective BMPs can be demonstrated through increased reporting, IDDE discoveries by City staff, and successful removal of IDDE. The City of Sapulpa will record all IDDE incidents as described in the SWMP and results of each investigation. The increased number of illicit discharges removed from the environment over a period of several years of BMP implementation and inspections conducted should demonstrate effectiveness of this MCM. Effective BMPs can be demonstrated through increased citizen reporting, IDDE discoveries by City staff, and successful removal of IDDE. Success of IDDE program BMPs will also be evaluated for removing sources of pollutants of concern in 303(d) and TMDL watersheds.

III.D. MCM 4: Construction Site Stormwater Runoff Control:

The City of Sapulpa has implemented a comprehensive education, inspection and enforcement program to address the pollution of stormwater runoff from active construction sites. The City of Sapulpa has developed an ordinance prohibiting the discharge of pollutants and sediment from construction sites, and require the deployment of adequate sediment and erosion control measures. The MS4's stormwater, infrastructure, and building inspectors and their qualified designees will perform periodic site inspections for compliance with local stormwater codes either as part of other construction inspections or in response to complaints about site runoff contamination.

III.D.1 Best Management Practices for Construction Site Runoff Control

The City of Sapulpa will use a number of Best Management Practices (BMPs) to implement an effective erosion and pollutant control program for active construction sites. Appendix A provides a description of each BMP, along with Measurable Goals and schedule of implementation. The BMPs presented in Appendix A include an education component, and

include administrative actions, such as ordinance development. There are also BMPs for performing inspections and taking enforcement actions.

III.D.2 Ordinance

OKR04 Part V.C.4.a(1) requires the MS4 to develop an ordinance to control erosion and sediment at construction sites. The City of Sapulpa has adopted and updated an ordinance prohibiting construction related discharges to the MS4. The ordinance will be annually evaluated and modifications made as needed. The ordinance will mirror requirements contained in ODEQ's statewide stormwater permit for construction activities (OKR10). Local ordinance adoption and updating will involve:

- a. An initial ordinance development and update action will be taken during the first year of OKR04 authorization.
- b. The initial process will compare model construction ordinances to existing City ordinances and drafting modifications that will be needed to local codes;
- c. Inspection and administrative staffing needs will be assessed, and additional resources will be sought, if needed, to ensure that the City will be able to implement all provisions in the ordinance;
- d. Local construction codes and ordinances will be updated as needed;
- e. Key staff persons will be identified to manage all inspection and enforcement activities; and
- f. Program effectiveness will be assessed annually, and changes made to the program pertaining to ordinance requirements and City resources and manpower.

III.D.3 Plan to Ensure Compliance by Site Operators

OKR04 Part V.C.4.a.i requires the MS4 to, "*implement and enforce requirements for construction site operators to implement BMPs for erosion and sediment control*". The City of Sapulpa will take the following actions to address construction related activities as defined in OKR04 Part V.C.4.a to ensure that construction site operators implement proper erosion and sediment control measures and control wastes at construction sites. These will include:

- a. Provide materials for construction site operators that they will be required through local ordinance to establish erosion and sediment controls and controls of site waste;
- b. The MS4 will incorporate this into the initial plan review and building permit application process;
- c. The MS4 will establish guidelines and requirements for erosion and sediment control Best Management Practices (BMPs) and methods to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste; and
- d. The MS4 will ensure compliance from site operators through the site inspection and enforcement process. Site inspections will be performed monthly for sites requiring OKR10 permits, quarterly for smaller, non-commercial sites, and within 48 hours of a complaint. Construction inspections will be tracked through a spreadsheet and recorded on the developed construction inspection forms. Increasing severity of penalties will result when corrective action has been ignored or not fully achieved. The City has developed and

implemented an Enforcement Response Plan to use as guidance during the enforcement process.

III.D.4 Procedures for Site Plan Review

OKR04 Part V.C.4.a.ii requires the MS4 to, “*develop, ... implement and enforce procedures for site plan review which incorporate consideration of potential water quality impacts...*”. To meet this OKR04 permit requirement, the City of Sapulpa will take the following actions:

- a. Include in the MS4’s regular site plan review process additional steps to ensure that the draft plans are consistent with local erosion and sediment control requirements;
- b. Require all new development and redevelopment construction plans to consider potential impacts on water quality from construction activities. Areas to be addressed include sediment and erosion control and control of on-site wastes that can impact water quality;
- c. Ensure that the proposed construction plans and activities are in compliance with local floodplain ordinances; and
- d. Ensure that the design of permanent structural stormwater control measures assess impacts on water quality.

III.D.5 Procedures for Public Input

OKR04 Part IV.C.4.a(5) requires the MS4 to, “*implement and enforce procedures for receipt of and consideration of information submitted by the public*”. The City of Sapulpa will establish the following administrative process for taking input from the public:

- a. The City of Sapulpa has designated one MS4 staff as the primary contact person for stormwater communications from the general public;
- b. Creating and periodically updating as needed a written and/or computer based form that allows efficient collection of the information being provided from the public;
- c. Educating MS4 staff on how to coordinate contacts from the public with the designated MS4 staff person.
- d. Processing of input from the public will be allowed from all sources, including emails, letters, phone calls and personal contacts;
- e. Creating a stormwater webpage on the City of Sapulpa website that clearly details the process for reporting an incident;
- f. The MS4 will document the response actions taken to resolve each request for assistance; and
- g. The public input program will be part of the annual program assessment for the Annual Report and include evaluating success and follow-up actions taken on unresolved problems.

III.D.6 Construction Site Inspections

OKR04 requires the MS4 to, “*implement and enforce procedures for site inspection and enforcement of control measures*”. To comply with this requirement, the City of Sapulpa will develop a program for inspection of construction sites. Stormwater control inspections will be performed by the MS4’s stormwater, infrastructure, and building inspectors and their qualified designees. Inspections will be performed when a complaint is received from the public about a stormwater pollution incident, and periodically during the other MS4 construction inspection activities. The following stormwater inspection procedures will be used:

- a. A stormwater inspection form will be created and periodically updated as needed to document inspection results of each site visit;
- b. Stormwater inspection staff will be identified and trained to perform stormwater inspections.
- c. A stormwater inspection will be conducted whenever a complaint is received, after a significant rain event, and periodically during the routine construction inspections by the MS4 inspector;
- d. The stormwater inspection form will document the adequacy of the erosion and sediment control measures being used and note any remedial action needed;
- e. Inspection data from the forms as well as all follow-up actions, including enforcement, will be entered into a computer and also stored in paper files;
- f. Enforcement will rely upon initially encouraging remediation by the construction owner / operator, followed by a warning to remediate within a reasonable time, followed by issuance of a fine under authority of the local ordinance (as prescribed in the Enforcement Response Plan); and
- g. Any immediate and significant threat to health, safety or the environment will be enforced immediately using best professional judgment of the inspector and/or administrative or public works management, including police and fire personnel, as the situation merits. ODEQ will be notified as deemed necessary to report the violation for OKR10 enforcement.

III.D.7 Management Responsibility

The City of Sapulpa has overall project management responsibility. The Environmental Administrator will coordinate all local activities and implementation of all program elements. The City Engineer will be responsible for site plan reviews, and will assist in the development of construction site guidelines for sediment and erosion control, and site waste control (for inclusion in the Design Criteria Manual). The Public Works Department and Building Inspection Department will be responsible for construction site inspections of commercial and industrial developments and residential developments during the infrastructure construction portion of a development. The Environmental Administrator and Building Inspector will be responsible for residential development inspections during the home building portion of the development. The Building inspector will assist in all non-infrastructure construction inspections as required. The Urban Development Director will assist in promoting Green Development. INCOG’s GCSA program will be managed by the Environmental and Energy Division at INCOG. The City of Sapulpa will provide sufficient funds for INCOG to assist its GCSA members with their Construction Site Runoff Control program. INCOG will submit an annual written scope of services to the City of Sapulpa that will specify INCOG’s role in providing technical support and

activities, as well as maintain the GCSA stormwater web site on behalf of the City of Sapulpa and other GCSA members.

III.D.8 Evaluating Program Effectiveness

OKR04 requires the MS4 to, “*Evaluate the appropriateness of your identified BMPs for this MCM. Your evaluation shall verify compliance with permit requirements and more importantly, document that efforts have been made towards achieving your identified measurable goals and reducing the impacts of stormwater runoff from the small MS4.* The City of Sapulpa will employ the following strategy to assess program effectiveness in the Annual Report:

Measurable Goals have been established for each construction site control BMP. These are listed in Appendix A and include implementation schedules and milestones for each BMP. The Measurable Goals and target dates for the BMPs were selected by the City of Sapulpa to accommodate local resources with the intent of establishing BMPs efficiently and cost effectively. Sufficient time was built into the implementation schedules to allow for corrective actions to be taken to have an improved program by the end of the permit cycle.

BMP effectiveness will be demonstrated by keeping records of feedback from individuals and stakeholders in the general public and from agencies and organizations involved with the construction site control program. Feedback from the public, agencies and organizations (email, phone call, letter or personal visit) including outputs and outcomes of education events will be recorded in writing. The City of Sapulpa will record all construction site inspections and pollution abatement episodes as described in the SWMP, including date, location, pollutant, observations, measurements, interviews, photos, field form data, abatement and enforcement steps taken, and results of each investigation. A reduction in the amount of violations and complaints reported over a period of several years of BMP implementation and inspections conducted should demonstrate effectiveness of this MCM.

III.D.9 7th MCM Optional Permit Requirements for City Construction

The City of Sapulpa has elected NOT to use the alternative provided in Part VIII of OKR04 relating to construction activities on land owned by the MS4 and to activities that are directly controlled by the City of Sapulpa.

The City of Sapulpa’s Contractor will ensure that the project-specific SWP3 is developed and a copy kept at the construction site for review. When the City of Sapulpa hires a contractor to perform the work, the contractor will be required to prepare and maintain access to the SWP3, and this will be verified by the construction inspector or other MS4 official. The project site will be inspected as with any other construction project as described above in the SWMP. Part of this inspection process will be to ensure that all SWP3 requirements are being met.

III.E. MCM 5: Post-Construction Management:

Post-construction stormwater management in new development and redevelopment focuses on implementation of controls and practices that are designed to maintain good water quality

conditions after an area has been developed and after construction activities have been completed.

III.E.1 Best Management Practices for Post Construction Runoff Control

BMP Strategy: The City of Sapulpa has developed the following strategy for addressing post-construction control of runoff:

- a. Attempt to maintain pre-development runoff conditions;
- b. Ensure that controls are in place that will prevent or minimize water quality impacts;
- c. Define pre-development not as conditions that existed before any manmade disturbance, but rather the condition of development that exists just prior to commencing the present development activities;
- d. Develop and implement structural and/or non-structural BMPs appropriate for the MS4 community;
- e. Implement BMPs that are appropriate for the local site conditions and selected to minimize water quality impacts;
- f. Review local codes and ordinances and identify barriers to Low Impact Development (LID), and remove those barriers that are incompatible with local community standards;
- g. Implement language on Plats and plans that ensure adequate long-term operation and maintenance of the BMPs;
- h. Consider developing and implementing an education program for developers and the general public about the benefits of LID; and
- i. Consider encouraging and providing incentives for implementation of LID practices by private developers before and during the building permit application and pre-design phases of projects.

Additional details of the Post-Construction BMP Strategy are presented below.

III.E.2 Ordinance

OKR04 Part V.C.5.a requires the MS4 to develop a Post-Construction ordinance to control pollutants in runoff from the final project once construction has been completed. The program must maintain pre-development runoff conditions and ensure that controls are in place that would prevent or minimize water quality impacts. The City of Sapulpa has adopted a Post-Construction ordinance, which will be assessed and updated in the future as needed. Local ordinance adoption and updating will involve:

- a. Local construction codes and ordinances will be updated as needed;
- b. Ordinance effectiveness will be assessed annually, and changes made when necessary.

III.E.3 Review Local Codes for LID Barriers

OKR04 Part V.C.5.a.iii requires the MS4 to, “*Review local ordinances and regulations, and identify any legal/regulatory barriers to Low Impact Development (LID). Develop a schedule to*

remove those barriers that prohibit LID practices selected by the MS4, or provide a justification for each barrier not removed". The City of Sapulpa will comply with this requirement by taking the following actions:

- a. Educate MS4 staff on LID practices and on the types of requirements in local codes that are barriers to implementing certain types of LID;
- b. Identify all of the local codes, policies, guidance and ordinances that must be reviewed.
- c. Review each of these, and list all LID-related provisions that must be considered further.
- d. Decide whether or not the LID-related provision in each code is a barrier to LID implementation.
- e. Assess each of the LID barrier code provisions that can be deleted or modified to make LID implementation possible or more beneficial.
- f. Assess current street design, parking lot guidelines, and other requirements that affect the creation of impervious cover and implement additional guidelines or design standards to support LID design options.
- g. For each code the MS4 determines should not or cannot be changed, prepare a written justification as to why the barrier must stay in place.

OKR04 Part V.C.5.a.iv requires the MS4 to, *"Assess current street design, parking lot guidelines, and other requirements that affect the creation of impervious cover and implement additional guidelines or design standards to support LID design options. Provide a justification if additional guidelines are not implemented."*

Assessment was made during 2021 OKR04 renewal process. No LID barriers have been identified this permit cycle.

- a. The City of Sapulpa has a variance process to allow smaller streets and parking lots.
- b. The Engineering Design Criteria promotes maximizing greenspace and open channels, especially in larger developments.
- c. The City of Sapulpa has a landscaping criteria that requires vegetation, greenspace, and tree requirements in all developments- including industrial developments.
- d. The City has a greenspace requirement for single family housing as well.

III.E.4 BMP Long-Term Operation and Maintenance (O&M)

ODEQ considers that this provision shall apply to both privately owned and public facilities, and that the provision applies to all types of flood control projects, including detention basins, not just to LID-type projects. ODEQ also considers that the inspections should be conducted as visual observations of each facility's condition and adequacy of maintenance. Characteristics of the inspections are presented below.

O&M Inspection and Enforcement Program: The City of Sapulpa will comply with this permit requirement by taking the following actions:

- a. The City of Sapulpa has adopted a Post Construction Ordinance that clearly delineates O&M and inspection responsibility on the property owner, developer, or Homeowners Association. This responsibility shall be included in the covenants and deeds, as applicable.

- b. Compile a list of all LID and flood control structures within the MS4 that are to be assessed.
- c. Research basic data and information about each structure, such as:
 - 1) Ownership of property and responsible party for maintenance.
 - 2) Type of structure.
 - 3) Purpose of structure and any associated land uses served by the structure (e.g., subdivision or commercial center).
 - 4) Watershed in which structure is located.
 - 5) Age and present estimated condition of structure.
- d. Conduct visual inspections of structures during the regularly scheduled DWFS, Code Enforcement daily activities, and according to priority schedule; including:
 - 1) Mowing and weeding;
 - 2) Sediment buildup and erosion;
 - 3) Fencing, pathways, signage, public safety;
 - 4) Evidence of vandalism;
 - 5) Structural integrity;
 - 6) Vegetation health, ground cover, rock, concrete surfaces;
 - 7) Inlet and Outlet damage, blockage, condition;
 - 8) Debris, tree limbs, trash buildup;
 - 9) Function of pervious surfaces.
- e. MS4-Owned Structures: Schedule and acquire resources and funding for making any needed repairs or upgrades.
- f. Privately-owned Structures: Within the authority granted by local codes and ordinances, negotiate with the private responsible party on the types of maintenance and upgrades that the MS4 has determined are needed, and take any enforcement actions allowable under the Enforcement Response Plan, local codes and ordinances for failure of the responsible party to perform the required tasks.

III.E.5 Education Program for Developers and the Public OKR04 Part V.C.1.a.ii.4

The City of Sapulpa will host (along with other municipalities in the Tulsa Regional Metroplex area) annual Construction and LID/ Post-Construction Training for engineers, developers and builders.

The City of Sapulpa has purchased ExCal Visual Ground Control training video to educate on erosion control measures and post-construction measures. Prior to issuance of Sediment & Erosion Control permits, all builders and developers will have to watch a 15 minute training video on construction site stormwater and pollution prevention regulations. Training will be on an annual basis.

The City of Sapulpa implemented a remote training video through SmartGov and a Cloud Drive to track and host the sediment and erosion control training for all builders and developers that construct in the City of Sapulpa. Prior to issuance of Sediment & Erosion Control permits, all builders and developers are required to watch a 15 minute training video on construction site

stormwater and pollution prevention regulations. Training is required of builders & developers annually.

The City of Sapulpa participates in INCOG's regional stormwater education program implemented on behalf of its Green Country Stormwater Alliance (GCSA). The GCSA website (www.stormwaterok.net) contains a number of public education materials and information about protecting water quality and about LID specifically that is periodically updated by INCOG.

The GCSA website has webpages that target developers and the public on many water quality protection issues. The GCSA website is periodically updated with new information as needed. In addition, The City of Sapulpa, in cooperation with INCOG's GCSA, helps sponsor water quality conferences and workshops that target developers and the public about water quality protection at construction sites, household chemicals, urban stormwater pollution issues, and the benefits of LID. Several of these MS4 activities are listed in Appendix A as specific BMPs under the Public Education and Public Participation MCMs.

INCOG prepares an annual summary GCSA Fact Sheet that reports on all of the LID education and outreach activities accomplished by INCOG on behalf of its GCSA members. These Fact Sheets are kept by each GCSA member in their stormwater files and attached to or summarized in their Annual Reports.

III.E.6 Management Responsibility

The City of Sapulpa has overall project management responsibility. The Environmental Administrator will coordinate all local activities and implementation of all program elements. The Environmental Administrator (with the assistance of the City Engineer and the Urban Development Director) is responsible for the overall review of local codes to identify barriers to LID; removal or justification of non-removal. The City Engineer (with assistance from the Environmental Administrator), will be responsible for the Post-Construction ordinance or code, and the O&M language for Municipal BMP's. The Urban Development Director will be responsible for the consideration of developing standards to direct growth away from sensitive areas and to increase open space, the consideration of encouraging infill development in high density urban areas, the consideration of adopting local codes that allow implementation of LID practices, the assessment of local codes for street design and parking lots for potential modifications to support LID and reduce impervious cover. INCOG's GCSA program will be managed by the Environmental and Energy Division at INCOG. The City of Sapulpa will provide sufficient funds for INCOG to assist its GCSA members with their Post-Construction Site Runoff Control program. INCOG will submit an annual written scope of services to the City of Sapulpa that will specify INCOG's role in providing technical support and activities, as well as maintain the GCSA stormwater web site on behalf of the City of Sapulpa and other GCSA members.

III.E.7 Evaluating Program Effectiveness

The City of Sapulpa will employ the following strategy to assess program effectiveness in the Annual Report:

Measurable Goals have been established for each post-construction BMP. These are listed in Appendix A and include implementation schedules and milestones for each BMP. The Measurable Goals and target dates for the BMPs were selected by the City of Sapulpa to accommodate local resources with the intent of establishing BMPs efficiently and cost effectively. Sufficient time was built into the implementation schedules to allow for corrective actions to be taken to have an improved program by the end of the permit cycle.

BMP effectiveness will be demonstrated by keeping records of feedback from individuals and stakeholders in the development community, the general public and from agencies and organizations involved with construction and post-construction. Feedback from developers, the public, agencies and organizations (email, phone call, fax, letter or personal visit) including outputs and outcomes of education events will be recorded in writing. The City of Sapulpa will record all post-construction site inspections and structural maintenance and improvements as described in this SWMP, including date, location, affected pollutants, observations, measurements, interviews, photos, field form data, abatement and enforcement steps taken, and results of each investigation and maintenance project. The increased number of structural maintenance and improvements made over a period of several years of BMP implementation and inspections conducted should demonstrate effectiveness of this MCM.

III.F. MCM 6: Pollution Prevention / Good Housekeeping for MS4 Operations:

The “Pollution Prevention / Good Housekeeping for MS4 Operations” Minimum Control Measure (MCM) addresses the operation and maintenance (O&M) of the MS4 and municipal facilities, and requires training of municipal employees. Performing municipal activities in a careful and proper manner prevents or reduces pollutant runoff. Municipal operations addressed by this “Good Housekeeping” MCM include parks and open space maintenance, buildings for storage and maintenance of fleet vehicles and other public works vehicles and equipment, new construction and land disturbances, and stormwater system maintenance.

The City of Sapulpa will address OKR04 Part V.C.6.a requirements with the following program. Appendix A contains a list of all BMPs for the Good Housekeeping MCM, along with Measurable Goals and implementation schedules for each BMP.

III.F.1 Employee Training and Education Program

OKR04 Part V.C.6.a(1) requires the MS4 to implement, “*employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance*”. OKR04 Part V.C.6.a(2) requires the MS4 to implement, “*a municipal employee training and education program that you will use to prevent and reduce stormwater pollution from MS4 activities*”. The following actions will be taken by the City of Sapulpa to meet these permit requirements:

- a. The City of Sapulpa participates in the INCOG regional GCSA program which includes periodic (at least every other year, and locally if requested) employee training on the following topics:
 - 1) Park and open space maintenance;
 - 2) Fleet and building maintenance;

- 3) New construction and land disturbances;
- 4) Stormwater system maintenance;
- 5) Urban water quality, pollution and OKR04 requirements;
- 6) Construction permit requirements under OKR10;
- 7) Storage and disposal of chemicals at city facilities; and
- 8) Reporting of local pollution to municipal officials.

- b. INCOG's GCSA employee training 1-day workshops are held approximately three times per year. Certificates of Training and for engineer Professional Development Hours (PDH) are issued. At least once a year, INCOG provides ODEQ's 4-hour operator license renewal training certificates for one of the workshops.
- c. One or more meeting handouts are distributed by INCOG at the GCSA employee training workshops, or are emailed to GCSA members prior to each workshop.
- d. INCOG prepares GCSA Fact Sheets and GCSA News Bulletins annually on a variety of topics, many concerning pollution issues at municipal operations or within the MS4. These are distributed by email to GCSA members as well as posted on the GCSA website.
- e. INCOG has prepared a number of GCSA brochures, several of which pertain to municipal operations and educating city councils and county commissions about the OKR04 permit program. These are posted on the GCSA website in pdf format for download and local printing by each GCSA member.
- f. The Stormwater Management Department performs pollution prevention training for Public Works Employees annually and for all City employees approximately twice per OKR04 permit cycle. The City of Sapulpa utilizes Excal Visual "Storm Watch" and "Storm Warnings" Municipal Stormwater Pollution Prevention training videos specifically designed for municipality Good Housekeeping operations and BMPs. All MS4 related pollution generating activities are addressed in the training videos.

III.F.2 List of Industrial Permitted Facilities

Part V.C.6.a(3) requires the MS4 to, "*Maintain a list of industrial facilities you own or operate that are subject to the DEQ Multi-Sector General Permit or individual OPDES or NPDES permits for discharges of stormwater associated with industrial activity that ultimately discharge to your small MS4*". The following facilities are owned and operated by the City of Sapulpa that are subject to the ODEQ Multi-Sector General Permit for Industrial Activities (OKR05) or individual OPDES or NPDES permits for discharges of stormwater associated with industrial activity that ultimately discharge to the MS4:

- City of Sapulpa WTP PWSID: OK 1020404
- City of Sapulpa WWTP Auth. No. OKR050422
- City of Sapulpa WWTP Auth. No. OK0020303 Facility #S21310
OKR05 Auth No. OKR053307

III.F.3 Controlling Pollutants from MS4 Systems and Facilities

Part V.C.6.a(4) requires the MS4 to, “*Implement procedures for controlling, reducing or eliminating the discharge of pollutants from streets, roads, highways, parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas you operate*”.

To comply with this OKR04 requirement, the City of Sapulpa will implement a program to control, reduce or eliminate pollutants discharged from the MS4. The following areas will be addressed:

- City streets and roads;
- Municipal parking lots;
- Municipal Animal Shelter;
- City maintenance and storage yards;
- City fleet maintenance shops with outdoor storage areas;

List of MS4 Facilities: The following facilities are owned by the City of Sapulpa and are subject to the requirements of this MCM:

Facility	Location / Address	Notes
City Golf Course	1200 West Dewey	Outdoor washing of electric golf carts (no soap or heat) & outdoor fuel tank
Utility Maintenance	8805 West 100 th Street	Outdoor gravel stockpile with concrete barrier containment
South Heights Cemetery	1815 South Ridgeway Street	Outdoor fuel tank
Animal Shelter	8812 W. 100 th St. S.	
Public Works Facility	8900 West 100 th St	All vehicles and materials stored under cover
Fire Dept.		
WWTP	8700 West 100 th St	Inactive sludge drying beds. Belt press is indoors and covered dumpsters
Sapulpa Aquatic Center	701 N. Brown St	Covered outdoor storage of pool chemicals with secondary containment
WTP	2610 Sahoma Lake Road	Outdoor storage of old, empty drums

Implement and Enforce Procedures for Controlling, Reducing or Eliminating the

Discharge of Pollutants: The facilities listed above all pertain to the requirements in OKR04 Part V.C.6.a(iii). They are herein categorized as to Municipal Facilities (e.g., buildings, parking lots, storage yards, etc.), and MS4 System (e.g., roads, streets, roadside ditches, culverts, and large stormwater conduits). The City of Sapulpa will take the following actions to reduce or eliminate pollutants from these systems and areas.

Municipal Facilities:

- a. The City of Sapulpa will perform annual inspections of its facilities to determine potential pollutant sources via stormwater into the MS4;
- b. Where possible, all exposed materials will be stored inside a building to prevent contact with stormwater runoff.
- c. For those materials that cannot be sheltered, such as gravel piles, structural BMPs will be used where feasible to control contaminated runoff from the storage areas. These will include use of concrete barriers, silt fencing, grassy swales, sediment ponds and/or other measures as deemed appropriate.
- d. At least once a year, an inspection of these areas will be made to ensure that the BMPs and storage controls are deployed properly and working.
- e. The City of Sapulpa has developed a Spill Prevention and Response Plan for pollutant runoff at municipal facilities.
- f. Quarterly inspections of the WWTP will be performed in conjunction with the Quarterly Visual Monitoring as per the OKR05 permit requirement (**OKR04 Part V.C.6.a.vi**).

MS4 System:

- a. The public education MCM is expected to reduce the amount of trash and chemical pollutants placed on city streets. This program will include educating citizens and employees about not disposing of chemicals, yard waste, and pet wastes into the streets and drop inlets.
- b. The City of Sapulpa has developed and implemented a Spill Response and Prevention Plan and has incorporated employee training including chemical use, storage, and proper disposal.
- c. The City of Sapulpa owns street sweeping equipment that is used every Friday to remove floatables, trash and sediment from streets. The goal is for the entire city to be swept at least once per OKR04 permit cycle. All spoils are disposed of in the WWTP drying bed and then hauled to the landfill.
- d. MS4 Public Works crews will be trained to report observed pollution problems and/or trash buildup on city streets and in the City's stormwater collection system. When reported, MS4 crews will remove debris and trash from streets and the MS4 system as necessary. All spoils are disposed of in the WWTP drying bed and then hauled to the landfill.
- e. The City's MS4 is routinely maintained as part of the Good Housekeeping program. The major drainage basins (ex. Downtown drainage basin) are attempted to be cleaned at least annually. Routine storm sewer system maintenance is performed daily, prioritizing work order requests and IDDE activities. Informal inspections of the storm sewer system are performed during maintenance and cleaning of the MS4. If an issue is discovered, then the City staff creates an official work order for requested repair or maintenance. All inlets, storm sewer pipes, ditches, streets swept, etc. are tracked and logged in the GOVQA work order system "weekly cleaning report" for future reference, tracking, and reporting.

- f. Removed debris and waste materials will be disposed of by transporting the material to the Wastewater Treatment Plant for disposal in a dedicated drying bed. Waste materials are dried out and then periodically disposed of in a landfill. The material to be disposed of includes street sweeper collections, dredged material from drainage systems and creeks, sediment cleanups from streets and lots, floatables removed from culverts and streams, materials from drop inlet cleanouts, waste materials from sanitary sewer infrastructure maintenance and repairs, and other types of debris removed from the MS4 system.
- g. The City of Sapulpa has implemented sediment and erosion controls during construction activities that have a high chance to contribute to an illicit discharge or have a disturbance area of one (1) acre or greater. Sapulpa Stormwater Department has purchased stockpile topsoil and seed mix that is spread on routine maintenance drainage projects. Stabilization measures shall be implemented within fourteen (14) calendar days of completion. Stormwater crew routinely checks to ensure that stabilization has taken place within the fourteen (14) calendar days (**OKR04 Part V.C.6.a.iii.1.c.**).
- h. Vehicle wash waters are not discharged into the MS4 or waters of the state. Vehicle wash waters are performed in a car wash for fleet trucks and vehicles, and the heavy equipment- Vactors, Street Sweeper, etc.- are washed at the Wastewater Treatment Plant where the wash water is captured and recirculated to the headworks.

III.F.4 New Flood Management Projects

Part V.C.6.a.iv requires the MS4 to, “*Implement procedures to ensure that new flood management projects are assessed for impacts on water quality*”. The City of Sapulpa will ensure that all municipally-owned new flood management projects are assessed for impacts on water quality. The City’s Floodplain Administrator and City Engineer will evaluate each proposed new municipal project for potential water quality impacts during the technical review of the proposed project plans and specifications. If it is feasible and cost effective to add water quality protection features to the project design, a recommendation will be made to incorporate the features before final plans are developed.

III.F.5 Inspection and Maintenance of BMPs

OKR04 Part V.C.6.a(6) requires the MS4 to, “*Implement inspection/maintenance for structural and non-structural BMPs, including maintenance activities, maintenance schedules and long term inspection procedures for controls to reduce floatables and other pollutants discharged to your small MS4*”. This OKR04 requirement applies to municipally owned facilities under the Good Housekeeping MCM. Structural BMPs at municipal facilities include sediment basins, various types of containers for disposal of wastes and fluids, constructed swales and shallow depressions designed to collect runoff and allow infiltration, wet and dry detention basins having inlet and outlet structures, and various types of pervious surfaces used in parking lots and storage areas that allow infiltration of runoff.

Non-structural BMPs at municipal facilities include stormwater-related programs implemented by the City of Sapulpa, including: preservation of open space; expanding disconnections of

impervious surfaces; expansion of vegetation and natural systems; natural grass swales and other types of unconstructed, vegetated infiltration areas; and protection and expansion of riparian stream buffers.

Hired Contractors

Part V.C.6.a.v requires that any contractors hired to perform maintenance activities on MS4 facilities will be contractually required to comply with all of MS4 stormwater control measures, good housekeeping practices and facility-specific stormwater management operating procedures. The City has opted out of MCM 7, and has placed all required compliance responsibility on City hired contractors.

BMP Maintenance: Structural BMP maintenance will be according to need and availability of funds and resources. High maintenance priority will be given to projects that scored high on the Master Drainage Plan prioritization criteria developed by the City Council, and projects that have a positive effect on health and safety and structures that have the greatest potential to improve water quality and have a high feasibility of success using available funds. Maintenance will be scheduled upon acquisition of funds and materials, and when manpower and necessary permits are obtained. Projects that have a low chance of improving water quality after maintenance will be considered for replacement or decommissioned. The City of Sapulpa will make every effort to address maintenance issues identified in the BMP inspection program. Non-structural BMP maintenance, such as assessing ordinance effectiveness, will be made annually.

BMP Inspections: The City of Sapulpa will inspect structural BMPs annually or within 24 hours after a report of a stormwater contamination problem at a municipal facility. Inspections of structural BMPs will rely upon visual indicators, such as accumulation of trash and debris, breaks and cracks, misalignments of headwalls and inflow and outflow devices, excessive accumulation of sediment, excessive erosion of slopes, failure of fencing and other public safety features, etc. Inspections of non-structural BMPs will consist of annual reviews of stormwater programs and the corresponding codes and ordinances, and annual inspections of natural features within the MS4 such as riparian areas along creeks and natural swales and infiltration areas.

Results of all inspections and maintenance will be reported to the city staff and recorded in computer and paper files. Routine maintenance will be tracked through the WebQA work order system “weekly reports.” The Annual Report will include a summary of these activities.

III.F.6 Best Management Practices for Good Housekeeping

Appendix A contains a list of all BMPs that will be performed for this MCM, and includes Measurable Goals and implementation schedules for each BMP.

III.F.7 Management Responsibility

The City of Sapulpa has overall project management responsibility. The Environmental Consultant/Administrator will coordinate all local activities and implementation of all program elements. The Environmental Consultant/Administrator, with the assistance of the Streets & Stormwater Superintendent, will implement an inspection and maintenance program of city

facilities' structural and non-structural BMP's. The City Engineer will be responsible for developing procedures to assess impacts on water quality from new city flood management projects, assessing existing flood management projects to determine if additional protection is needed. INCOG's GCSA program will be managed by the Environmental and Energy Division at INCOG. The City of Sapulpa will provide sufficient funds for INCOG to assist its GCSA members with their Good Housekeeping program. INCOG will submit an annual written scope of services to the City of Sapulpa that will specify INCOG's role in providing technical support and activities, as well as maintain the GCSA stormwater web site on behalf of the City of Sapulpa and other GCSA members.

III.F.8 Evaluating Program Effectiveness

OKR04 Part V.C.6.a(9) requires the MS4 to, "*Evaluate the appropriateness of your identified BMPs for this MCM. Your evaluation shall verify compliance with permit requirements and more importantly, document that efforts have been made towards achieving your identified measurable goals and reducing the impacts of stormwater runoff from the small MS4.*" The City of Sapulpa will employ the following strategy to assess program effectiveness in the Annual Report:

Measurable Goals have been established for each Good Housekeeping BMP. These are listed in Appendix A and include implementation schedules and milestones for each BMP. The Measurable Goals and target dates for the BMPs were selected by the City of Sapulpa to accommodate local resources with the intent of establishing BMPs efficiently and cost effectively. Sufficient time was built into the implementation schedules to allow for corrective actions to be taken to have an improved program by the end of the permit cycle.

BMP effectiveness will be demonstrated by keeping records of feedback from city staff, the general public and from agencies and organizations using city owned facilities and impacted by the MS4 system conditions. Feedback from city staff, the public, agencies and organizations (email, phone call, fax, letter or personal visit) including outputs and outcomes of education events will be recorded in writing. The City of Sapulpa will record results of all Good Housekeeping site inspections and structural maintenance and improvements as described in this SWMP. All city maintenance activities will be recorded and tracked, with notes and comments, in the WebQA work order system. The increased number of structural maintenance and improvements made and/or the decrease in violations discovered during the annual inspections should demonstrate effectiveness of this MCM.

III.G. MCM 7: Optional Requirements for Municipal Construction Activities:

The City of Sapulpa has opted out of MCM 7.

APPENDIX A: BEST MANAGEMENT PRACTICES FOR THE SIX MCMs

MCM 1: PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT														
ID NO.	PERMIT REQUIREMENTS	SUBJECT	PARTICIPANTS	DELIVERY METHOD	ANNUAL MEASURABLE GOAL	MEASURABLE GOAL MET (Y/N)	NEW OR EXISTING	IMPLEMENTATION YEAR	IMPLEMENTATION MONTH	SCHEDULE	BMP FOR NEXT REPORTING CYCLE?	COMMENTS	IMPLEMENTED BY ANOTHER ENTITY?	IS THIS BMP USED TO ADDRESS ANY ADDITIONAL REQUIREMENTS?
1.1	Development and printing of <u>education</u> materials	Pet Waste Management	Public	Brochure/Pamphlet	All Utility Accounts	Yes	Existing	Already in place	June	Once per year	Yes	Utility Bill Mailer- Pet Waste Tips for Homeowners mailed to all 7,740 Utility Accounts. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
1.2	Development and printing of <u>education</u> materials	Illicit Discharge Detection and Elimination	Public	Other (describe in comments)	Commercial played at local movie theater	Yes	Existing	Already in place	Already in place	Continuous	Yes	The City of Sapulpa has developed a 15 second pollution prevention commercial that is shown on all theatre screens. The commercial was shown approximately 19,000 times during the 2024 Annual Report cycle. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
1.3	In coordination with MCM 3, implement an education program to involve public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste (Part V.C.1.a.ii.2.a).	Residential Yard Waste Management (e.g., onsite reuse of leaves and grass clippings)	Public	Brochure/Pamphlet	All Utility Accounts	Yes	Existing	Already in place	October	Once per year	Yes	Utility Bill Mailer- Rake it or Leaf it mailed to all 7,740 Utility Accounts. BMP is appropriate, and no further changes are necessary at this time.	No	No
1.4	Conduct public involvement efforts for a target audience (Part V.C.1.a.i).	Cleanup Event	Public	Newspaper Article/Press Release	Distribute 50 Vouchers	Yes	Existing	Already in place	April	Once per year	Yes	The City of Sapulpa held a City-Wide Cleanup Day on April 20, 2024. Brochures were distributed to every utility bill holder within the City of Sapulpa (7,740 utility accounts). The event was advertised on the City website and the Sapulpa Daily Herald. A total of 34 roll-off dumpsters were collected during the event. 266 vouchers were issued to citizens who participated in the event. This is a good indicator of public education and participation success. BMP is appropriate, and no further changes are necessary at this time.	No	No
1.5	Conduct public involvement efforts for a target audience (Part V.C.1.a.i).	Cleanup Event	Public	Newspaper Article/Press Release	Distribute 50 Vouchers	Yes	Existing	Already in place	October	Once per year	Yes	The City of Sapulpa held a City-Wide Cleanup Day on October 19, 2024. Brochures were distributed to every utility bill holder within the City of Sapulpa (7,740 utility accounts). The event was advertised on the City website and the Sapulpa Daily Herald. A total of 24 roll-off dumpsters were collected during the event. 238 vouchers were issued to citizens who participated in the event. This is a good indicator of public education and participation success. BMP is appropriate, and no further changes are necessary at this time.	No	No

1.6	In coordination with MCM 3, promote, publicize, and facilitate the reporting of illicit discharges (Part V.C.1.a.ii.2.b).	General Stormwater Management Information	Public	Website	Annually review effectiveness of <u>public information process</u> and update, if needed	Yes	Existing	Year 2: 2022	September	Once per year	Yes	The City of Sapulpa is contracted with SmartGov to host the City website and work order system. This is an improvement, because now a single system is used for phone complaints, website complaints and work order requests. These requests are easily tracked for reports. This system will also be used to host and track educational videos for various aspects of the Stormwater Management Program. Effectiveness reviewed during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	No
1.7	In coordination with MCM 3, conduct staff training to identify and report stormwater illicit discharges (Part V.C.1.a.ii.2.c).	Illicit Discharge Detection and Elimination	Public Employees	Targeted Group Training	One event per year	Yes	Existing	Already in place	December	Once per year	Yes	The City of Sapulpa has purchased stormwater and pollution prevention training videos from Excal Visual. The training video specific to illicit discharge detection & Municipal Good Housekeeping, "Storm Watch," was shown to the Public Works crews. BMP is appropriate, and no further changes are necessary at this time.	No	No
1.8	In coordination with MCM 4, implement an education program to involve local developers (Part V.C.1.a.ii.3.a).	Construction Sites	Developers	Targeted Group Training	One event per Contractor	Yes	Existing	Year 2: 2022	January	Once per year	Yes	The City of Sapulpa implemented a remote training video through SmartGov and a Cloud Drive to track and host the sediment and erosion control training for all builders and developers that construct in the City of Sapulpa. Prior to issuance of Sediment & Erosion Control permits, all builders and developers are required to watch a 15 minute training video on construction site stormwater and pollution prevention regulations. Training is required of builders & developers annually. 52 developers, builders and contractors watched the training video during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	No
1.9	In coordination with MCM 4, conduct staff training to address requirements for inspection and enforcement of erosion and sediment control measures (Part V.C.1.a.ii.3.c).	General Stormwater Management Information	Public Employees	Training	One event per year	Yes	Existing	Already in place	June	Once per year	Yes	During 2024 the Environmental Administrator attended GCSA training and Inspections Supervisor attended Conservation Commission training. BMP is appropriate, and no further changes are necessary at this time.	Yes	No

1.10	In coordination with MCM 4, implement and enforce procedures for receipt and consideration of information submitted by the public (Part V.C.1.a.ii.3.b).	General Stormwater Management Information	Public Employees	Other (describe in comments)	Annually review effectiveness of public information process and update, if needed	Yes	Existing	Already in place	April	Once per year	Yes	The City of Sapulpa can receive information from the public via the website, by phone, and through social media. The website automatically creates a work order. Sapulpa has an employee dedicated to taking stormwater related calls and tracking/managing the work orders. Phone calls leading to a work order are entered into SmartGov work order system. All stormwater related complaints were inspected/investigated during 2024. The City of Sapulpa received 189 stormwater related work orders by phone and through the website during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	No
1.11	In coordination with MCM 6, conduct staff training to prevent and reduce stormwater pollution from MS4 activities (Part V.C.1.a.ii.5).	Infrastructure Maintenance	Public Employees	Training	One event per year	Yes	Existing	Already in place	June	Once per year	Yes	The City of Sapulpa has purchased stormwater and pollution prevention training videos from Excal Visual. The training video specific to illicit discharge detection & Municipal Good Housekeeping, "Storm Watch," was shown to the Public Works crews. BMP is appropriate, and no further changes are necessary at this time.	No	No
1.12	Conduct public involvement efforts for a target audience (Part V.C.1.a.i).	Household Hazardous Waste Disposal	Public	Other (describe in comments)	800 pounds of household hazardous materials properly disposed of annually	Yes	Existing	Already in place	Already in place	Continuous	Yes	Seven (7) Sapulpa residents utilized the facility during 2024, and 724 pounds of household hazardous wastes were properly disposed of at the facility. There was a decrease of participation from the prior year. The City will further promote the HHPCF in 2025. However, the City of Sapulpa has seen a decrease in proper disposal of such items, so BMP is appropriate, and no further changes are necessary at this time.	Yes	No
1.13	Conduct public involvement efforts for a target audience (Part V.C.1.a.i).	Storm Drain Marking	School Groups	School Program	10 Storm Drains Marked Annually	Yes	Existing	Already in place	Already in place	Once per year	Yes	During storm drain marking programs, the students go door to door informing the citizens of pollution prevention activities. This program has proven to be a popular and successful program. A local school classroom performed one (1) storm drain marking public education/public participation event. The students were first educated through a display board and enviroscope, then the students marked 10 local storm drains and educated 21 local households on general pollution prevention. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

1.14	Conduct public education efforts for a target audience (Part V.C.1.a.i).	Recycling	Public	Brochure/Pamphlet	Public education promotion of the local recycling centers- Distribute 20 brochures	Yes	Existing	Already in place	Already in place	Once per year	Yes	Recycling was promoted through brochures distributed at the Public Works Annex building. 24 brochures were distributed during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	No
1.15	Conduct public education efforts for a target audience (Part V.C.1.a.i).	General Stormwater Management Information	Public	Meeting	Discuss Phase II stormwater and stormwater related topics in public meetings- One public event per year	Yes	Existing	Already in place	Already in place	Once per year	Yes	Stormwater related projects were discussed during 3 City Council meetings during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
1.16	Include a process by which public comments on the SWMP are received and reviewed by the person(s) responsible for the SWMP (Part V.C.1.a.iii).	Involvement in Development of SWMP	Public	Involvement in Development of SWMP	Initiate process for public to comment on updated SWMP.	Yes	Existing	Year 3: 2023	June	Continuous	Yes	SWMP uploaded to City website requesting public comments. Comments are received and reviewed by Environmental Administrator for discussion and consideration with Sapulpa staff. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)												
ID NO.	PERMIT REQUIREMENTS	BMP DESCRIPTION	ANNUAL MEASURABLE GOAL	MEASURABLE GOAL MET (Y/N)	NEW OR EXISTING	IMPLEMENTATION YEAR	IMPLEMENTATION MONTH	SCHEDULE	BMP FOR NEXT REPORTING CYCLE?	COMMENTS	IMPLEMENTED BY ANOTHER ENTITY?	IS THIS BMP USED TO ADDRESS ANY ADDITIONAL REQUIREMENTS?
3.1	Implement procedures to identify priority areas (Part V.C.3.a.i).	Identify and update priority areas including areas with a higher likelihood of illicit connections or discharges. Describe procedures for identifying priority areas in the SWMP.	Develop priority area list in Year 1 to identify priority areas with a higher likelihood of illicit connections or discharges. Place special focus on pollutants of concern for 303 (d) and TMDL watersheds.	Yes	Existing	Year 1: 2021	August	Once per permit cycle	No	SWMP priority areas updated April 2022. Priority areas were selected using the following criteria: Examine maps of MS4 area to locate sites with high potential for pollutant discharges. Delineate MS4 areas within each of the 303(d) watersheds, and identify high priority areas that have sources most likely to cause or have the reasonable potential to contribute the 303(d) pollutants of concern to the 303(d) listed waterbody. Collect data on pollutant spills that have occurred in the MS4 within the past 5 years. Identify areas in which there have been sewer system bypasses within the past 5 years. Identify areas having the oldest sewer system lines and appurtenances and areas with septic systems. Identify industrial, commercial and residential areas having the greatest potential to discharge pollutants (i.e. industrial facilities with previous NOVs). Compile results of any ambient sampling and DWFS inspections that indicate potential pollutants being discharged. Compile all of these data, and generate a map and description of areas in the MS4 having the greatest potential to discharge pollutants. Of the overall MS4 high priority areas, identify high priority areas specifically associated with 303(d) waterbodies. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
3.2	Annually update the list of priority areas. Please include the date it was last updated in the comments (Part V.C.3.a.i).	Update priority areas based on annexations, citizen complaints, and changing priorities.	Update priority list annually in April along with the SWMP review.	Yes	Existing	Year 2: 2022	April	Once per year	Yes	SWMP priority areas reviewed April 2024 with no updates. There were two (2) areas removed from City Limits (de-annexations) in priority watersheds during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

3.3	Implement procedures to trace or investigate the source of an illicit discharge (Part V.C.3.a.ii).	Develop SOPs for illicit discharge detection and elimination and Dry Weather Field Screening Program.	Implement program in Year 1. Conduct MS4 inspection program based upon incident reports and Dry Weather Field Screen (DWFS) inspections of outfalls. All discovered incidents must be investigated.	Yes	Existing	Already in place	Already in place	Continuous	Yes	SOPs for IDDE and DWFS programs are included as attachment to SWMP. Program description is located in SWMP Section III.C.4 Plan to Detect and Eliminate Illicit Discharges . As part of the Illicit Discharge Detection and Elimination (IDDE) program BMP, the City of Sapulpa performed two (2) IDDE investigations during the 2024 permit year. The City televised approximately 230 ft of its 30.5 miles of storm sewer system during the 2024 permit year. No illicit discharges were discovered as a result of televising or DWFS during 2024. All IDDE performed during 2024 have been abated and/or corrected. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
3.4	Implement procedures to remove the source of an illicit discharge (Part V.C.3.a.iii).	Develop SOPs for illicit discharge detection and elimination and Dry Weather Field Screening Program including Enforcement Procedures.	Implement program in Year 1. Conduct MS4 inspection program based upon incident reports and Dry Weather Field Screen (DWFS) inspections of outfalls. All discovered incidents must be corrected utilizing Enforcement Response Procedures.	Yes	Existing	Already in place	Already in place	Continuous	Yes	SOPs for IDDE and DWFS programs are included as attachment to SWMP. Program description is located in SWMP Section III.C.4.d Removing the Source . A major sanitary sewer improvement project in a 303 (d) listed watershed was initiated during 2024. This improvement will extend sewer access to areas currently served by septic and aerobic onsite sewer systems as well as repair aging and leaking infrastructure within the North Polecat Creek watershed and should significantly reduce the amount of bacteria load from I&L. There were ten (10) lift station related overflows that were investigated & subsequently corrected & cleaned. During 2024, 1,107 ft of damaged or aging sanitary sewer was replaced; 17,000 ft of root control; and one sanitary sewer manhole was replaced. All IDDE investigations performed during 2024 have been abated and/or corrected. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
3.5	Implement procedures to identify problems using visual indicators and simple field test kits (Part V.C.3.a.iv).	Develop SOPs for field test kits and meters	Implement program in Year 1.	Yes	Existing	Already in place	Already in place	Once per permit cycle	No	SOPs for field test kits and instrumentation are included as an attachment to the SWMP. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

3.6	Implement ordinances, or other regulatory mechanisms, to prohibit illicit discharges (Part V.C.3.a.vi).	Enforce Sapulpa City Code, Chapter 4, Stormwater Management Program, Section 14-408, Illicit Discharge Prohibitions	Review Ordinance annually in February.	Yes	Existing	Already in place	Already in place	Once per year	Yes	Stormwater Management Program Ordinance with Illicit Discharge Prohibition was adopted in 2007 and administrative enforcement procedures amended in 2010. Ordinances and ERP were reviewed in 2024, and no changes were recommended. All IDDE investigations were corrected and/or enforced as per ordinances. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
3.7	Develop a storm sewer system map (Part V.C.3.a.vii).	Develop MS4 system map	Develop a city-wide storm sewer system map to include all public infrastructure and Waters of the State.	Yes	Existing	Already in place	Already in place	Once per permit cycle	No	The City of Sapulpa hired Meshk and Associates in 2008 to create the City of Sapulpa Master Drainage Plan. The entire storm sewer system was surveyed as part of the Master Drainage Plan. All inlets, outfalls, manholes, and storm sewer pipes were labeled and mapped into overlays in ArcMap. Mapping system is updated to include newly developed or annexed infrastructure. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
3.8	Annually update the storm sewer system map. Please include the date it was last updated in the comments (Part V.C.3.a.vii).	Review and update MS4 system map	Review and update map and data annually in December to include annexations and newly installed infrastructure or improvements.	Yes	Existing	Already in place	Already in place	Once per year	Yes	The ArcMap data is continually updated with new infrastructure annexation, installation and improvements. There were three (3) areas of infrastructure that were updated during 2024. BMP is appropriate, and no further changes are necessary at this time.	Yes	303(d) list of impaired waters and TMDL or watershed plan
3.9	Develop a list of occasional incidental non-stormwater discharges or flows (Part V.C.3.a.viii).	Develop a list of occasional incidental non-stormwater discharges or flows based on the 2021 OKR04.	Develop a list of occasional incidental non-stormwater discharges or flows as per the 2021 OKR04. Develop once per permit cycle.	Yes	Existing	Year 1: 2021	August	Once per permit cycle	No	In August 2021 updates were made to the incidental discharges list for discharges or flows from emergency firefighting activities or training activities. BMP is appropriate, and no further changes are necessary at this time.	No	No
3.10	Annually update your list of occasional incidental non-stormwater discharges or flows. Please include the date it was last updated in the comments (Part V.C.3.a.viii).	Annually review list of occasional incidental non-stormwater discharges or flows.	Annually in February review and update if necessary list of occasional incidental non-stormwater discharges or flows.	Yes	Existing	Year 2: 2022	February	Once per year	Yes	No updates were made to the incidental discharges list during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	No

3.11	Conduct DWFS at all identified outfalls (Part V.C.3.a.v).	Conduct <u>MS4 inspection program</u> based upon incident reports and Dry Weather Field Screen (DWFS) inspections of outfalls	Perform DWFS on 40% of major outfalls annually. Investigate all reported IDDE incidents.	Yes	Existing	Already in place	Already in place	Continuous	Yes	As part of the Illicit Discharge Detection and Elimination (IDDE) program BMP, the City of Sapulpa performed two (2) IDDE investigations during the 2024 permit year. The City televised approximately 230 ft of its 30.5 miles of storm sewer system during the 2024 permit year. No illicit discharges were discovered as a result of televising or DWFS during 2024. All IDDE performed during 2024 have been abated and/or corrected. The City conducted DWFS on ten (10) outfalls during the 2024 permit year. No illicit discharges were discovered based on DWFS results. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
3.12	Conduct DWFS at high priority areas (Part V.C.3.a.v).	Conduct DWFS on major outfalls in high priority areas on an increased basis.	Perform DWFS on high priority area outfalls annually.	Yes	New	Year 1: 2021	June	Once per year	Yes	The City conducted DWFS on ten (10) outfalls during the 2024 permit year. No illicit discharges were discovered based on DWFS results. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL												
ID NO.	PERMIT REQUIREMENTS	BMP DESCRIPTION	ANNUAL MEASURABLE GOAL	MEASURABLE GOAL MET (Y/N)	NEW OR EXISTING	IMPLEMENTATION YEAR	IMPLEMENTATION MONTH	SCHEDULE	BMP FOR NEXT REPORTING CYCLE?	COMMENTS	IMPLEMENTED BY ANOTHER ENTITY?	IS THIS BMP USED TO ADDRESS ANY ADDITIONAL REQUIREMENTS?
4.1	Implement and enforce ordinances, or other regulatory mechanisms, to require BMPs (Part V.C.4.a.i).	Enforce Stormwater Management Program Ordinance Utilizing Enforcement Response Plan	Enforce all construction site violations	Yes	Existing	Already in place	Already in place	Continuous	Yes	During 2024, five (5) verbal warnings, five (5) Stop Work Orders and three (3) Notice of Violations were issued and subsequently corrected. Enforcement escalation followed Enforcement Response procedures. BMP is appropriate, and no further changes are necessary at this time.	No	No
4.2	Review and/or revise ordinances, or other regulatory mechanisms, that require BMPs (Part V.C.4.a.i).	Review effectiveness of ordinances and make changes as needed	Review in Permit Year 2021 and update as needed	Yes	Existing	Already in place	Already in place	Once per permit cycle	No	The City of Sapulpa reviewed the ordinances for appropriateness during the 2021 Annual Report cycle and updated the current Stormwater Management Program Ordinance to adopt the OKR10 by reference, strengthen the watercourse protection Section, and to remove language regarding straw and hay bales as erosion control methods. BMP is appropriate, and no further changes are necessary at this time.	No	No

4.3	Implement and enforce procedures for site plan review (Part V.C.4.a.ii).	Review and amend process for including water quality consideration and sediment & erosion control measures in <u>site plan reviews</u>	Review annually in April and update as needed	Yes	Existing	Already in place	Already in place	Once per year	Yes	The City of Sapulpa staff held several interdepartmental meetings and amended the new commercial construction development process. Water quality is considered from the initial proposal of the development through final approval; during Pre-Development Technical Advisory Committee (TAC) meetings, the Civil & Hydrology reviews and during the Earth Change and Sediment and Erosion Control permit reviews. Garver Engineering, the Hydrology and Civil engineers contracted for site plan reviews, has also been informed of the importance of water quality considerations. The City requires Sediment & Erosion Control Plans for all Earth Change Permits, regardless of disturbance area. Sediment & Erosion Control Plans are reviewed prior to issuance of Earth Change Permit. During 2024, the City of Sapulpa issued one-hundred sixty-seven (167) Earth Change Permits and Sediment & Erosion Control Permits. The Sapulpa Urban Development Department held nineteen (19) Pre-Development & TAC meetings. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
4.4	Implement and enforce procedures for site inspection and enforcement of control measures (Part V.C.4.a.iii).	Implement Inspection & Enforcement Program	Continue to use construction inspection SOP for OKR10 sites and use ERP for enforcement response.	Yes	Existing	Already in place	Already in place	Continuous	Yes	A construction Inspection SOP is utilized for sites with one acre or greater disturbance area. ERP is utilized for all enforcement response and escalation. Both items are attachments to the SWMP. No amendments have been made during this permit cycle. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

4.5	Conduct construction site inspections (Part V.C.4.a.iii).	Conduct <u>construction site inspections</u>	Perform Monthly construction inspections of sites that require OKR10. Perform quarterly inspections of all other sites.	Yes	Existing	Already in place	Already in place	Continuous	Yes	756 construction inspections were performed during 2024. 725 inspections were performed by the Building Inspector and thirty-one (31) inspections were performed by the Environmental Administrator. During 2024, five (5) verbal warnings, five (5) Stop Work Orders and three (3) Notice of Violations were issued and subsequently corrected. Enforcement escalation followed Enforcement Response procedures. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
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MCM 5: POST-CONSTRUCTION MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT												
ID NO.	PERMIT REQUIREMENTS	BMP DESCRIPTION	ANNUAL MEASURABLE GOAL	MEASURABLE GOAL MET (Y/N)	NEW OR EXISTING	IMPLEMENTATION YEAR	IMPLEMENTATION MONTH	SCHEDULE	BMP FOR NEXT REPORTING CYCLE?	COMMENTS	IMPLEMENTED BY ANOTHER ENTITY?	IS THIS BMP USED TO ADDRESS ANY ADDITIONAL REQUIREMENTS?
5.1	Implement and enforce ordinances, or other regulatory mechanisms, to require BMPs (Part V.C.5.a.i).	Develop and enforce a program to maintain pre-development runoff conditions and ensure controls are in place to minimize water quality impacts. Review and amend process for including water quality consideration in site plan reviews	Hold Pre-Development and Technical Advisory Committee (TAC) meetings for all new commercial and multi-family developments subject to OKR10.	Yes	Existing	Already in place	Already in place	Continuous	Yes	The City of Sapulpa adopted a Post-Construction Stormwater Impacts; Minimization Regulations and Requirements; Compliance Procedures Ordinance in 2010. The Watercourse Protection section of the Stormwater Management Ordinance, which affects post-construction enforcement, was amended in 2021. The use of BMPs and LID development procedures is explored and promoted during the Pre- Development meetings. Garver Engineering (Sapulpa Engineer) also promotes the use of BMPs during the hydrology and infrastructure review process. Post-construction plan review is performed during TAC meetings and through the hydrology and construction plan review. The City of Sapulpa held nineteen (19) Pre-Development and TAC meetings during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

5.2	Implement and enforce procedures, such as ordinances or other regulatory mechanisms, to ensure long-term operation and maintenance of BMPs (Part V.C.4.a.ii).	Require long term operation & maintenance procedures for post-construction BMPs on Plat and covenants of new developments	Hold Pre-Development and Technical Advisory Committee (TAC) meetings for all new commercial and multi-family developments subject to OKR10.	Yes	Existing	Already in place	Already in place	Continuous	Yes	The City reviews the O&M program language during the Plat review process to ensure that O&M procedures of post-construction features are clearly delineated on the Plat as per listed requirements. Post-construction features are inspected during construction and again as part of the final construction inspection. All enforcement procedures listed in the ERP are utilized for enforcement of O&M of post-construction features. The City of Sapulpa held nineteen (19) Pre-Development and TAC meetings during 2024. The City of Sapulpa has implemented a Post-Construction inspection program. Detention facilities (when required under the Engineering Design Criteria) are to be developed as Phase 1 of construction regardless of size of construction site. The site shall then be graded to the facility (in Phases) to act as a sedimentation basin. The City Inspector verifies correct sizing, grading, and permanent stabilization prior to issuing a Certificate of Occupancy. Post-construction inspections are performed by the City as part of the construction inspection program, Certificate of Occupancy program, and during the DWFS program. Seven (7) post-construction inspections were performed during 2024. One subdivision infrastructure was dedicated to the Public and accepted by the City Council during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
5.3	Review local ordinances, regulations, and engineering plans or specifications to identify any legal/regulatory barriers to LID (Part V.C.4.a.iii).	Review ordinances, Code, and Engineering Design Criteria for barriers to LID	Review in conjunction with OKR04 Permit Renewal and SWMP Updates	Yes	Existing	Already in place	Already in place	Once per permit cycle	No	No LID barriers have been identified this permit cycle. BMP is appropriate, and no further changes are necessary at this time.	No	

5.4	Assess current street design, parking lot guidelines, and other requirements that affect the creation of impervious cover and implement additional guidelines or design standards to support LID design options. Provide a justification if additional guidelines are not implemented (Part V.C.4.a.iv).	Review ordinances, Code, and Engineering Design Criteria for barriers to LID. Implement guidelines as developed.	Review in conjunction with OKR04 Permit Renewal and SWMP Updates	Yes	Existing	Already in place	Already in place	Once per permit cycle	No	Assessment was made during 2021 OKR04 renewal process. The City of Sapulpa has a variance process to allow smaller streets and parking lots. The Engineering Design Criteria promotes maximizing greenspace and open channels, especially in larger developments. The City of Sapulpa has a landscaping criteria that requires vegetation, greenspace, and tree requirements in all developments-including industrial developments. The City has a greenspace requirement for single family housing as well. No LID barriers have been identified this permit cycle. BMP is appropriate, and no further changes are necessary at this time.	No	No
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MCM 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MS4 OPERATIONS												
ID NO.	PERMIT REQUIREMENTS	BMP DESCRIPTION	ANNUAL MEASURABLE GOAL	MEASURABLE GOAL MET (Y/N)	NEW OR EXISTING	IMPLEMENTATION YEAR	IMPLEMENTATION MONTH	SCHEDULE	BMP FOR NEXT REPORTING CYCLE?	COMMENTS	IMPLEMENTED BY ANOTHER ENTITY?	IS THIS BMP USED TO ADDRESS ANY ADDITIONAL REQUIREMENTS?
6.1	Develop a list of all MS4 facilities impacted by this program (Part V.C.5.a.i).	Develop a list of City-owned operation and maintenance facilities and detail in SWMP	Detail list in the SWMP	Yes	Existing	Already in place	Already in place	Once per permit cycle	No	List is detailed in the SWMP Section III.F.3 Controlling Pollutants from MS4 Systems and Facilities BMP is appropriate, and no further changes are necessary at this time.	No	No
6.2	Anually update the list of all MS4 facilities impacted by this program. Please include the date it was last updated in the comments (Part V.C.5.a.i).	Annually review City-owned operation and maintenance facilities list in SWMP. Update as necessary.	List will be reviewed annually during facility inspections in November and updated as necessary with Annual Report preparation.	Yes	Existing	Already in place	Already in place	Once per year	Yes	Facility list was reviewed in June 2024, and no updates were required. BMP is appropriate, and no further changes are necessary at this time.	No	No
6.3	Develop a list of all MS4 facilities subject to an OKR05 or individual OPDES/NPDES permit (Part V.C.5.a.ii).	Develop a list of City-owned facilities subject to OKR05 or OPDES and detail in SWMP	Detail list in the SWMP	Yes	Existing	Already in place	Already in place	Once per permit cycle	No	List is detailed in the SWMP Section III.F.2 List of Industrial Permitted Facilities BMP is appropriate, and no further changes are necessary at this time.	No	No
6.4	Anually update the list of all MS4 facilities subject to an OKR05 or individual OPDES/NPDES permit. Please include the date it was last updated in the comments (Part V.C.5.a.ii).	Annually review City-owned facilities subject to OKR05 or OPDES list in SWMP. Update as necessary.	List will be reviewed annually during facility inspections in November and updated as necessary with Annual Report preparation.	Yes	Existing	Already in place	Already in place	Once per year	Yes	List is detailed in the SWMP Section III.F.2 List of Industrial Permitted Facilities. List was updated to include WTP that had mistakenly been deleted. BMP is appropriate, and no further changes are necessary at this time.	No	No
6.5	Implement and enforce procedures for controlling, reducing or eliminating the discharge of pollutants (Part V.C.5.a.iii).	Conduct street sweeping for reducing & eliminating discharge of pollutants and prevent flooding	50 lane miles swept per year and trash and debris landfilled	Yes	Existing	Already in place	Already in place	Continuous	Yes	Procedures detailed in SWMP Section III.F.3 Controlling Pollutants from MS4 Systems and Facilities. City will target POCs. During 2024, 403.7 lane miles swept; 744 cu yds of trash and debris collected and landfilled. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
6.6	Implement and enforce procedures for controlling, reducing or eliminating the discharge of pollutants (Part V.C.5.a.ii).	Conduct storm sewer inlet cleaning for reducing & eliminating discharge of pollutants and prevent flooding	50 inlets cleaned per year and trash and debris landfilled	Yes	Existing	Already in place	Already in place	Continuous	Yes	Procedures detailed in SWMP Section III.F.3 Controlling Pollutants from MS4 Systems and Facilities. City will target POCs. During 2024, 2,125 inlets cleaned; 147 cu yards of trash and debris landfilled and removed from storm sewer system. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
6.7	Implement and enforce procedures for controlling, reducing or eliminating the discharge of pollutants (Part V.C.5.a.iii).	Vactor clean storm sewer system for reducing & eliminating discharge of pollutants and prevent flooding	100 feet of storm sewer system Vactored per year and trash and debris landfilled	Yes	Existing	Already in place	Already in place	Continuous	Yes	Procedures detailed in SWMP Section III.F.3 Controlling Pollutants from MS4 Systems and Facilities. City will target POCs. During 2024, 3,258 ft storm sewer cleaned with Vactor; 565.2 cu yards of trash and debris landfilled and removed from storm sewer system. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

6.8	Implement and enforce procedures for controlling, reducing or eliminating the discharge of pollutants (Part V.C.5.a.iii).	Identify and correct sanitary sewer overflows based on inspections and work orders	Correct all smaller projects in-house and plan, prepare for budgeting of large infrastructure projects	Yes	Existing	Already in place	Already in place	Continuous	Yes	A major sanitary sewer improvement project in a 303 (d) listed watershed was initiated during 2024. This improvement will extend sewer access to areas currently served by septic and aerobic onsite sewer systems as well as repair aging and leaking infrastructure within the North Polecat Creek watershed and should significantly reduce the amount of bacteria load from I&L. There were ten (10) lift station related overflows that were investigated & subsequently corrected & cleaned. During 2024, 1,107 ft of damaged or aging sanitary sewer was replaced; 17,000 ft of root control; and one sanitary sewer manhole was replaced. BMP is appropriate, and no further changes are necessary at this time.	Yes	303(d) list of impaired waters and TMDL or watershed plan
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6.9	Implement and comply with procedures to ensure that new flood management projects are assessed for impacts on water quality (Part V.C.5.a.iv.).	Develop procedures to assess new City-owned flood management projects for impacts on water quality and detail procedures in SWMP Section III.F.4 New Flood Management Projects.	Hold Pre-development and TAC meetings for all new City-owned flood management projects and assess impacts on water quality prior to final plan development.	Yes	Existing	Already in place	Already in place	Continuous	Yes	No	303(d) list of impaired waters and TMDL or watershed plan
6.10	Provide oversight and ensure contractors are contractually required to comply with any stormwater control measures, good housekeeping practices, or facility-specific procedures (Part V.C.5.a.v.).	Develop procedures to ensure contractors comply with stormwater control measures and good housekeeping practices for City-owned facility projects.	Plan, prepare, and develop procedures for addition to final SWMP in 2023	Yes	Existing	Year 2: 2022	July	Continuous	Yes	During 2023, procedures were added to SWMP Section III.F.5 Best Management Practices for Good Housekeeping.	No

6.11	Conduct MS4 facility inspections (Part V.C.5.a.vi).	Conduct inspection of city facilities and maintenance yards for control of pollutants	One (1) inspection per facility per year in November. WWTP Inspected Quarterly with the Visual Monitoring	Yes	Existing	Already in place	Already in place	Once per year	Yes	The WWTP was inspected in conjunction with the Quarterly Visual Monitoring. All City-owned facilities were inspected during December 2024. The Streets & Stormwater Public Works Facility was instructed to close an inlet that could have been used for washing equipment or vehicles. No other deficiencies were found. BMP is appropriate, and no further changes are necessary at this time.	No	No
6.12	Implement and enforce procedures for controlling, reducing or eliminating the discharge of pollutants (Part V.C.5.a.iii).	Develop procedures for implementing and enforcing the use of BMPs including sediment and erosion controls after line breaks, emergency repairs, and routine maintenance have been completed.	Plan, prepare, and develop procedures for addition to final SWMP in 2023	Yes	New	Year 3: 2023	July	Once per permit cycle	No	During 2024, procedures were added to <u>SWMP Section III.F.3.G, Implement and Enforce Procedures for Controlling, Reducing or Eliminating the Discharge of Pollutants, MS4 System, Part G, Page 46.</u> The City of Sapulpa has implemented sediment and erosion controls during construction activities that have a high chance to contribute to an illicit discharge or have a disturbance area of one (1) acre or greater. Sapulpa Stormwater Department has purchased stockpile topsoil and seed mix that is spread on routine maintenance drainage projects. Stabilization measures shall be implemented within fourteen (14) calendar days of completion. Stormwater crew routinely checks to ensure that stabilization has taken place within the fourteen (14) calendar days. 50 tons of topsoil/seed mixture was purchased for projects during 2024. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan

6.13	Implement and enforce procedures for controlling, reducing or eliminating the discharge of pollutants (Part V.C.5.a.iii).	Develop procedures for implementing and enforcing the use of BMPs to ensure that vehicle wash waters are not discharged into the MS4 or waters of the state.	plan, prepare, and develop procedures for addition to final SWMP in 2023	Yes	New	Year 3: 2023	July	Once per permit cycle	No	During 2024, procedures were added to SWMP Section III.F.3.H, Implement and Enforce Procedures for Controlling, Reducing or Eliminating the Discharge of Pollutants, MS4 System, Part H, Page 46. Vehicle wash waters are not discharged into the MS4 or waters of the state. Vehicle wash waters are performed in a car wash for fleet trucks and vehicles, and the heavy equipment- Vactors, Street Sweeper, etc. are washed at the Wastewater Treatment Plant- where the wash water is captured and recirculated to the headworks. BMP is appropriate, and no further changes are necessary at this time.	No	303(d) list of impaired waters and TMDL or watershed plan
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APPENDIX B: Documentation of Selection Criteria for Protected Species

Procedures for and Documentation of the Selection of Criteria to Meet Eligibility for Protection of Endangered Species per Part I.E. of OKR04

Part I.E.2.a and d:

2. Eligibility Certification

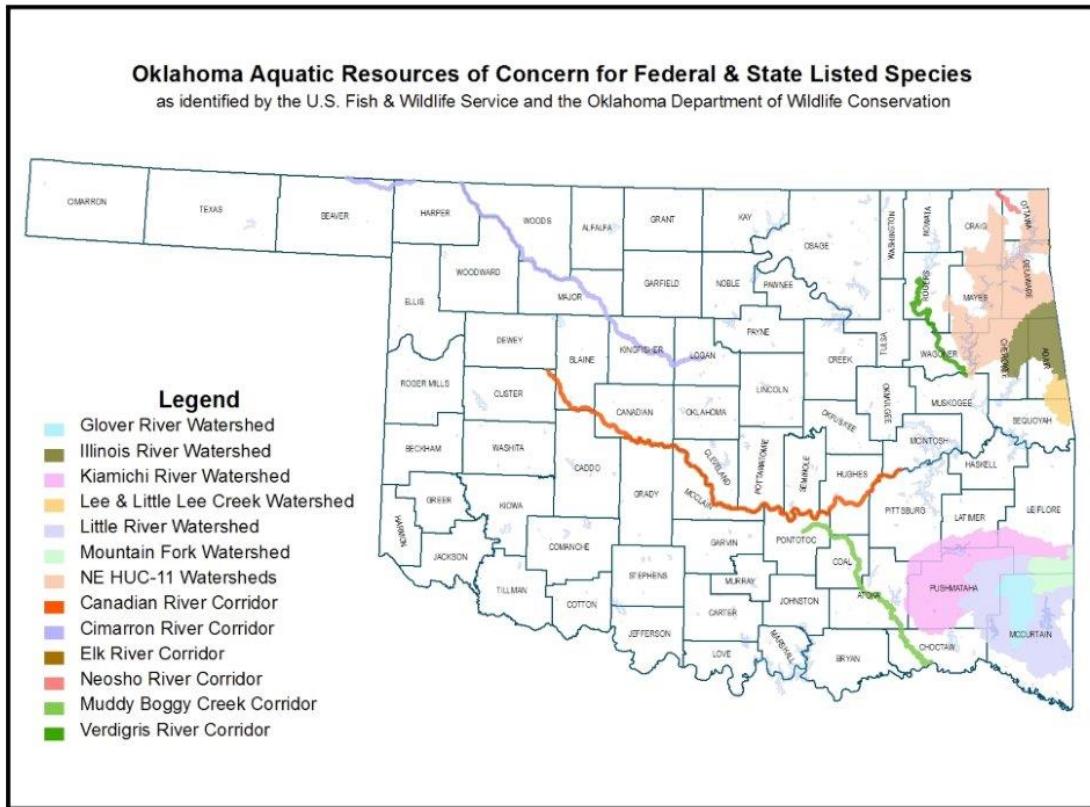
a. You must certify that you have met eligibility criteria for protection of threatened or endangered species and their critical habitat. Your signed NOI will constitute your certification of eligibility. If the eligibility requirements cannot be met, you may seek coverage under a DEQ individual permit. This eligibility must be evaluated before the NOI is submitted. DEQ strongly recommends that you conduct this evaluation at the earliest possible stage to ensure that measures to protect listed species are incorporated early in the planning process.

d. You must meet one or more of the criteria below for the entire term of coverage under this Permit. If you are located partially or wholly in a shaded region of the map or in an area described in Exhibit 1, then you must meet criterion B, C, D, or E for the term of this Permit. If you are not located in the shaded area or watersheds listed in Exhibit 1, then you meet the terms of criterion A. The information used to make the eligibility determination must be documented and included as part of the SWMP.

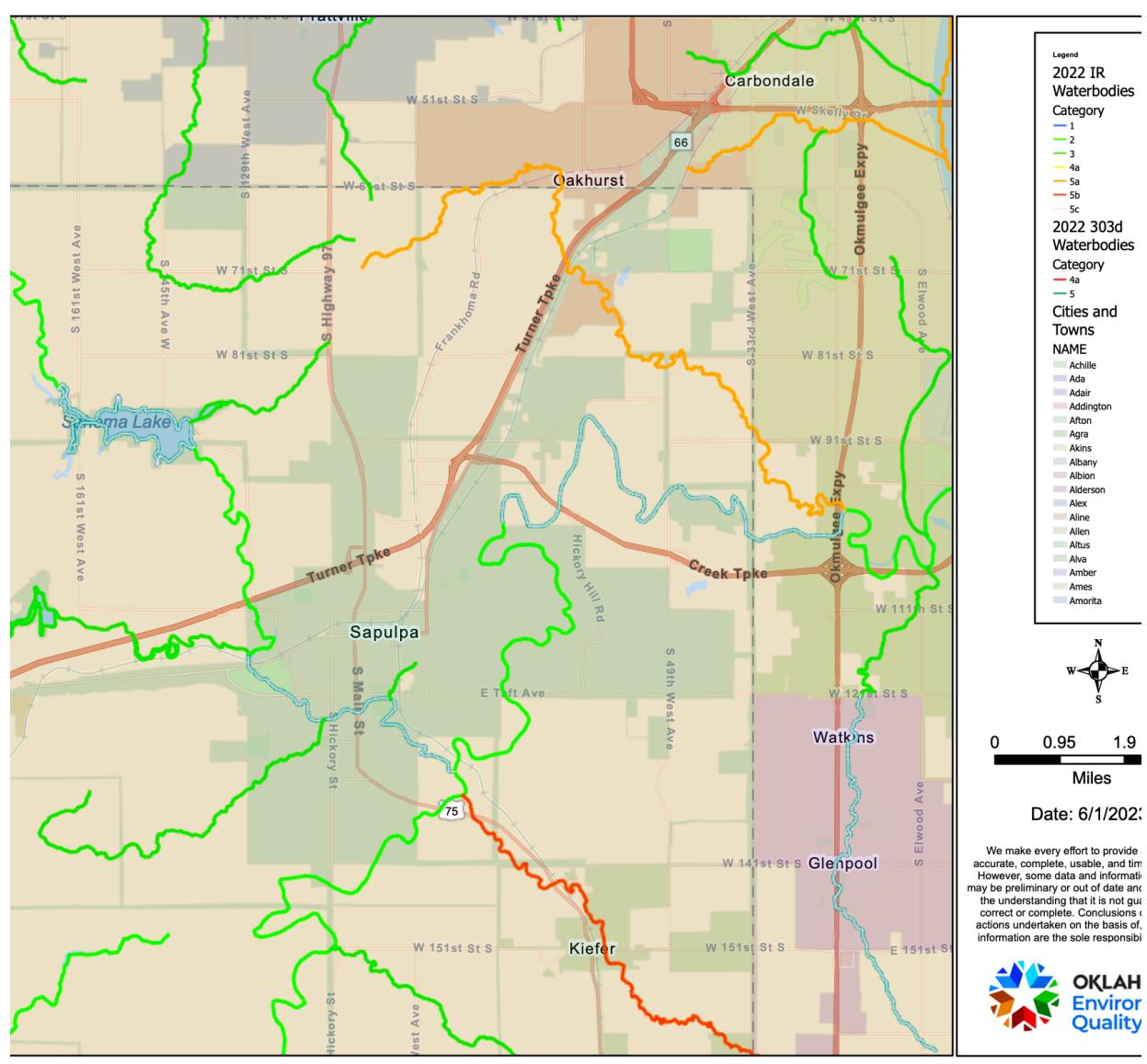
Criterion D: *The applicant has evaluated, using best judgment and available scientific and commercial data, the effects of the stormwater discharges, allowable non-stormwater discharges, and discharge related activities on listed species and critical habitat. Based on the evaluation, the permittee has determined that there is no reason to believe the discharge and discharge related activities are likely to adversely affect any listed species or result in the adverse modification or destruction of critical habitat. Any measures necessary to maintain eligibility under this criterion must be documented in the SWMP.*

After comparing ARC delineations in Appendix C: Map of MS4 and Water Features with the MS4 boundaries and MS4 areas of highest likelihood of having stormwater pollution sources, it was determined that the MS4 will have no stormwater discharges that will likely adversely affect endangered species or result in the adverse modification or destruction of critical habitat. The City of Sapulpa has identified a number of special BMPs that are described in this SWMP for compliance with OKR04 Part III (Special Conditions). By implementing these special BMPs, any receiving waterbodies that are on the 303(d) List, have completed TMDLs or otherwise are subject to the provisions of Part III, are expected to not have any exceedances of water quality

standards nor will stormwater discharges from the MS4 have the reasonable potential to cause any water quality problems.



Section Break is here. Paste a **APPENDIX C: Map of MS4 and Water Features**



Caption

APPENDIX D: Written Agreement(s) By Another Governmental Entity

Intergovernmental Agreement for Regional Household Pollutant Collection Facility and Participation

THIS AGREEMENT is made and entered into this _____ day of _____, 2019, to be effective July 1, 2019, by and between The City of Sapulpa to 60 O.S. 176 et seq., and The City of Tulsa, an Oklahoma municipal corporation (hereinafter referred to as "Tulsa").

WITNESSETH:

WHEREAS, the parties desire to enter into this Agreement to define the participation and expectations of each party and to coordinate the collection and management of household hazardous waste (HHW); and

WHEREAS, the EPA Clean Water Act of 1987 requires the establishment of Hazardous Waste Collection and Disposal Programs for MS4 permits; and

WHEREAS, HHW is "a waste which would be chemically or physically classified as a hazardous waste but is excluded from regulation as a hazardous waste pursuant to the regulations of the US Environmental Protection Agency because it is generated by a household." Such HHW consists of numerous products common to the average household, such as pesticides, paints, polishes, cleaners, and automotive supplies; and

WHEREAS, each party has determined that a regional cooperative HHW Education, Collection and Management Facility ("Facility") will provide increased convenience and participation and possibly result in cost savings to all parties to this Agreement; and

WHEREAS, each party to this Agreement has independently researched the possible benefits and obligations of participating in and coordinating activities within the Facility; and

WHEREAS, The City of Sapulpa has entered into agreements with The City of Tulsa to enable the citizens of Sapulpa to deliver HHW to the Tulsa facility under the terms and conditions contained in this Agreement. The citizens are referred to in this Agreement as "Participants."

NOW, THEREFORE, in consideration of the mutual goals and covenants contained herein, and the mutual benefits to result therefrom, the parties agree as follows:

1. The purpose of this Agreement is to establish the process by which the City of Sapulpa may participate in the City of Tulsa's Regional HHW Collection and Management Facility to effect cost savings, increase public convenience and participation, and educate the public about the proper management of HHW.

2. The term of this Agreement shall commence upon the effective date set forth above and conclude June 30, 2020 (which term shall be referred to as the "Initial Term").

3. Either party shall have the right to terminate its participation in this Agreement for cause after giving 30 days' notice of its intent to terminate for cause to the other party, and such other party has failed to cure after a reasonable time. Grounds constituting cause include but are not limited to, failure to comply with the provisions of this Agreement, or any applicable laws, ordinances, material regulations or guidelines; one party has been unduly dilatory in executing its duties under this Agreement; or non-payment. The City of Sapulpa must meet all financial and performance commitments and other obligations up to the date of the termination. Termination shall not be effective until all financial commitments and other obligations are satisfied. Either party may terminate this Agreement without cause by giving sixty (60) days' written notice to the other.

4. This Agreement may be renewed beyond the Initial Term through written notification, with the approval of both the City of Tulsa and The City of Sapulpa by May 30th of the then current year. Upon such written notice, the parties will execute a renewal agreement. Each such renewal shall be for one fiscal year, July 1 to the following June 30; provided however, that if The City of Sapulpa is in arrears in payment of charges for services rendered pursuant to this Agreement the City of Sapulpa shall not be permitted to renew its participation in this Agreement until such financial obligations are paid in full.

5. The City of Tulsa agrees to accept HHW from Participants. The City of Tulsa will maintain an accounting of the amounts received from Participant. Each Participant will be required to produce proof of residency within the City of Sapulpa. This will be in a form agreed upon by both parties, to include voucher, current driver's license, and/or water bill. The City of Sapulpa agrees that the City of Tulsa may, but is not required to, inquire as to or investigate the residency of any person dropping off HHW. In addition, Participants will be required to comply with ordinances and policies for the disposition of HHW established by the City of Tulsa, as may be amended from time to time. It is the responsibility of the City of Tulsa to inform The City of Sapulpa of any changes to its policies within a timely manner. It is The City of Sapulpa responsibility to inform its Participants of the policies for disposition at the Facility. These policies are found in Exhibits A, B and C.

6. The City of Tulsa will invoice The City of Sapulpa and The City of Sapulpa will reimburse the City of Tulsa in accordance with the terms of this Agreement including Exhibit A. The City of Sapulpa hereby agrees to establish and/or encumber funding for the services to be provided under this Agreement, and to timely pay for services provided.

7. Payment is due thirty (30) calendar days after the date the invoice is mailed. If payment is not received by the due date, the City of Tulsa will contact The City of Sapulpa and inquire about the delinquency and inform The City of Sapulpa that payment must be made. This

notification will be documented. If the payment is not received within 30 days after this notification, a ten (10%) percent late fee may be assessed to The City of Sapulpa and service to Participants under this will be subject to termination. This action will only be implemented after the delinquent City of Sapulpa has been notified of the termination via email or certified letter.

8. The City of Tulsa shall assess a rate based on weight of HHW received from Participants delivered to the Facility. The City of Sapulpa has agreed to pay the first 45lbs at a cost of \$40 (\$0.89/lbs). Participants are responsible for weights greater than 45lbs, at a rate of \$1.33 per lbs. with payment paid directly to the City of Tulsa at the time of receipt of HHW services. Weight does not include automobile/boat/lawn equipment batteries. This rate shall be re-assessed annually by the City of Tulsa and is subject to change. Any change will be based upon the average disposal cost of the pollutants disposed of at the Facility by the City of Tulsa in addition to the annual operating costs of the Facility. The rate change will be effective upon written amendment to this Agreement signed by the parties.

9. Pursuant to the permit issued by the Oklahoma Department of Environmental Quality, the City of Tulsa is prohibited from taking certain waste that is generated at households. A list of acceptable and non-acceptable waste can be found at Exhibit B. No products from commercial businesses or institutions will be accepted; this includes waste generated by commercially exempt small quantity generators. No products from commercial vehicles or any other waste considered non-acceptable shall be accepted. It is The City of Sapulpa responsibility to inform its Participants of this policy as well as all the policies used to govern the Facility. Further, the City of Tulsa will make the final determination on any materials considered acceptable at the Facility for disposal.

10. This Agreement may be amended only by written agreement signed by all parties.

11. All notices required to be given hereunder, shall be in writing and shall be: delivered in person (and a confirmation copy sent by first class mail); or shall be mailed by registered mail; or shall be delivered by facsimile with a return receipt showing delivery (and a confirmation copy sent by either first class mail or email), to the following addresses:

(a) Notices to the City of Tulsa:

City Clerk
The City of Tulsa
175 E. 2nd Street
Tulsa, Oklahoma 74103

and

City of Tulsa
Stormwater Management
Attn: Scott VanLoo
4502 S. Galveston Ave.
Tulsa, Oklahoma 74107

(b) Notices to The City of Sapulpa:

The City of Sapulpa.
Attn: Steve Hardt
425 E. Dewey Ave
Sapulpa, OK 74066

The parties may hereafter designate, in writing and as provided herein, other or different persons or addresses for receipt of notice.

12. When any word in this Agreement is used in the singular, it shall include the plural and the plural, the singular, except where contrary intention plainly appears. When any word is used in the masculine, it shall include the feminine, and the feminine, the masculine, except where a contrary intention plainly appears.

13. The parties hereto agree that it is not their intent to create any rights or benefits to any third parties and that no third party beneficiaries shall be created or shall be deemed to be created by this Agreement.

14. The parties hereto agree to abide by the applicable and constitutionally valid laws and rules of the City of Tulsa, State of Oklahoma and the United States of America. This Agreement is executed in and shall be governed by and construed in accordance with the laws of State of Oklahoma without regard to its choice of law principles. The parties agree that any dispute regarding the terms or the provisions of this Agreement shall first be resolved by negotiation and mutual agreement between the parties. If the dispute is not resolved thru negotiation, the dispute shall be resolved in a court of competent jurisdiction in Tulsa County, Oklahoma.

15. This is the complete Agreement between the parties and no statements, representations or discussions not set forth herein shall be binding upon the parties and no party is or shall be bound by any statement or representation that does not conform to this Agreement. No agent or any party to this Agreement has authority to alter, modify or change this Agreement except as expressly provided herein. This Agreement shall be read as a whole and shall not be interpreted either for or against any party. This Agreement may only be amended in writing as approved and executed by the parties hereto.

16. Time shall be deemed to be of the essence of this Agreement.

17. A breach of any provision of this Agreement shall be deemed to be a breach of the entire Agreement provided however the breaching party or parties shall be given thirty (30) days' notice as provided herein during which to cure any breach prior to the termination of this Agreement. The failure of any party hereto to provide notice of a breach of this Agreement shall not be deemed a waiver of that breach or any subsequent breach of a similar or different kind or nature.

18. A determination that any provision or application of any provision of this Agreement to any party is prohibited or contrary to law shall be limited to the specific language and/or party so construed and shall not affect the validity of the remaining provisions of the Agreement or its binding effect on any other party or parties

19. The parties hereto, acting under authority of their respective governing bodies, have caused this Agreement to be executed in multiple counterparts, each of which shall constitute an original, but which together shall constitute one and the same instrument.

In WITNESS WHEREOF this Agreement has been executed on the dates set forth below to be effective during the period recited above.

(SEAL)

ATTEST:

The City of Sapulpa:

X

City Clerk

X

Steve Hardt

DATE: _____

APPROVED TO AS FORM:

RECOMMENDED:

X

City of Sapulpa Legal Counsel

(SEAL)

ATTEST:

THE CITY OF TULSA, OKLAHOMA

X

City Clerk

X

Mayor

DATE: _____

APPROVED TO AS FORM:

RECOMMENDED:

X

City Attorney

X

Director of Streets and Stormwater

Exhibit A – Criteria Specific to The City of Sapulpa.

The following criteria are agreed upon and implemented with the execution of the attached Agreement between the City of Tulsa and The City of Sapulpa.

1. The City of Sapulpa will field requests via telephone or email, screen, and schedule appointments at the Facility to collect household hazardous waste from citizens from The City of Sapulpa.
2. The City of Sapulpa will work with City of Tulsa to schedule appointment of customers that are City of Sapulpa residents. This includes capturing the information that is required in order to properly schedule an appointment. Each customer scheduled by The City of Sapulpa will be issued a Sapulpa voucher. The City of Sapulpa will forward all scheduling requests to City of Tulsa, Streets and Stormwater Department for scheduling.
3. If the City of Sapulpa receives request to schedule appointments from Tulsa residents, The City of Sapulpa will direct the customer to contact the City of Tulsa, Streets and Stormwater Department for scheduling.
4. The City of Sapulpa will provide vouchers to qualified customers at their discretion in the form of codes mutually agreed to by both parties. The City of Sapulpa will inform the customer that a proof of residency and proper identification matching that of the customer to which the voucher was issued, must be presented to City of Tulsa at the time of the scheduled appointment. City of Tulsa will verify the voucher number and match the customer to the scheduled appointment. Those customers that do not have a voucher or proper identification will be charged the full fee as delineated in the Agreement with no charge to The City of Sapulpa. The City of Sapulpa is responsible for payment for all City of Sapulpa vouchers that are processed by the City of Tulsa.
5. Any citizen with a City of Sapulpa voucher and a prescheduled appointment that has proper credentials will be allowed to drop off acceptable materials up to 45 pounds, excluding the weight of batteries, at no cost to them. The City of Sapulpa will be billed for the first 45lbs, which is \$40. The City of Tulsa will invoice The City of Sapulpa with the total amount for the previous month to be paid within 30 days of the invoice date. Payment will be mailed to:

Household Pollutant Collection Payment
Stormwater Management

4502 S. Galveston
City of Tulsa, OK 74011

6. Any materials in excess of 45 pounds excluding batteries will be billed to the citizen at the time of acceptance by City of Tulsa at the rate specified in the Agreement. Acceptable payment will be by major credit card only. The City of Sapulpa will instruct the customer as to the consequences of including more poundage prior to arrival at the Facility.
7. Tulsa will deliver to The City of Sapulpa monthly an itemized invoice in a format approved by The City of Sapulpa showing, the name and address of each customer, total

number of appointments, the poundage of waste received, and amount paid by customer and the amount owed by The City of Sapulpa.

8. The City of Sapulpa shall maintain adequate records to indicate the activities undertaken pursuant to this Agreement. Such records shall be maintained at The City of Sapulpa place of business and shall be available to Tulsa during the normal business hours of The City of Sapulpa upon reasonable notice.

Exhibit B – Accepted and Non-Accepted Household Hazardous Waste

The waste list below is to be accepted by Tulsa from citizens of the City of Sapulpa.

- Fluorescent and CFL(Compact Fluorescent Lamp) Light
- Bulbs
 - Oil Based Paints and Paint Thinner
 - Flammable Liquids
 - Lawn Chemicals
 - Automotive Fluids
 - Cooking Oil/Grease
 - Aerosols
 - Household and Car Batteries
 - Household Cleaners
 - Pool Chemicals
 - Latex Paint

The listed wastes below are not accepted by Tulsa

- Medical or Biomedical Waste
- Asbestos
- Food or Organic Waste
- Radioactive Material
- Ammunition/Explosives
- Tires
- Unknown Materials or Substances

These lists are subject to change. Tulsa will notify The City of Sapulpa prior to implementing any changes.

APPENDIX E: ACRONYMS

Refer to OKR04 Part VII for a list of definitions of terms used in the OKR04 stormwater permit program. The following list of acronyms was compiled by INCOG. These pertain to contents of this SWMP and include terms involved with specific activities, such as assessing laboratory data and technical reports from other agencies.

%Sat	Percent saturation of dissolved oxygen in a water sample.
303(d)	Section 303(d) of the Clean Water Act requiring biannual assessment of beneficial uses.
BMP	Best Management Practice, particularly regarding pollution controls.
BOD	Biochemical oxygen demand; a test of potential for a water sample to use up oxygen.
BUMP	Beneficial Use Monitoring Program; OWRB's sampling program to support USAP.
°C	Degrees centigrade or Celsius; the most common unit of measure for temperature.
CBOD5	Carbonaceous BOD, incubated 5 days; common NPDES permit requirement for WWTPs.
CBOD20	CBOD incubated 20 days; equivalent to "ultimate" (maximum) CBOD in a water sample.
COE	US Army Corps of Engineers.
col/100mL	Colonies per 100 milliliters of water sample; a unit of quantification for bacteria samples.
COSWA	Central Oklahoma Storm Water Alliance.
CPP	Continuing Planning Process; a standards and procedures summary document.
CWA	Clean Water Act; more formally the Federal Water Pollution Control Act.
Diurnal	24 hour cycle, particularly related to how DO changes over a 24 hour period.
DMR	Discharge Monitoring Report; ODEQ's form for filing sampling results.
DO	Dissolved oxygen.
EA / EIS	Environmental Assessment / Environmental Impact Statement.
EPA	US Environmental Protection Agency.
FWS	US Fish and Wildlife Service.
GCSA	Green Country Stormwater Alliance; INCOG's coalition of stormwater permittees.
GIS	Geographic Information System; computer system that relates map features to data.
GPS	Global Positioning System; measuring x and y coordinates (location) from satellites.
HHPCF	City of Tulsa Household Pollutant Collection Facility
HUC	Hydrologic Unit Code, used to classify watershed sizes.
INCOG	Indian Nations Council of Governments; 5-county Tulsa area sub-state planning agency.
LA	Load Allocation; nonpoint source numerical discharge quantity in a TMDL.
MCM	Minimum Control Measure; six categories of permit actions under EPA/ODEQ rules.
mg/L	Milligrams per liter; approximately equivalent to parts per million.

MS4	Municipal Separate Storm Sewer System; also used to designate a stormwater permittee.
NH3-N	Ammonia nitrogen; amount of nitrogen as ammonia.
NO2-N	Nitrite nitrogen; amount of nitrogen as nitrite.
NO3-N	Nitrate nitrogen; amount of nitrogen as nitrate.
NOI	Notice of Intent; application form and process to apply for stormwater permit coverage.
NPDES	National Pollutant Discharge Elimination System; federal discharge permit program.
NWI	National Wetlands Inventory by the US Fish and Wildlife Service
OAC	Oklahoma Administrative Code
OCC	Oklahoma Conservation Commission.
ODEQ	Oklahoma Department of Environmental Quality.
OKR04	ODEQ's stormwater general permit for small MS4s.
OKR05	ODEQ's stormwater general permit for industrial activities.
OKR10	ODEQ's stormwater general permit for construction activities.
OPDES	Oklahoma Pollutant Discharge Elimination System; the state discharge permit program.
OWRB	Oklahoma Water Resources Board.
QAPP	Quality Assurance Project Plan; formal documentation about ensuring data integrity.
RCRA	Resource Conservation and Recovery Act; for control of hazardous substances.
SOP	Standard Operating Procedure; description of repetitive tasks such as inspections.
s.u.	Standard Unit for pH measurements.
SWMP	Stormwater Management Program document required by stormwater permits.
SWP3	Stormwater Pollution Prevention Plan; required by construction stormwater permit.
TDS	Total dissolved solids; reflects on presence of salts and conductivity in a water sample.
TKN	Total Kjeldahl Nitrogen; amount of organic nitrogen plus ammonia in a water sample.
TMDL	Total Maximum Daily Load; study accounting for all point and nonpoint sources.
TP	Total phosphorus.
TRI	Toxics Release Inventory; national database of releases of over 650 chemical types.
ug/L	Micrograms per liter; approximately equivalent to parts per billion.
USAP	Use Support Assessment Protocol; methods used in 303(d) assessments.
USGS	United States Geological Survey.
WBID	Waterbody Identification; Oklahoma's system of classifying streams.
WLA	Wasteload allocation; point source numerical quantity in a TMDL and discharge permits.
WQS	Water quality standards.
WWTP	Wastewater treatment plant; also referred to as POTW (publicly owned treatment works).

Section 7 Break is here.

APPENDIX F: EXISTING ILLICIT DISCHARGE ORDINANCE

Street, Sidewalks & Public Works

CHAPTER 4

STORMWATER MANAGEMENT PROGRAM

Section 14-401	Purpose and Intent
Section 14-402	Definitions and Abbreviation
Section 14-403	Applicability
Section 14-404	Responsibility for Administration
Section 14-405	Ultimate Responsibility
Section 14-406	Watercourse Protection
Section 14-407	Notification of Spills
Section 14-408	Illicit Discharge Prohibitions
Section 14-409	Prohibition of Illicit Connections
Section 14-410	Construction Activities
Section 14-411	Request for Variance
Section 14-412	Monitoring of Discharge
Section 14-413	Penalties and Administrative Remedies
Section 14-414	Storm Water Management Fee
Section 14-415	Post-Construction Stormwater Impacts; Minimization Regulations and Requirements; Compliance Procedures

SECTION 14-401

PURPOSE AND INTENT

The purpose of this chapter is to regulate non-storm water discharges to the City of Sapulpa storm water drainage system to the maximum extent practicable as required by federal and state law. This chapter establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) and the Oklahoma Pollutant Discharge Elimination System (OPDES) permit requirements. The objectives of this chapter are:

1. To regulate the contribution of pollutants to the municipal separate storm sewer system by storm water discharges by any person;
2. To control the introduction to the municipal separate storm sewer system of spills, dumping, or the disposal of materials other than storm water;
3. To prohibit illicit connections and illicit discharges to the municipal separate storm sewer system;
4. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with this chapter;

Street, Sidewalks & Public Works

5. To establish procedures for enforcement of this chapter;
6. To establish abatement and remediation procedures for this chapter; and
7. To establish penalties for noncompliance with this chapter.

SECTION 14-402

DEFINITIONS & ABBREVIATIONS

For the purposes of this chapter, the following shall mean:

Accelerated Erosion. Erosion caused by development activities that exceeds the natural processes by which the surface of the land is worn away by the action of water, wind, or chemical action;

Applicant. A property owner or agent of a property owner who has filed an application for a permit;

Authorized Enforcement Agency. The City of Sapulpa or its designated representative;

Best Management Practices (BMPs). Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, or storm water conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage;

Building. Temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property;

Channel. A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water;

Clean Water Act. The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto;

Clearing. Any activity that removes the vegetative surface cover;

Conservation. The preservation, protection and improvement of the components of the natural environment through a comprehensive management and maintenance program administered by a public authority for individual or public use;

Street, Sidewalks & Public Works

Conservation and Wildlife Sanctuary. Land left in its natural state for the purpose of providing sanctuary, habitat and breeding grounds for wild birds, animals, and plant-life and includes a forest reserve;

Conservation Easement. A legal document which provides permanent, property-specific protection for natural features on private land through legal agreements to restrict the management and use of affected areas;

Construction Activity. Activities include but are not limited to clearing, grubbing, grading, regrading, land filling, excavating, berming, and diking of land, and includes land disturbance activities for the purpose of constructing a structure at some time;

Construction Site. A site where construction activities occur;

Contaminated Site. Property or lands that, for reasons of public health and safety, are unsafe for development as a result of past human activities, particularly those activities that have left a chemical or radioactive residue. Also, a site which has been identified as a former industrial or waste disposal site, where the presence of toxic chemicals and/or gas pose an unreasonable risk of injury to health, property, and/or the environment;

Contamination. The introduction of materials including, but not limited to pesticides, herbicides, septic leaks, or other toxic substances into a natural system;

Contractor. Any person, firm, association, syndicate, partnership, realtor, or corporation engaged in the business of accepting orders or contracts, either as a general contractor or subcontractor, for construction of model homes and other residential dwellings for sale the public and/or licensed by the state of Oklahoma as a contractor;

Dedication. The deliberate appropriation of property by its owner for general public use;

Detention. The temporary storage of storm runoff in a storm water management practice with the goals of controlling peak discharge rates and providing gravity settling of pollutants;

Detention Facility. A detention basin or alternative structure designed for the purpose of temporary storage of stream flow or surface runoff and gradual release of stored water at controlled rates;

Developer. A person who undertakes land disturbance activities;

Development. A change in the use of any land, building, or structure for any purpose, and shall include the carrying out of building, engineering construction or other operation in, on, over or under land, or the construction, addition or alteration of any building or structure;

Street, Sidewalks & Public Works

Discharge. To cause or allow to throw, drain, release, dump, spill, empty, emit, or pour any liquids, pollutants or other materials into the municipal separate storm sewer system;

Drainage Easement. A legal right granted by a landowner to a grantee allowing the use of private land for storm water management purposes;

Drainage Way. Any channel that conveys surface runoff throughout a site;

Dry Weather. A period of at least seventy-two (72) hours in which there has been no measurable rainfall;

Dry Weather Field Screening. Inspection and/or testing of outfalls conducted during dry weather to evaluate outfalls for pollutants;

Environmental Administrator. The City of Sapulpa Environmental Administrator or his/her designee(s);

EPA. The United States Environmental Protection Agency;

Erosion. The mobilization of soil as a result of loss of vegetative cover, scouring by runoff, or associated with slope instability;

Erosion Control. A measure that prevents erosion;

Grading. Excavation or fill of material, including the resulting conditions thereof;

Hazardous Materials. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed;

Hotspot. An area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in storm water;

Illicit Discharge. Any direct or indirect non-storm water discharge to the storm water drainage system, except as exempted in section 14-408 (3) of this chapter;

Illicit Connections. An illicit connection is defined as either of the following: any drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the storm water drainage system including but not limited to any conveyances which allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm water drainage system and any connections to the storm water drainage system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency or,

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any drain or conveyance connected from a commercial or industrial land use to the storm water drainage system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency;

Impervious Surface. Those surfaces such as concrete, asphalt, brick, metal, or any other material that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways). The previous examples are not an exhaustive listing of all types of impervious surfaces;

Industrial Activity. Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14);

Industrial Storm Water Permit. A National Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial storm water discharges or specifies on-site pollution control strategies;

Infiltration. The process of percolating storm water into the subsoil;

Infiltration Facility. Any structure or device designed to infiltrate retained water to the subsurface. These facilities may be above grade or below grade;

Jurisdictional Wetland. An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation;

Land Disturbance Activity. Activities include but are not limited to clearing, grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, substantial removal of vegetation, or any activity which bares soil or rock or involves the diversion or piping of any natural or man-made watercourse. Any activity which changes the volume or peak flow discharge rate of rainfall runoff from the land surface;

Landowner. The legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land;

Maintenance Agreement. A legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of storm water management practices;

Municipal Separate Storm Sewer System (MS4). A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that are owned or operated by the City and are designed or used for collecting or conveying storm water;

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National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit. A permit issued by EPA (or by a State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis;

Nonpoint Source Pollution. Pollution discharged over a wide land area, not from one specific location. These are forms of diffuse pollution caused by sediment, nutrients, organic and toxic substances originating from land-use activities, which are carried to lakes, rivers and streams by surface runoff;

Non-Storm Water Discharge. Any discharge to the storm water drainage system that is not composed entirely of storm water;

ODEQ. The Oklahoma Department of Environmental Quality;

Off-Site Facility. A storm water management measure located outside the subject property boundary described in the permit application for land development activity;

OKR10 Permit. The Oklahoma Department of Environmental Quality General Permit OKR10 for storm water discharges from construction activities within the state of Oklahoma;

On-Site Facility. A storm water management measure located within the subject property boundary described in the permit application for land development activity;

OPDES. Oklahoma Pollutant Discharge Elimination System;

Outfall. The place where a sewer, drain, or stream discharges; the outlet or structure through which reclaimed water or treated effluent is finally discharged to a receiving water body;

Perimeter Control. A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin;

Permittee. Owner of the land or an agent of the landowner to whom a permit is issued;

Person. Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent;

Phasing. Clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next;

Plat. A map showing the location, boundaries and ownership of individual properties, planned and developed as a single project;

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Pollutant. Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects; floatables; pesticides, insecticides, herbicides, and fertilizers; hazardous substances and wastes; sewage; fecal coliform; pathogens; dissolved and particulate metals; animal wastes; sediment, wastes and residues that result from constructing a building or structure and/or altering premises; and noxious or offensive matter of any kind;

Pond. A small body of standing water, naturally or artificially formed with a depth not to exceed six (6) feet in depth and having an area of less than one (1) acre;

PPM. Parts per million;

Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips;

Public Utility. A private business organization, subject to governmental regulation, that provides an essential commodity or service, such as water, electricity, transportation, or communication, to the public;

Recharge. The replenishment of underground water reserves;

Redevelopment. Any construction, alteration or improvement in areas where existing land use is high density commercial, industrial, institutional or multi-family residential;

Right-of-Way. An area of land that is legally described in a registered deed for the provision of public access;

Riparian Habitat. Areas adjacent to rivers and streams with a differing density, diversity, and productivity of plant and animal species relative to nearby uplands;

Sediment. The coarse particles (such as sand, silt and gravel) and organic particulates transported by storm runoff and streamflow. Also, solid material, both mineral and organic, that is in suspension, is being transported or has been moved from its site of origin by air, water, gravity or ice and has come to rest on the earth's surface either above or below water level;

Sediment and Erosion Control Permit. A permit designed to review, evaluate, modify, or any other action necessary to ensure sediment and erosion control on a construction site;

Sediment and Erosion Control Plan. A set of plans indicating the specific measures and sequencing to be used to control sediment and erosion on a construction site;

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Sediment Control. Measures that prevent eroded sediment from leaving a site;

Site. A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation;

Site Plan. A scale drawing showing the relationship between the lot lines and their uses, buildings or structures, existing or proposed on a lot, including such details as parking areas, access points, landscaped areas, building areas, setbacks from lot lines, building heights, floor areas, densities, septic tank tile fields, utility lines and currents, or a special or particular use;

Slope. The degree of deviation of a surface from the horizontal expressed in percentage or degrees;

Stabilization. The use of practices that prevent exposed soil from eroding;

Start of Construction. The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages;

Stop Work Order. An order issued which requires that all construction activity on a site be stopped;

Storm Water Drainage System. Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures;

Storm Water. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation;

Storm Water Management. The use of structural or non-structural practices that are designed to reduce storm water runoff pollutant loads, discharge volumes, and/or peak flow discharge rates;

Storm Water Retrofit. A storm water management practice designed for an existing development site that previously had either no storm water management practice in place or a practice inadequate to meet the storm water management requirements of the site;

Storm Water Runoff. Flow on the surface of the ground, resulting from precipitation;

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Storm Water Treatment Practices (STPs). Measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing or reducing point source or nonpoint source pollution inputs to storm water runoff and water bodies;

Structure. Anything constructed or erected occupying more than 200 square feet of area, the use of which requires location on the ground or attachment to something located on the ground but not including pavements, curbs, walks or open air surfaced areas or moving vehicles;

Summary Abatement. Action taken by the City of Sapulpa or its agents to abate a violation without prior notice to the property owner or other interested parties;

SWP3. A storm water pollution prevention plan developed in compliance with ODEQ permit requirements;

Unstable Slopes. Slopes which are or may be subject to erosion such as mass movement, slumping, landslides, mudflows or rock falls. Also, slope or land which has a potential to collapse or slide if development occurs on, or adjacent to, such an area;

Variance. A relaxation of the terms of an ordinance where such variance will not be contrary to the public interest and where, owing to conditions peculiar to the property and not the result of the actions of the applicant, a literal enforcement of the ordinance would result in unnecessary and undue hardship;

Wastewater. Any water or other liquid, other than uncontaminated storm water, discharged from a facility;

Watercourse. A natural or artificial channel or conduit through which water flows;

Waterway. A channel that directs surface runoff to a watercourse or to the public storm drain;

Watershed. The land area that drains water, sediment, dissolved materials and other matter to a common receiving body or outlet such as a stream, river or lake. The term is not restricted to surface water runoff and includes interactions with subsurface water;

Zoning. Categorizing the use or activity of land, buildings, structures or activities permitted in delineated areas; and

Zoning Code. A set of local government regulations and requirements that govern the use, placement, spacing and size of buildings and lots (as well as other types of land uses) within specific areas designated as zones primarily dedicated to certain land use types or patterns within the city limits.

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SECTION 14-403

APPLICABILITY

This chapter shall apply to all water entering the storm water drainage system generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

SECTION 14-404

RESPONSIBILITY FOR ADMINISTRATION

The Environmental Administrator shall administer, implement, and enforce the provisions of this chapter.

SECTION 14-405

ULTIMATE RESPONSIBILITY

The standards set forth herein and promulgated pursuant to this chapter are minimum standards; therefore this chapter does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

SECTION 14-406

WATERCOURSE PROTECTION

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

SECTION 14-407

NOTIFICATION OF SPILLS

Notwithstanding other requirements of law, as soon as any person has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water or the storm water drainage system, said person shall notify the City of Sapulpa. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the Environmental Administrator in person or by phone or facsimile no later than the next business day. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

SECTION 14-408

ILICIT DISCHARGE PROHIBITIONS

1. No person shall discharge or cause to be discharged into the municipal storm water drainage system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water. The commencement, conduct or continuance of any unlawful discharge is prohibited.

2. It is unlawful for any residence or business to allow drainage of a polluting substance or to allow drainage of water which may become a hazard into any street, alley or sidewalk. A polluting substance is one so defined under Section 926.1 of Title 82 of the Oklahoma Statutes.

3. The following discharges are exempt from discharge prohibitions established by this section unless the Environmental Administrator determines that the type of discharge, whether singly or in combination with others, is causing contamination of surface water, storm water or groundwater; causes overload or damage to the municipal separate storm sewer system or has the potential to endanger public health and safety; or is causing the City of Sapulpa to violate its NPDES or OPDES permit for storm water discharges:

- a. Water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, individual residential car washing, non-commercial or charity washing of vehicles, natural riparian habitat or wet-land flows, swimming pools (if dechlorinated), fire hydrant flushings, fire fighting activities, and any other water source not containing pollutants;
- b. Discharges specified in writing by the Environmental Administrator as being necessary to protect public health and safety;
- c. Dye testing (using non-toxic dye) is an allowable discharge, but requires a verbal or written notification to the Environmental Administrator prior to the time of the test; and
- d. The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the United States Environmental Protection Agency, provided that the discharger is in full

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compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm water drainage system.

SECTION 14-409

PROHIBITION OF ILLICIT CONNECTIONS

1. The construction, use, maintenance or continued existence of illicit connections to the storm water drainage system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

2. A person is considered to be in violation of this section if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

SECTION 14-410

CONSTRUCTION ACTIVITIES

1. **General Performance Standards.** Any person subject to a construction activity NPDES and/or OPDES storm water discharge permit shall comply with all provisions of such permit(s). Proof of compliance with said permit(s) may be required in a form acceptable to the Environmental Administrator prior to the allowing of discharges to the MS4. All construction activities including but not limited to the development, excavation, clearing, grading, regrading, paving, land filling, berming, and diking of land shall be conducted in such a manner as to minimize erosion and prevent the discharge of pollutants, including but not limited to rock, sand, soil, discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste into the City of Sapulpa municipal separate storm sewer system. Persons conducting the construction shall implement and maintain adequate structural and/or nonstructural BMPs for controlling erosion and preventing the discharge of pollutants to the MS4. All construction site storm water runoff control BMPs and post-construction storm water runoff BMPs shall comply with the current *City of Sapulpa Engineering Design Criteria and Standard Specifications*.

2. **Responsible Person.** The person with overall responsibility of the construction, such as the general contractor, shall be jointly responsible with the person at whose direction the construction is being conducted for compliance with subsection (1) of this section.

3. **Record Keeping.** The person or persons responsible shall retain, and make available to the Environmental Administrator, for inspection and copying, all records and information required to be retained under this section or order issued hereunder. These records shall remain available for a period of at least three (3) years after expiration of the applicable permit. This period shall be automatically extended for the duration of any

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litigation concerning compliance with this section, or where the person or persons responsible have been specifically notified of a longer retention period by the Environmental Administrator.

4. Permitting Purpose. The purpose of permitting is to obtain and review proposed sediment and erosion control plans for any construction activities.

5. Sediment and Erosion Control Permit.

- a. Applicability.** Unless specifically exempted, a sediment and erosion control permit, as defined and regulated by this section, shall be obtained from the Environmental Administrator for any construction activities causing land disturbance. The sediment and erosion control permit must be obtained prior to commencement of any construction activities including, but not limited to any development, excavation, clearing, grading, regrading, land filling, berthing, and diking of land.
- b. Exemptions.** A sediment and erosion control permit shall not be required for the following: customary and incidental routine grounds maintenance, landscaping, and home gardening; construction activities related to bona fide agricultural, ranching, and farming operations which constitute the principal use of a tract of ground in the City of Sapulpa and are under the jurisdiction of the Oklahoma Department of Agriculture, Food, and Forestry; construction activities occurring at oil and gas exploration and production related industries and pipeline operations that are under the jurisdiction of the Oklahoma Corporation Commission; and construction activities occurring on Indian Country lands (as defined in 18 USC Section 1151).
- c. Application for Sediment and Erosion Control Permit.** For each sediment and erosion control permit a written application from the owner of the site, or his/her authorized representative, shall be provided to the Environmental Administrator in the form and with the content prescribed in this section, and shall be accompanied by a minimum of three (3) copies of a sediment and erosion control plan with the content prescribed in this section, and the required sediment and erosion control permit fee as set forth in the Master Fee Schedule. The permit application shall include the following information:

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- 1) Name, address, and telephone number of the legal owner of the property for which the sediment and erosion control permit is requested;
- 2) Name, address, and telephone number of applicant, if different from the property owner;
- 3) Name(s), address(es), and telephone number(s) of any and all contractors, subcontractors or persons actually doing the land disturbing or land filling activities;
- 4) Name(s), address(es), and telephone number(s) of the person(s) responsible for the preparation of any required vicinity map;
- 5) Name(s), address(es), and telephone number(s) of the person(s) responsible for preparation of the sediment and erosion control plan and any required reports;
- 6) Legal description of the site and the address of the site (if a valid address has been assigned and/or accepted by the City of Sapulpa);
- 7) Size of the construction site, measured in acres;
- 8) Proposed start date of the project;
- 9) Proposed completion date of the project;
- 10) Date of the application; and
- 11) Signature(s) of the owner(s) of the site or an authorized representative.

d. Sediment and Erosion Control Plan Requirements. These plans shall include sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed construction activities

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on water resources, and the best management practices and other measures proposed to minimize soil erosion and prevent off-site sedimentation. All sediment and erosion control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. All construction activities including but not limited to the development, excavation, clearing, grading, regrading, landfilling, berthing, and diking of land shall be performed in strict accordance with the approved plan.

- 1) For construction sites less than one acre that are not part of a larger common plan of development or sale that is one acre or more, the following information shall be included in any plan:
 - a) A project narrative describing the nature of the construction activity;
 - b) A description of any surrounding watercourses, water bodies and other significant geographical features;
 - c) Legal description of the site and the address of the site (if a valid address has been assigned and/or accepted by the City of Sapulpa);
 - d) The name, address, and telephone number of the owner and/or developer of the property where the land disturbing activity is proposed;
 - e) A description of, and specifications for, sediment and erosion control measures to minimize on-site erosion and prevent off-site sedimentation during the construction process, including provisions to preserve topsoil and limit disturbance. Minimum control measures must include the proper installation and maintenance of silt screen around the perimeter of the construction site. The applicant may propose the use of any sediment and erosion control measures in a plan provided such measures are proven to be as or more effective than the measures contained in this section and the current *City of*

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Sapulpa Engineering Design Criteria and Standard Specifications;

- f) A chronological schedule describing when the sediment and erosion control measures will be implemented during the construction process;
- g) A description of temporary and permanent stabilization measures. The plan shall ensure that existing vegetation is preserved where attainable and that disturbed portions of site are stabilized. Stabilization practices may include but are not limited to the establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for stabilization should be avoided. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased except:
 - (1) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by adverse climatological conditions (i.e., snow, ice, heavy rains, or drought) stabilization measures shall be initiated as soon as practicable; and
 - (2) Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of the site; and
- h) The Environmental Administrator may require any additional information or data deemed appropriate and/or may impose such conditions thereto as may be deemed necessary to

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ensure compliance with the provisions of this section or the preservation of public health and safety.

- 3) For construction sites greater than or equal to one acre and for construction sites that are less than one acre if the construction site is part of a larger common plan of development or sale that is one acre or more, sediment and erosion control plans shall be prepared by or under the direction of a registered professional engineer licensed by the State of Oklahoma. Any required sediment and erosion control plans shall comply with good engineering practices and shall be approved and stamped by a registered professional engineer licensed by the State of Oklahoma. In addition the following information shall be included in any plan:
 - a) A project narrative describing the nature of the construction activity;
 - b) An attached vicinity map showing the location of the site in relationship to the surrounding area's watercourses, water bodies and other significant geographical features, roads and other significant structures, and showing suitable contours for the topography. An indication of the scale used (this map shall be at a scale no smaller than 1 inch = 100 feet) and an arrow indicating north shall be included on the map;
 - c) Legal description of the site and the address of the site (if a valid address has been assigned and/or accepted by the City of Sapulpa);
 - d) The name, address, and telephone number of the owner and/or developer of the property where the land disturbing activity is proposed;
 - e) A chronological schedule and description of construction activities that disturb soils of the site (e.g., clearing, grubbing, excavation, grading, utilities and infrastructure installation);

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- f) A description of, and specifications for, sediment and erosion control measures to minimize on-site erosion and prevent off-site sedimentation during the construction process, including provisions to preserve topsoil and limit disturbance. Minimum control measures include the proper installation and maintenance of silt screen around the perimeter of the construction site; the proper installation and maintenance of straw bales around all storm sewer inlets; the proper installation and maintenance of straw bales to minimize erosion on all slopes greater than 3 horizontal to 1 vertical (3:1) where land disturbing activity is planned; and stabilized gravel construction site entrances/exits to prevent tracking or flowing of sediment onto public right-of-ways. The applicant may propose the use of any sediment and erosion control measures in a plan provided such measures are proven to be as or more effective than the measures contained in this section and the current *City of Sapulpa Engineering Design Criteria and Standard Specifications*;
- g) A chronological schedule describing when the sediment and erosion control measures will be implemented during the construction process;
- h) A description of temporary and permanent stabilization measures. The plan shall ensure that existing vegetation is preserved where attainable and that disturbed portions of site are stabilized. Stabilization practices may include but are not limited to the establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for stabilization should be avoided. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased except:

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- (1) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by adverse climatological conditions (i.e., snow, ice, heavy rains, or drought) stabilization measures shall be initiated as soon as practicable; and
- (2) Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of the site;
 - i) A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed;
 - j) A copy of all required state and federal storm water discharge permits (NPDES filed with EPA; OPDES filed with ODEQ) for the construction site shall be provided to the Environmental Administrator. If an OKR10 permit is required by ODEQ for storm water discharges from a construction site, then the following documents shall be provided to the Environmental Administrator: a copy of the notice of intent submitted to ODEQ for the OKR10 permit, a copy of all storm water pollution prevention plans developed for the construction site, and a copy of the authorization to discharge storm water issued by ODEQ; and
 - k) The Environmental Administrator may require any additional information or data deemed appropriate and/or may impose such conditions thereto as may be deemed necessary to ensure compliance with the provisions of this section or the preservation of public health and safety.

e. Permit Application Review. The Environmental Administrator shall review each application for a sediment and erosion control permit to determine its conformance with the provisions of this section. Within

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fifteen (15) business days after receiving a complete application, the Environmental Administrator shall:

- (1) Approve the permit application;
- 2) Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this section, and issue the permit subject to these conditions; or
- 3) Disapprove the permit application, indicating the reason(s) for disapproval.

- f. **Permit Disapproval.** If the Environmental Administrator determines that the sediment and erosion control plan does not meet the requirements of this section, then a sediment and erosion control permit shall not be issued. The sediment and erosion control plan must be resubmitted and must be approved by the Environmental Administrator before the land disturbance activity begins.
- g. **Conditions of Approval.** In granting any sediment and erosion control permit pursuant to this section, the Environmental Administrator may impose such conditions as may be reasonably necessary to prevent creation of a nuisance or unreasonable hazard to persons or to a public or private property. Such conditions shall include (even if not specifically written in the permit), but need not be limited to:
 - 1) The granting (or securing from others) and the recording in county land records of easements for drainage facilities, including the acceptance of their discharge on the property of others, and for the maintenance of slopes or erosion control facilities;
 - 2) Adequate control of dust by watering, or other control methods acceptable to the Environmental Administrator, and in conformance with applicable air pollution ordinances;

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- 3) Improvements of any existing grading ground surface or drainage condition on the site (not to exceed the area as proposed for work or development in the application) to meet the standards required under this section and the current *City of Sapulpa Engineering Design Criteria and Standard Specifications*; and
- 4) Sediment traps and basins located within a densely populated area or in the proximity of an elementary school, playground or other area where small children may congregate without adult supervision may be requested to install additional safety related devices.

h. **Permit Authorization.** The issuance of a sediment and erosion control permit shall constitute an authorization to do only that work described in the permit, or shown on the approved sediment and erosion control plan and specifications, all in strict compliance with the requirements of this section, unless each and every modification or waiver is specifically listed and given specific approval by the Environmental Administrator.

i. **Permit Duration.** The permittee shall fully perform and complete all of the work required in the sequence shown on the plans within the time limit specified in the permit. Permits issued under this section shall be valid for the period during which the proposed land disturbing or filling activities and soil storage takes place or is scheduled to take place, whichever is shorter, but in no event shall such a permit be valid for more than one (1) year after cessation of construction activity.

j. **Responsibility of Permittee.** The permittee shall maintain a copy of the sediment and erosion control permit, approved plans and reports required under the sediment and erosion control permit on the work site and available for public inspection during all working hours. The permittee shall, at all times, be in conformity with the approved sediment and erosion control plan and also conform to the following:

- 1) **General.** Not withstanding other conditions or provisions of the sediment and erosion control permit, or the minimum standards set forth in this section, the permittee is responsible for the prevention of damage to adjacent property. No person shall grade on land in any manner, or so close to the property line as to endanger or damage any adjoining public street, sidewalk, alley or any other public or

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private property without supporting and protecting such property from settling, cracking, erosion, sedimentation or other damage or personal injury which might result; and

- 2) **Public Ways.** The permittee shall be responsible for the prompt removal of, and the correction of damages resulting from any soil, miscellaneous debris or other materials washed, spilled, tracked, dumped or otherwise deposited on public streets, highways, sidewalks or other public thoroughfare, incident to the construction activity, or during transit to and from the construction site.
- k. Liability. The permittee is responsible for safely and legally completing the project. Neither the issuance of a sediment and erosion control permit under the provisions of this section, nor the compliance with the provisions hereto or with any condition imposed by the City of Sapulpa, shall relieve any person from responsibility for damage to persons or property resulting therefrom, or as otherwise imposed by law, nor impose any liability upon the City of Sapulpa for damages to persons or property.

I. **Action upon Noncompliance.**

- 1) In the event work does not conform to the sediment and erosion control permit or to the plans and specifications or to any conditions imposed by the City of Sapulpa, notice to comply shall be given to the permittee in writing. The notice shall set forth a notification and compliance period of at least fifteen (15) days for the permittee to comply with the requirements of the notice, except that when an imminent hazard exists the Environmental Administrator may require that corrective work begin immediately. The notification and compliance period will begin on the day the notice is mailed to the permittee or the day the notice is posted on the property that is not conforming to the permit requirements, except that when an imminent hazard exists the Environmental Administrator may order an immediate summary abatement action to abate the violation. At the time of mailing of notice, the city shall obtain a receipt of mailing from the postal service, which receipt shall indicate the date of mailing and the name and address of the mailee. Said notice shall further advise that, should the permittee fail to comply with the requirements of the notice by the established deadline, the work necessary to achieve compliance may be done by the City of Sapulpa or a designated

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contractor and the expense thereof shall be charged to the permittee. Issuance of a notice to comply shall not be a prerequisite to taking any other enforcement action.

- 2) If the City of Sapulpa finds any existing conditions not as stated in the application or approved plans, the Environmental Administrator may issue a stop-work order requiring that all construction activities halt when a construction site is in violation of this section. The stop-work order may apply to all construction activity on the subject property which may be directly or indirectly related to site drainage and which is being performed pursuant to any permits, licenses, franchises or contracts issued or approved by the City of Sapulpa. The stop-work order may order a work stoppage on all construction activity on buildings or structures and appurtenances thereto, including but not limited to building, electrical, plumbing, mechanical, street work, storm sewers, sanitary sewers, gas lines, and all utilities including but not limited to gas, electric, telephone and cable television. The Environmental Administrator may also suspend or revoke any sediment and erosion control, site preparation, grading, erosion control, earth change, construction, or any other permit when any part of this section is violated.
- 3) The violation of any provision of this section, upon conviction, shall be punished by a fine not exceeding One Thousand Dollars (\$1,000.00) or thirty days in jail, or both, plus court costs as set by the city. Each day or any portion of a day during which any violation of this section shall continue shall constitute a separate offense.
- 4) Other actions described in the Penalties and Administrative Remedies section of this chapter may be taken by the City of Sapulpa, including but not limited to suspension of MS4 access, water supply severance, injunctive relief, abatement, remediation, and restoration of lands. The permittee shall be responsible for the costs incurred by the City of Sapulpa. Failure to pay will result in the City of Sapulpa seeking recovery of costs and damages pursuant to the conditions set forth in this chapter.

m. **Changes to Plans.** All proposals to modify the approved sediment and erosion control plans must be submitted in writing to the Environmental Administrator. No grading or any type of work in connection with any

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proposed modification shall be initiated without prior written approval of the Environmental Administrator.

- e. **Inspection and Supervision.** The City of Sapulpa shall conduct construction site inspections upon receiving a complaint of violation of this section and as needed to evaluate compliance with this section. The permittee shall notify the Environmental Administrator when there are any departures from the approved sediment and erosion control plan and at the following stages:
 - 1) Upon completion of installation of perimeter sediment and erosion controls;
 - 2) At least twenty-four (24) hours but not more than seventy-two (72) hours (exclusive of Saturdays, Sundays, and holidays) prior to commencing initial grading or land disturbing activities;
 - 3) When construction and land disturbing activities are halted for a period of thirty (30) days or more;
 - 4) At least twenty-four (24) hours but not more than seventy-two (72) hours (exclusive of Saturdays, Sundays, and holidays) prior to when construction or land disturbing activities shall recommence after being halted for a period of thirty (30) days or more;
 - 5) Upon submitting a notice of termination to ODEQ in compliance with any OKR10 permit requirements; and
 - 6) Upon completion of final grading, permanent drainage and erosion control facilities including established ground covers and planting, and all other work of the permit.
- o. **Maintenance During and After Construction.** For any property on which grading or other work has been done pursuant to a sediment and erosion control permit granted under the provisions of this section, the permittee or owner or an agent of the owner shall inspect all sediment and erosion control measures and other protective measures identified in the sediment and

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erosion control plan at least once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater and shall maintain and repair all sediment and erosion control measures, graded surfaces and erosion control facilities, drainage structures or means and other protective devices, plantings, and ground cover installed while construction is active. After construction is complete, the owner or their agent shall continue to regularly inspect the vegetation until adequate turf establishment or other suitable vegetative cover is established.

SECTION 14-411

REQUEST FOR VARIANCE.

1. The City Council shall hear and render judgment on requests for variances from the requirements of this chapter.
2. The variance request must be received by the Environmental Administrator within fifteen (15) days from the date of the Notice of Violation.
3. The Environmental Administrator shall maintain a record of all actions involving a request for variance and shall report variance decisions to ODEQ and EPA upon request.
4. Upon consideration of the factors involved and the intent of this chapter, the City Council may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this chapter.
5. Any person or persons aggrieved by the decision of the City Council may appeal such decision in the courts of competent jurisdiction.

SECTION 14-412

MONITORING OF DISCHARGES

1. The Environmental Administrator shall be permitted to enter facilities, premises, watercourses and waterways subject to regulation under this chapter for the purpose of observing, measuring, sampling, testing and inspecting as often as may be necessary to determine compliance with this chapter. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.

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2. Facility operators shall allow the Environmental Administrator ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES or OPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law. Any permits, pollution prevention plans, or other documents regarding a facility's storm water discharge shall be made available to the Environmental Administrator when requested.
3. The Environmental Administrator shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's storm water discharge.
4. The Environmental Administrator has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure storm water flow and quality shall be calibrated to ensure their accuracy.
5. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the Environmental Administrator and shall not be replaced. The costs of clearing such access shall be borne by the operator.
6. Unreasonable delays in allowing the Environmental Administrator access to a permitted facility is a violation of a storm water discharge permit and of this chapter. A person who is the operator of a facility with a NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this chapter.
7. If the Environmental Administrator has been refused access to any part of the premises from which storm water is discharged, and the City of Sapulpa is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this chapter or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the City of

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Sapulpa may seek issuance of a search warrant from any court of competent jurisdiction.

SECTION 14-413

PENALTIES AND ADMINISTRATIVE ENFORCEMENT

REMEDIES

The following enforcement provisions are intended to encourage compliance wth this chapter.

1. **Investigation.** The Environmental Administrator or authorized representative may investigate any premises where there is to believe that there may be failure to comply with the requirements of this ordinance.
2. **Notice of Violations.** Whenever the Environmental Administrator determines that a violation of this ordinance has occurred or is occurring, the Environmental Administrator may issue a notice of violation (NOV) to the person or industry. This NOV shall include the nature of the violation and provide a reasonable time for correction. The Environmental Administrator may require, within fifteen (15) days of the receipt of this NOV, an explanation of the violation and a plan for the satisfactory correction and prevention, including specific required actions. The explanation and plan shall be submitted by the violator to the Environmental Administrator in writing. Submission of this plan shall in no way relieve the person or industry of liability for any violation(s) occurring before or after receipt of the NOV. Issuance of a NOV shall not preclude any other enforcement action.
3. **Administrative Orders.**
 - A. **Consent Orders.** The Environmental Administrator is empowered to enter consent orders, assurances of voluntary compliance, or other similar documents establishing a consensus with any person or industry for noncompliance. Such an order shall include specific action to be taken by the violator to correct the noncompliance within a time period specified in the order. Consent orders shall be judicially enforceable.

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B. Compliance Orders. When the Environmental Administrator finds that a person or industry has violated or continues to violate this ordinance or orders issued hereunder, the Environmental Administrator may issue an order to the violator directing that compliance be obtained within a specified time period. If compliance is not achieved within the time period, water service or sewer service, or both services may be discontinued, unless adequate BMPs or other related appurtenances are installed and properly operated. Compliance orders may also contain other requirements addressing noncompliance, including additional self-monitoring. A compliance order shall not extend the deadline for compliance established by a federal standard or requirement, nor shall a compliance order release the violator from liability for any violation, including any continuing violation. Issuance of a compliance order shall not preclude any other enforcement action.

C. Cease and Desist Orders. When the Environmental Administrator finds that a person or industry is violating provisions of this ordinance, or any order issued hereunder, or that past violations are likely to recur, the Environmental Administrator may issue an order directing the violator to cease and desist all such violations or activities likely to cause a recurrence, and to:

1. Immediately comply with all requirements, and
2. Take such appropriate remedial or preventive actions as may be necessary to properly address a continuing or threatened violation, including halting operations or terminating the discharge.

D. Issuance of a cease and desist order shall not preclude other action against the violator.

E. Administrative orders may be revised by the Environmental Administrator at anytime in order to insure compliance with this ordinance.

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4. **Administrative Fines.**

- A. When the Environmental Administrator finds that a user has violated or continues to violate any provision of the ordinance, or order issued hereunder, the Environmental Administrator, upon good cause shown, may impose an administrative fine against such user in an amount not to exceed One Thousand Dollars (\$1,000.00). Such fines may be assessed on a per violation, per day basis.
- B. Notice of an administrative fine shall be served personally on the user or by certified mail, return receipt requested. Payment of the fine shall be received by the Environmental Administrator within fifteen (15) days after such notice is served.
- C. Failure to submit payment for an administrative fine within fifteen (15) days shall be considered a violation of this ordinance.
- D. Issuance of an administrative fine shall not preclude any other action against the user.

- 5. **Cost Recovery of Expenses Incurred for Violation of this Ordinance.** Notwithstanding any other provision of this ordinance, the Environmental Administrator may require any person and or industry found to have violated any provision of this ordinance, or orders issued hereunder, to reimburse the City for any goods or services used to remove pollutants from the City's MS4, prevent further discharge of pollutants into the MS4, and shall become liable to the City for any expense, loss, or damages experienced by the City as a result of a violation. The City may pursue its right of action to recover all such costs, by utilizing any and all reasonable methods, including installment payment administered by the Finance Department. The City may recover the costs incurred by adding them to the utility bill of the violator or filing a lien on the subject property.
- 6. **Water Supply Severance.** Whenever a person has violated, or continues to violate any provision of this ordinance, or orders issued hereunder, water service may be severed. Service shall only recommence at the violator's expense, after the violator has satisfactorily demonstrated an ability to comply, and actual compliance.

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7. **Appeals.** Any person aggrieved by any NOV, administrative fine or order issued by the Environmental Administrator pursuant to this Section may appeal the action as provided in this subsection.
 - A. The initiation of an appeal shall be in writing and filed with the Environmental Administrator no later than fifteen (15) days after service of notice of the action appealed from. The written notice of appeal shall specify the action appealed, detail why the action is in error, and specify provision of ordinances or statutes supporting the person's appeal.
 - B. Upon receipt of a notice of appeal by the Environmental Administrator, the Environmental Administrator shall conduct any necessary investigation into the basis of the appeal and hold a hearing within thirty (30) days of receipt. However, upon review of the notice of appeal, if the Environmental Administrator determines that the basis of the appeal is patently frivolous or filed only for purposes of delay, then the Environmental Administrator may deny the appeal without a hearing. Upon the Environmental Administrator's denial without a hearing, the appellant shall be notified in writing of the denial and the grounds for denial.
 - C. At the conclusion of a hearing on an appeal, if the appeal is sustained in favor of the appellant, the Environmental Administrator may modify or withdraw the notice, fine or order. If the Environmental Administrator fails to act on the appeal within thirty (30) days of concluding the hearing, the appeal shall be deemed denied. Any ruling, requirements, decisions or actions of the Environmental Administrator on appeal shall be final and binding, unless appealed to the City Council.
 - D. Any person aggrieved by an appeal decision of the Environmental Administrator may perfect an appeal to the City Council by filing a written notice of appeal with the City Clerk and the Environmental Administrator within fifteen (15) days from the date of the action by the Environmental Administrator. Such notice shall specify grounds for the appeal. A hearing on the appeal shall be commenced by the Council no later than thirty (30) days from the date the notice of appeal was filed with the City Clerk. The City Council shall have jurisdiction to affirm, modify, reverse or remand the action of the Environmental Administrator upon good cause shown. Any rulings, requirements, or decision of the Council shall be final.

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8. **Injunctive Relief.** Whenever a person or industrial facility has violated or continues to violate the provisions of this ordinance, or orders issued hereunder, the Director, with the advice and counsel of the City Attorney and the approval of the Manager, may petition the district court for the issuance of an injunction, which restrains or compels the activities on the part of the person or industry. A petition for injunctive relief shall not preclude any other action against a person or industrial facility.
9. **Criminal Prosecution.** It shall be unlawful and a misdemeanor offense for any person to violate any of the provisions of this ordinance, or any order issued hereunder. Any person convicted of a violation of this ordinance, or any order issued pursuant to this ordinance, shall be guilty of a misdemeanor offense and shall be punished by a fine of not more than Five hundred & no/100 dollars (\$500.00), excluding costs, fees and assessments, or by imprisonment in the City Jail for a period not exceeding ten (10) days, or by both such fine and imprisonment. Each day, or portion thereof, during which a violation is committed, continued or permitted shall be deemed a separate offense.
10. **Remedies Nonexclusive.** The provisions of Sections 55.13 A and B of this ordinance shall not be exclusive remedies. The City reserves the right to take any combination of actions against a violator of this ordinance. These actions may be taken concurrently. The City may recover reasonable attorney's fees, court costs and other expenses associated with enforcement activities, including sampling and monitoring expenses, and the cost of any actual damages incurred by the City.

SECTION 14-414

STORMWATER UTILITY FEE

1. In order to provide revenue to fund the costs associated with a stormwater management program, there is hereby established a Stormwater Utility Fee as set forth in the Master Fee Schedule.

2. All revenues collected from the Stormwater Utility Fee shall be deposited to the Stormwater Management Fund.

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3. The Stormwater Management Fund shall be used for the following purposes:
 - a. Costs of development, administration, and implementation of the stormwater management program including operation costs, capital expenses, salaries and consulting fees;
 - b. Public education and outreach;
 - c. Stormwater pollution prevention activities;
 - d. Illicit discharge detection and elimination;
 - e. Inspection, monitoring, surveillance, and enforcement activities;
 - f. Abatement, remediation, and restoration activities;
 - g. Field sampling and testing equipment, supplies, and services;
 - h. Laboratory testing equipment, supplies, and services;
 - i. Engineering and GIS equipment, supplies, and services;
 - j. Storm sewer system development, upgrades, and repairs;
 - k. Retrofitting developed areas for pollution control;
 - l. The acquisition by gift, purchase, or condemnation of real and personal property, and interests therein, necessary to construct, operate, and maintain the municipal storm sewer system; and
 - m. Other equipment, supplies, and activities which are reasonably required.

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SECTION 14-415 POST-CONSTRUCTION STORMWATER IMPACTS; MINIMIZATION REGULATIONS AND REQUIREMENTS; COMPLIANCE PROCEDURES

The following post-construction stormwater impact provisions are intended to encourage compliance with this chapter.

1. The purpose of this section is to address the design, construction, operation, and maintenance requirements of stormwater drainage systems within the City of Sapulpa to reduce or eliminate post-development adverse stormwater quality and quantity impacts to the municipal separate stormwater system (MS4).
2. Development design, construction, and post-construction operations and maintenance of stormwater drainage systems shall be performed in such a manner so that adverse stormwater quality and quantity impacts to stormwater drainage systems and receiving streams both on the subject property and on offsite properties are avoided, reduced, or eliminated. Adverse stormwater quality and quantity effects for the purposes of this section includes increased flood elevations, increased velocity of floodwaters, erosion, siltation, sedimentation, reduced base flow, pollution, or degradation of water quality.
3. Stormwater drainage systems for the purposes of this section include any facility, structure, improvement, development, equipment, property or interest therein, including structural and nonstructural elements, which are made, constructed, used or acquired for the purpose of collecting, containing, storing, conveying, filtering, treating, infiltrating and controlling stormwater. This includes, but is not limited to detention facilities, retention facilities, sediment basins, ponds, lakes, engineered open channels, natural channels, floodplains, creeks, storm sewers, conduits, pipes, borrow ditches, swales, roadways, infiltration systems, rain gardens, and bio-retention filters.
4. Every development shall be provided with a stormwater drainage system designed by an Engineer registered in the State of Oklahoma, adequate to serve the development, and otherwise shall meet approval requirements of the officials having jurisdiction. The design shall meet City of Sapulpa Engineering Design Criteria Manual and other City of Sapulpa criteria and codes where applicable.

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5. The stormwater drainage system shall be designed so that property owners located downstream from and upstream from the development shall not be injuriously affected by the construction, operation, or maintenance of such system.
6. Proof of Compliance.
 - (a) If a proposed development will disturb an existing wetland, the developer shall provide to the city a written statement from the U.S. Army Corps of Engineers that the development plan fully complies with all applicable federal wetland regulations as established in the federal Clean Water Act.
 - (b) If the Environmental Administrator obtains credible information regarding threatened or pending regulatory enforcement action related to an environmental condition of the property to be developed, or an environmental impact related to the development plan, then the Environmental Administrator may require the developer to provide to the City written statements from such governmental agencies as the Environmental Administrator may designate as having related jurisdiction based on the nature of the threatened enforcement action or environmental impact. Said statements shall verify that the development plan fully complies with environmental regulations within the jurisdiction of the writing agency. If the developer, after a diligent effort, is unable to obtain such written verifications from one (1) or more of the designated agencies, the developer shall at least provide to the City a written verification from said agency that the City's approval of the development plan will not interfere with a threatened or pending environmental enforcement action of said agency. All required written statements shall be provided to the Environmental Administrator prior to the scheduling of the hearing for the project development plan.
7. Construction of the development including stormwater drainage systems shall be performed in compliance with Section 14-410 requirements, City of Sapulpa Engineering Design Criteria requirements, and other City of Sapulpa construction criteria and code requirements where applicable.
8. Operations responsibility of the development stormwater drainage system shall be detailed in the covenants language on platted developments, on easement language for stormwater drainage systems in dedicated easements, or shall be borne by the property owner for stormwater drainage systems on private property.

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9. Maintenance responsibility of the development stormwater drainage system shall be detailed in the covenants language on platted developments, on easement language for stormwater drainage systems in dedicated easements, or shall be borne by the property owner for stormwater drainage systems on private property.
10. In the event that the owner or responsible party fails to properly operate or maintain the stormwater drainage system such that negative stormwater quality or quantity impacts to stormwater drainage systems and or receiving streams either on the subject property or on offsite properties occurs or is imminent, the City of Sapulpa, Oklahoma, or its designated contractor may enter the property to perform required operations or maintenance, and the cost shall be paid by the owner or responsible party.”

APPENDIX G: SAPULPA OKR04 STORMWATER MANAGEMENT PROGRAM SOPS & GUIDELINES

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ACRONYMS

ACRONYMS

BMP	Best Management Practice
ERP	Enforcement Response Plan
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NOT	Notice of Termination
NOV	Notice of Violation
ODEQ	Oklahoma Department Of Environmental Quality
OPDES	Oklahoma Pollutant Discharge Elimination System
SWP3	Stormwater Pollution Prevention Plan
UDEPA	United States Environmental Protection Agency

SECTION 1

1 INTRODUCTION AND BACKGROUND

This Stormwater Enforcement Response Plan (ERP) codifies enforcement procedures used by the City of Sapulpa (City) to enforce provisions of its Oklahoma Pollutant Discharge Elimination System (OPDES) statewide Stormwater Permit (hereafter referred to as the Permit). Under the Municipal Separate Storm Sewer System (MS4) which is owned and operated by the City through rules and regulations regulating stormwater discharges.

Control the contribution of pollutants to the MS4 by stormwater and non-stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity.

Control the contribution of pollutants to the MS4 by stormwater and non-stormwater discharges associated with construction activity and the quality of stormwater discharged from sites of construction activity.

Require compliance with conditions in Oklahoma State statutes, rules, permits, contracts and orders.

Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and non-compliance with permit conditions including the prohibition on illicit discharges to the MS4.

The City's MS4 consists of a conveyance or system of conveyances owned by the City that is designed or used for collecting or conveying stormwater, which is not a combined sewer and which is not part of a publicly owned treatment works.

1.1 Purpose

This ERP describes the measures available to the City to exercise its authority. The ERP identifies enforcement procedures designed to encourage a timely response by the discharger. Implementation of the ERP will ensure a consistent response throughout the City and avoid confusion, delays and disputes over enforcement for stormwater pollution prevention.

An effective enforcement program depends on detailed and comprehensive documentation of all contacts with the alleged violator and of all evidence establishing the violation. Investigations and enforcement actions must be handled quickly. The City

is required by the Permit to investigate reports of illicit discharges and initiate enforcement action to eliminate the source(s) of the discharge.

1.2 Sapulpa's Permit History

The City's current MS4 permit was issued by the State of Oklahoma Department of Environmental Quality (ODEQ) and became effective on March 16, 2016 and will expire on October 31, 2020. This permit replaces the previous OPDES MS4 permit issued by ODEQ in 2005. The scope of the current permit includes all stormwater discharges associated with construction sites, industrial facilities, maintenance facilities and other activities within the MS4.

1.3 Types of Enforcement Actions

The City will use City Code, permits and penalties to enforce illicit discharges to the City's MS4 system. The City anticipates two (2) general types of stormwater violations: construction sites and illicit discharges or connections to the City's MS4. Potential violators include construction contractors, businesses, industries, private citizens and other governmental agencies which are detailed below.

1.3.1 Construction Sites

The City's construction contractors are required to obtain all required permits pertaining to land disturbance activities from various agencies. Permits could include City or ODEQ permits.

The City has inspection oversight responsibility, except for private projects and must ensure that a trained employee inspects construction activity at sites until final stabilization is achieved. The MS4 permit requires the City to implement a system to monitor contracted construction activities and to enforce Permit provisions. The City is required to list and describe all violations and enforcement responses taken for construction activities in the Annual Report submitted to ODEQ.

The City's authority to take enforcement action at construction sites is derived from its City Code along with Permit language.

1.3.2 Illicit Discharges and Connections

The Permit also required Sapulpa to take measures to detect and eliminate illicit discharges and connections to the City's MS4. An illicit discharge is defined as any discharge to a MS4 that is not composed entirely of stormwater, rainwater or snowmelt, with the exception of allowable non-stormwater discharges and separately permitted discharges. Illicit connections are defined as any man-made conveyance that connects an illicit discharge directly to the MS4. The City is required to implement a program to minimize, detect, investigate and eliminate illicit discharges and connections, including unauthorized non-stormwater discharges and spills into the MS4 system.

SECTION 2

2 METHODS OF DISCOVERY OF NON-COMPLIANCE

Reports of a stormwater violation or non-compliance may come from one of several sources:

Reports from City Staff—Illicit discharges and discharges of sediment or other pollutants from the construction sites, facilities or other sources within the City’s MS4 may be observed by City Staff as they conduct normal activities such as driving to or from job sites or when inspecting other activities. Such non-compliances could include: water and wind erosion, trash, construction debris leaving site, sediment tracking onto local streets, poor housekeeping, location of concrete washouts and failed or ineffective Best Management Practices (BMPs).

Permit Compliance Activities—Non-compliances may be discovered through Permit-required inspections or monitoring, including construction site inspections, dry weather field screening and stormwater sampling.

Contractor Compliance Activities—A construction contractor’s failure to comply with the ODEQ’s OKR04 MS4 Permit and ODEQ’s OKR10 Construction Permit such as conducting and submitting inspection reports, obtaining annual certifications, preparing and implementing Stormwater Pollution Prevention Plans (SWP3).

Reports from the Public—Public complaints may come directly to City or though other local state or federal government agencies.

SECTION 3

3 CONSTRUCTION CONTRACTOR ENFORCEMENT

This section imposes the obligation of the Contractor to perform their duties in an honest, diligent and cooperative manner.

The following section describes the City's authority and the mechanisms for enforcing Permit provisions on construction sites within the boundaries of the City's MS4 jurisdiction.

3.1 Contractor Compliance Requirements

Compliance with stormwater permits and laws on construction projects within the City's MS4 must be enforced according to these Enforcement Response Procedures.

Contractors are to comply with the ODEQ OPDES OKR10 Stormwater Construction Permit and Sapulpa's OKR04 MS4 Stormwater Permit for regulated construction projects, including the contractor's obligation to file a Notice of Intent (NOI) and obtain authorization from ODEQ for each construction project or site. The contractor shall also file a Notice of Termination (NOT) for each construction project or site, either terminating their responsibility if final stabilization has been achieved, or transferring to another contractor for completion.

3.2 Construction Contract Enforcement

When stormwater non-compliance is identified by the contractor, City inspector or City employee, enforcement actions will be taken promptly, but no later than fifteen (15) days following identification of the non-compliance. The City will take appropriate actions against the contractor based on the nature and severity of the violation. Serious discharges or an imminent threat of discharge on a project may require an immediate escalation to a higher level of enforcement. The level of enforcement response will depend upon several factors:

Severity of the violation, the duration, quality and quantity of pollutants, and effect on public safety and the environment

The violator's knowledge (either negligent or intentional) of the regulations being violated

A history of violations and/or enforcement actions of the individual or contractor

The potential deterrent value of the enforcement action

The City will use the following progressive enforcement policy, escalating the response when a contractor fails to respond in a timely manner. If the City identifies a deficiency in the implementation of the approved SWP3 or amendments and the deficiency is not corrected immediately or by a date requested by the City, the project is in non-compliance. The recommended sequence of enforcement actions are detailed below.

3.2.1 Inspection Forms

An Inspection Form will be completed with each on-site inspection. Pictures will be taken when violations occur or corrective action is necessary.

3.2.2 Verbal Warning

This action is a verbal exchange between the City personnel and the alleged violator. The information exchanged and pictures taken will be documented by the inspector. No letter or Notice of Violation (NOV) is written if the problem is corrected immediately.

3.2.3 Written Warning

A Notice of Non-Compliance (NON) may be issued if the non-compliance continues after the verbal warning is issued. If the non-compliance is a significant violation and not corrected after the NON, a NOV will be issued. The NOV will document the reasons why the discharge is illegal and provide deadline for compliance.

3.2.4 Stop Work Order/Fees

The City will issue stop work orders or fees only if all other avenues of compliance have been exhausted.

If the verbal and written warnings do not result in corrective action by the documented deadline, and immediate action is required due to an imminent threat of discharge or if the contractor does not respond to the warning letter within the required time frame, the City may attach fees to the NOV and temporarily suspend work on the project.

Fees

Initial:	\$250.00
Second:	\$500.00
Escalate:	\$750.00
Up to:	\$1,000.00 per day per violation

3.2.5 Require Corrective Action

The City may require the contractor to undertake corrective or remedial action to address any release or threatened release or discharge of the hazardous substance, pollutant or contaminant, water, wastewater, or stormwater.

SECTION 4

4 ILLICIT DISCHARGES AND ILLICIT CONNECTION ENFORCEMENT

The City is responsible for monitoring discharges to its MS4. The Permit requires the City to ensure that discharges from its MS4 do not cause or contribute to an exceedance of water quality standards. Any discharge or connection without permission is an illegal discharge to the City's MS4. An illegal discharge or connection may be discovered in two (2) ways, either through routine inspection or due to a complaint.

4.1 Verbal Warning

When a routine inspection of the drainage system identifies an illegal connection or discharge to the City's MS4, City personnel will document the discharge on an Inspection Form and take pictures.

If the source of the discharge or connection is evident, City personnel will contact the discharger or connector in person or by phone to discuss the violation. The communication will include requesting any permits or other authorizations, providing a follow up date within fifteen (15) days. If the discharge is permitted or authorized (documentation is required), no further action is required. If the discharge is not authorized, the discharge will need to be addressed or ceased.

4.2 Written Warning

If after the fifteen (15) days, the illicit connection or discharge has not been corrected, the City Public Works Director will issue a "Notice of Illegal Discharge and Demand for Corrective Action" letter to the property owner. The letter will request that the illegal connection or illegal discharge be ceased or removed within thirty (30) days. A follow up inspection will be performed to ensure compliance.

4.3 Removal of Illegal Discharge or Illegal Connection

The City may remove the illegal connection or illegal discharge if it has not been corrected within the allowed timeframe. If the City removes the illegal connection or illegal discharge, the responsible party is subject to Civil Action for damages.

4.4 Civil Action

If the illegal connection or illegal discharge is not corrected within the allowed timeframe, the Public Works Director may forward the matter to local enforcement authority. Additional measures will be escalated as needed to achieve compliance.

4.4.1 Oklahoma Department of Environmental Quality (ODEQ)

Authority to administer the MS4 Permit in the State of Oklahoma is the Oklahoma Department of Environmental Quality (ODEQ). The ODEQ has several enforcement mechanisms for violations of the OPDES regulations. In compliance with the provisions of the Federal Clean Water Act (CWA), as amended, (33 U.S.C., 1251 et seq); 40 CFR Parts 122, 123 and 124, as amended.

4.4.2 United States Environmental Protection Agency (USEPA)

Although the USEPA delegated authority for the OPDES Program to the State of Oklahoma, the USEPA reserves the authority to apply fines in addition to fines issued by the ODEQ,. Federal Environmental Regulations based on the Clean Water Act allow the USEPA to levy fines on dischargers of up to \$27,500.00 per day per violation.

SECTION 5

5 REPORTING REQUIREMENTS

The City shall provide a list of violations in the Annual Report to the ODEQ. At minimum City personnel should document the source of the complaint, the date and time, the contact person (if any), a description of the nature of the non-compliance or illicit discharge, actions taken and final resolution.

SECTION 6

6 ENFORCEMENT ACTION

6.1 *Preliminary action.*

A discussion of the inspection findings is held with the Company representative. At this time recommendations are made as to how and what BMPs could be employed to reduce or eliminate the risks found. Items discovered that require immediate attention, such as an illicit discharge, are also discussed.

A letter stating the findings, recommended BMPs and any mandated actions is sent within two weeks of the inspection.

6.1.2 *Notice of Violation (NOV)*

The City responds to all violations of the Ordinance with an NOV. Issuance of a NOV is neither the prerequisite nor exclusive of any other enforcement action.

6.1.3 *Administrative Orders*

There are three types of Administrative Orders enforced by the City through Ordinance. Consent orders, Compliance Orders and Cease and Desist Orders.

Consent Orders – A Consent Order is a voluntary agreement between the City and a noncompliant party detailing specific actions to be taken by the noncompliant party to bring them into compliance within a prescribed period of time.

Compliance Orders – A compliance Order is issued when a noncompliant party continues to violate City Ordinance. As in the Consent Order, specific actions are detailed and specific time limits are set forth for the noncompliant party to come into compliance

Cease and Desist Orders – A Cease and Desist Order is issued when a noncompliant party continues to violate City Ordinance or there is a very high probability that the violation will continue or reoccur. A Cease and Desist Order requires the noncompliant party to cease the violation and;

- i) Immediately comply with all requirements, and
- ii) Take such remedial and/or preventative action(s) as may be needed to properly address the violation.

Issuance of an Administrative Order is neither a prerequisite nor exclusive of any other enforcement action.

6.1.4 Administrative Fees

Administrative fees are to be issued when a violation is particularly serious or previous NOVs or Administrative Orders have gone unheeded. Fees are considered to be a stringent method of enforcement and may be considered after NOVs, Consent Orders and Compliance Orders have failed to elicit a positive response.



Maintaining Storm Sewer Infrastructure BMP

Objectives

Flow attenuation
Runoff volume reduction

Pollution Prevention

Soil erosion
Sediment control

Pollution Removal

Total Suspended Sediment (Solids)
Total Phosphorus
Heavy Metals
Floatables
Oil and Grease

Description

All BMPs require periodic maintenance as well as routine maintenance that should be applied to existing devices such as catch basins and ditches to maintain and enhance their performance.

Sediment removal applies to pond and wetland systems as well as filtration systems such as grit chambers and surface sand filters

Removing floatables helps prevent outlet structures from becoming blocked and changing hydraulics. It is also valuable from an aesthetic standpoint.

Vegetative maintenance applies to constructed wetlands, filter strips, wet and dry swales and bioretention facilities. Practices include, but not limited to mowing, reseeding, resodding and removing dead plant material.

Catch Basins

Catch basins, which function as "entrance chambers" to a storm sewer, often have a low area called a sump, which is intended to retain sediment. By trapping coarse sediment,

the catch basin prevents solids from clogging the storm sewer or being washed into receiving waters.

These low areas must be cleaned out periodically to maintain their sediment-trapping ability. Catch basin cleaning reduces the load of oxygen-demanding substances, such as leaf debris, etc. that reaches surface water.

The first flush of stagnant water and debris in the storm sewer system by stormwater runoff may contain a high concentration of pollutants, such as metals and hydrocarbons. The sediment and debris flushed out may clog downstream stormwater conveyance systems.

The rate at which catch basins fill and the total amount of material collected during different cleaning frequencies is highly variable. In general, if the contributing watershed has active construction or other land uses that create high sediment loads, the catch basin should be cleaned more often than in stabilized areas.

Over a year's time, monthly cleaning removes about six times more sediment than cleaning annually. Preventive measures such as street may reduce deposition significantly.

Ditches

Roadside ditches can contribute significant sediment to runoff, both from channelization and erosion within the ditch and accumulated sediment and other fine debris from the road surface. Cleaning and stabilizing ditches can help to reduce pollutant loadings.

Ditches should be inspected at a minimum annually. Periodic repairs may include reseeding or replanting and removing sediment. If problems recur, the ditches may need to be altered. Solutions may include reducing the length and slope of ditch runs and reducing the velocity of runoff by using check dams.

Sediment Disposal

Sediments can be contaminated with a wide array of organic and inorganic pollutants well beyond the levels of the same pollutants in the raw storm water itself. Handling and disposal of these residential wastes must be done with care.

Sediments from constructed wetlands or ponds must be carefully removed to minimize turbidity, further sedimentation, or other adverse water-quality impacts.

Retention Pond/Wetland

Removal of accumulated sediment from forebays or sediment storage areas should be on a 5-year cycle, or as needed.

Removal of accumulated sediment from main cells of pond once the original volume has been significantly reduced should be on a 5 to 10 year cycle.

Cleaning and removal of debris after major storm events, harvest excess vegetation, repair of embankment and side slopes and repair of control structures should be annually or as needed.

Detention Basin

Removal of accumulated sediment, repair of control structure and repair of embankment and side slopes should be annually or as needed.

Infiltration Trench

Cleaning and removal of debris after major storm events, mowing and maintenance of upland vegetated areas and maintenance of inlets and outlets should be annually or as needed.

Infiltration Basin

Cleaning and removal of debris after major storm events and mowing and maintenance of upland vegetated areas should be annually or as needed.

Removal of accumulated sediment from forebays or sediment storage areas should be on a 3 to 5 year cycle.

Sand Filters

Removal of trash and debris from control openings, repair of leaks from the sedimentation chamber or deterioration of structural components, removal of the top few inches of sand and cultivation of the surface when filter bed is clogged, clean-out of accumulated sediment from filter bed chamber and clean out of accumulated sediment from sedimentation chamber should be done annually or as needed.

Bioretention

Repair or eroded areas, mulching of void areas, removal and replacement of all dead and diseased vegetation and watering of plant material should be done bi-annually or as needed.

Grass Swale

Scraping swale bottom and removal of sediment to restore original cross section and infiltration rate and seeding or sodding to restore ground cover (use proper erosion and sediment control) should be on a 5 year cycle.

Filter Strip

Mowing and litter and debris removal, nutrient and pesticide use management, aeration of soil in the filter strip and repair of eroded or sparse grass areas should be done annually or as needed.



SAPULPA REGIONAL WASTEWATER TREATMENT FACILITY BEST MANAGEMENT PRACTICES

Non-Structural Best Management Practices

1. Good Housekeeping. All areas of the Sapulpa Regional Wastewater Treatment Facility will be kept in an orderly manner. Waste materials will be handled in a manner to minimize stormwater exposure. Grit and screenings will be disposed of daily. Trash will be picked up twice a week. Sludge trackout from drying beds will be swept daily.
2. Minimizing Exposure. All vehicle maintenance activities will occur indoors, when feasible. Chemicals will be stored indoors or in flammable storage containers.
3. Preventative Maintenance. Quarterly inspections will include inspection of berms surrounding sludge loading areas, waste hauler disposal area and sludge drying beds. Facility equipment will be inspected, tested, maintained, and repaired on a regular basis to avoid breakdowns or failures that might result in the discharge of pollutants to surface waters. Sludge dumpsters will be inspected for leaks prior to transport for disposal at the landfill.
4. Spill Prevention and Response Procedures. Any spills or leaks of hazardous materials will be cleaned up immediately using dry techniques (absorbents, floor dry). These materials will be kept near any areas of potential for spills and leaks. Employees will be trained in appropriate spill clean up techniques in employee training sessions.
5. Routine Facility Inspections. Qualified Personnel will inspect facility access roads, grit and screening areas, sludge drying beds and sludge loading area. Inspections will take place quarterly except for the fall quarter when a Comprehensive Site Evaluation inspection will take place for the Comprehensive Site Evaluation Report. Quarterly Visual Monitoring will take place on storm water discharges.
6. Employee Training. Employee training will take place yearly training for all employees. Training will include components and goals of the SWP3, good housekeeping and material management practices, equipment maintenance practices, and spill clean up techniques.

Structural Best Management Practices

1. Sediment and Erosion Control. All unpaved areas of the Sapulpa Waste Water Treatment Plant will be kept planted with grass to prevent erosion and the wastewater discharge channel will be concrete lined. These areas will be inspected quarterly for evidence of erosion.
2. Management of Runoff. Sludge loading areas are bermed to contain any spills or leaks. Screenings and grit are handled in a way to minimize exposure to storm water. Facility equipment, (drying beds, holding pond, sequential batch reactors), route contacted storm water back to the facility's head works.



Instructions for Outside Washing

Purpose

To provide guidelines for the disposal of wastewater generated from activities associated with outside washing of property. This includes, but is not limited to, the cosmetic cleaning of streets, parking lots, commercial car lots, sidewalks, building walls and roofs. All discharges to a City of Sapulpa Sewer System, must comply with the applicable requirements set forth in the City of Sapulpa's Code of Ordinances.

Please be advised that Federal Law requires the City of Sapulpa to stringently enforce both Sanitary Sewer and the Illicit Discharge Ordinances.

Disposal of anything other than stormwater into the Storm Sewer System is unlawful. The only exception is if your wash water does not carry pollutants into the Storm Sewer System.

It is also unlawful to discharge stormwater to the Sanitary Sewer System. The pollutants contained in wastewater discharged to the Sanitary Sewer System may not exceed levels set forth in the Sanitary Sewer Use Ordinance. Sanitary Sewer discharges of certain washing processes may be subject to other Federal or Local Regulations and may require approval prior to discharge. Contact the Stormwater Department if you believe, or are unsure if your discharge will be subject to these additional Regulations.

Following these instructions will help insure that you and/or your company stay in compliance with the Pollution Ordinance, protect area water quality and avoid enforcement action.

Definitions

Absorbents—Materials capable of absorbing (i.e., oil dry, sawdust, absorbent booms, pads, etc.)

Best Management Practices (BMP)—The best available practices or devices that, when used singly or in combination, reduce the contamination of surface and/or ground waters.

Chemicals—Detergents, surfactants, degreasers or any other additive.

Heated Water—Water that has been heated to a temperature greater than 10° F of the ambient air temperature.

Pollutants—A waste material that contaminates air, water and/or soil.

Storm Sewer System—A conveyance, including but not limited to roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or

storm drains that are designed or used for conveying stormwater directly into area waterways. Also referred to as the Municipal Separate Storm Sewer System (MS4).

Sanitary Sewer System—A drainage system that begins at drains inside buildings and ends at the Wastewater Treatment Plant, where all water is treated before it discharges to the waterways. This system does not include any outside drains, because they are part of the Storm Sewer System.

Before you Wash

- Remove all litter, including cigarettes, paper and other floatable materials from the surface you are preparing to wash. This may require sweeping and inspecting the area.
- Remove all liquid pollutants (e.g., anti-freeze, oil, gasoline, etc.) by using absorbent material or other means.
- Dispose of all waste into a dumpster, which is covered and does not leak.

Washing Options

You must choose one of the two following wash options.

Option 1 – Capture all wash waters

- A. This option must be used if chemicals and/or heated water are used at any time during the cleaning process.
- B. During cleaning, capture all wash waters for disposal.
- C. Wash waters may be disposed into the Sanitary Sewer at the location the wash waters are generated or off site in an environmentally acceptable manner. At no time can the wash waters be discharged into the Storm Sewer System.
- D. Remove and then dispose of any grit or sludge material in trash. DO NOT dispose of this material into the Sanitary Sewer.
- E. Use only chemicals that will not result in a violation of the Sanitary Sewer or Illicit Discharge Ordinance.

Option 2 – Do not capture wash waters

- A. If you choose this option, chemicals and/or heated water cannot be used at any time during the cleaning process.
- B. Employ BMPs such as chemical or hydrocarbon absorbents, filters, screens or any practice that will remove pollutants from the wash waters.
- C. Wash waters must filter through the absorbents before entering the Storm Sewer System. When washing pavement, place the appropriate BMPs (hydrocarbon absorbents, pads, filters, screens, booms, etc.) at the point where water leaves the wash area or property or at the Storm Sewer inlet (if possible). This will remove pollutants which otherwise would have

been discharged to the Storm Sewer System. This could be at the Storm Sewer drop boxes, inlets, parking lot entrances/exits, etc.

- D. Keep BMPs in place until you finish all washing activities and all wash waters have been processed.

After washing

Throw used absorbent material and sediment into a trash container, which is covered and does not leak.

Common violations

The most common violations include:

- A. Using chemicals and/or heated water during the cleaning process but failing to collect and properly dispose of the wash waters (wastewater). This includes allowing the wash waters to sit and evaporate.
- B. Failing to use BMPs during the implementation of Option 2 because the wash water (wastewater) appeared “clean”.



Landscape Maintenance

Objectives

Contain
Educate
Reduce/Minimize
Product Substitution

Targeted Constituents

Sediment
Nutrients
Trash
Oxygen Demanding

Description

Landscape maintenance activities include vegetation removal; herbicide and insecticide application; fertilizer application/ watering; and other gardening and lawn care practices. Vegetation control typically involves a combination of chemical (herbicide) application and mechanical methods. All of these maintenance practices have the potential to contribute pollutants to the storm drain system. The major objectives of the BMP are to minimize the discharge of pesticides, herbicides and fertilizers to the storm drain system and receiving waters; prevent the disposal of landscape waste into the storm drain system by collecting and properly disposing of clippings and cuttings, and educating employees and the public.

Approach

Pollution Prevention

- Choose low water using flowers, trees, shrubs and groundcover.
- Consider alternative landscaping techniques such as naturescaping and xeriscaping.
- Conduct appropriate maintenance (i.e. properly timed fertilizing, weeding, pest control and pruning) to help preserve the landscapes water efficiency.
- Consider grass cycling (grass cycling is the natural recycling of grass by leaving the clippings on the lawn when mowing. Grass clippings decompose quickly and release valuable nutrients back into the lawn).

Suggested Protocols

Mowing, Trimming and Weeding

- Whenever possible use mechanical methods of vegetation removal (e.g. mowing with tractor type or push mowers, hand cutting with gas or electric powered weed trimmers) rather than applying herbicides. Use hand weeding where practical.
- Avoid loosening the soil when conducting mechanical or manual weed control, this could lead to erosion. Use mulch or other erosion control measures when soils are exposed.
- Performing mowing at optimal times. Mowing should not be performed if significant rain events are predicted.
- Mulching mowers may be recommended for certain flat areas. Other techniques may be employed to minimize mowing such as selective vegetative planting using low maintenance grasses and shrubs.
- Collect lawn and garden clippings, pruning waste, tree trimmings, and weeds. Chip if necessary and compost or dispose of at a landfill (see waste management section of this fact sheet).
- Place temporarily stockpiled material away from watercourses, and berm or cover stockpiles to prevent material releases to storm drains.
- Leave a vegetative buffer next to Waters of the State.

Planting

- Determine existing native vegetation features (location, species, size, function, importance) and consider the feasibility of protecting them. Consider elements such as their effect on drainage and erosion, hardiness, maintenance requirements, and possible conflicts between preserving vegetation and the resulting maintenance needs.
- Retain and/or plant selected native vegetation whose features are determined to be beneficial, where feasible. Native vegetation usually requires less maintenance (e.g. irrigation, fertilizer) than planting new vegetation.
- Consider using low water use groundcovers when planting or replanting.

Waste Management

- Compost leaves, sticks or other collected vegetation or dispose of at a permitted landfill.
- Do not dispose of collected vegetation into waterways or storm drainage systems.
- Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.
- Reduce the use of high nitrogen fertilizers that produce excess growth requiring more frequent mowing or trimming.
- Avoid landscape waste in and around storm drain inlets by either using bagging equipment or by manually picking up the material.

Irrigation

- Where practical, use automatic timers to minimize runoff.
- Use popup sprinkler heads in areas with a lot of activity or where there is a chance the pipes may be broken. Consider the use of mechanisms that reduce water flow to sprinkler heads if broken.
- Ensure that there is no runoff from the landscaped area(s) if reclaimed water is used for irrigation.
- If bailing of muddy water is required (e.g. when repairing a water line leak), do not put it in the storm drain; pour over landscaped areas.
- Irrigate slowly or pulse irrigate to prevent runoff and then only irrigate as much as is needed.
- Apply water at rates that do not exceed the infiltration rate of the soil.

Fertilizer and Pesticide Management

- Utilize a comprehensive management system that incorporates integrated pest management (IPM) techniques. There are many methods and types of IPM, including the following:
 - Mulching can be used to prevent weeds where turf is absent, fencing installed to keep rodents out and netting used to keep birds and insects away from leaves and fruit.
 - Follow all federal, state and local laws and regulations governing the use, storage and disposal of fertilizers and pesticides and training of applicators and pest control advisors.
 - Use pesticides only if there is an actual pest problem. Not on a regular preventative schedule.
 - Do not use pesticides if rain is expected. Apply pesticides only when wind speeds are low.
 - Do not mix or prepare pesticides for application near storm drains or creeks or tributaries.
 - Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pests.
 - Employ techniques to minimize off-target application of pesticides, including consideration of alternative application techniques.
 - Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface.
 - Calibrate fertilizer and pesticide application equipment to avoid excessive application.
 - Periodically test soils for determining proper fertilizer use.
 - Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
 - Purchase only the amount of pesticide that you can reasonably use in a given time period.
 - Triple rinse containers and use rinse water as product. Dispose of unused pesticide as hazardous waste.

- Dispose of empty pesticide containers according to the instructions on the container label.

Inspection

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering and repair leaks in the irrigation system as soon as observed.
- Inspect pesticide and fertilizer equipment and transportation vehicles daily.

Spill Response and Prevention

- Refer to City of Sapulpa's Spill Prevention & Response Plan.
- Have spill cleanup materials readily available and in a known location.
- Clean up spills immediately and use dry methods if possible.
- Properly dispose of spill clean up material.

Other Considerations

- The Federal Pesticide, Fungicide and Rodenticide Act places strict controls over pesticide application and handling and specify training, annual refresher and testing requirements. The regulations generally cover:
 - A list of approved pesticides and selected uses, updated regularly
 - General application information
 - Equipment use and maintenance procedures
 - Record keeping
- All employees who handle pesticides should be familiar with the most recent material safety data sheet (MSDS) files.



Hazardous Materials Storage

Minimum Measure

Pollution Prevention/Good Housekeeping for Municipal Operations

Subcategory

Municipal Facilities

Description

Failure to properly store hazardous materials dramatically increases the probability that they will end up in local waterways. Many people have hazardous materials stored throughout their homes, especially in garages and storage sheds. Practices such as covering hazardous materials or storing them properly can have dramatic impacts.

Applicability

Hazardous material storage is relevant to both urban and rural settings and all geographic regions. The effects of hazardous material leakage may be more pronounced in areas with heavier rainfall, due to the greater volume of runoff.

Siting and Design Considerations

EPA (1992) has outlined some management considerations for hazardous materials. They are as follows:

1. Ensuring sufficient aisle space to provide access for inspections and to improve the ease of material transport.
2. Storing materials away from high-traffic areas to reduce the likelihood of accidents that might cause spills or damage to drums, bags or containers.
3. Stacking containers in accordance with the manufacturers directions to avoid damaging the container or the product itself.
4. Storing containers on pallets or equivalent structures. This facilitates inspection for leaks and prevents the containers from coming into contact with wet floors, which can cause corrosion. This consideration also reduces the incidence of damage by pests (insects, rodents, etc.).
5. Delegating the responsibility for management of hazardous materials to personnel trained and experienced in hazardous substance management.

Covering hazardous materials and areas where such materials are handled reduces potential contact with stormwater and wind. Storage areas, outdoor material deposits, loading and unloading areas and raw materials should all be covered or enclosed. Priority should be given to locations of the most hazardous materials (USEPA 1992).

Residents waiting to dispose of their household hazardous materials should store them properly until their hazardous waste collection day. An example storage technique includes a plastic container with a lid (e.g., a 5-gallon bucket). The container should be filled halfway with (unused) kitty litter. Then the hazardous material, in its own, original container, can be put in the bucket. The bucket lid must be fastened and the container clearly marked. It should be stored away from children and anyone else who might ingest the hazardous material stored inside. To reduce the potential for corrosion, the container should be stored off the ground.

Limitations

The lifespan of the cover or structure must be taken into account, depending on the hazardous nature of the stored materials. Tarpaulins and plastic sheets may not last in certain types of climatic conditions. If a roof or other structure is required, the lifespan will increase. Any storage facility must meet local fire and building codes.

Maintenance Considerations

Maintenance of hazardous material storage areas consists mostly of inspection and employee training. Storage spaces and containers should be routinely inspected for leaks, signs of cracks or deterioration, or any other signs of leakage. All hazardous materials should be protected from exposure to stormwater.

Effectiveness

Proper storage of hazardous materials reduces the possibility of contamination of stormwater runoff and receiving waters when coupled with proper maintenance techniques.

Spill Prevention and Response Plan

for



CITY OF SAPULPA

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SECTION 1

Spill Prevention and Response Plan Introduction

The City of Sapulpa (Sapulpa) has prepared this Spill Prevention and Response Plan (SPRP) to be implemented at the municipal industrial facilities located in Sapulpa, Oklahoma.

This SPRP describes planning, prevention and control measures to minimize impacts resulting from spills of fuels, petroleum products, or other regulated substances as a result of industrial activity. These measures will be implemented by Sapulpa personnel, unless otherwise indicated.

1.1 Planning And Prevention

Sapulpa requires its personnel to implement proper planning and preventative measures to minimize the likelihood of spills and to quickly and successfully clean up a spill, should one occur. Sapulpa has developed this SPRP to set forth minimum standards for handling and storing regulated substances and cleaning up spills. Potential sources of industrial-related spills include machinery and equipment failure, material stockpiles, fuel handling, transfer accidents and drum/storage tank leaks. Sapulpa will be responsible for implementing, at a minimum, the following planning and prevention measures.

SECTION 2

Preventative Measures

Sapulpa will require personnel to do everything practicable to minimize the potential for a spill during municipal industrial activity. Sapulpa will require the personnel to comply with applicable environmental and safety laws and regulations, including compliance by its contractors. The Spill Coordinator will be required to ensure a copy of this plan is available onsite to all personnel.

2.1 Training

All employees and contractors involved with transporting or handling equipment or maintaining equipment will be required to complete applicable training before they commence work.

Spill training programs will be conducted by a representative of Sapulpa. The spill training programs will:

- Provide information concerning pollution control laws;
- Inform personnel concerning the proper operation and maintenance of fueling equipment; and
- Inform personnel of spill prevention and response requirements.

Measures, responsibilities, and provisions of this SPRP and identification of response team individuals (Attachment A) will be incorporated into the training.

Training for other workers will be provided through ongoing meetings, which will discuss safety, and spill prevention and response, including personal responsibility to initiate appropriate procedures. Attendance of training sessions will be documented using sign-in sheets that will become part of the permanent site maintenance records.

2.2 Release Response Equipment

The employees will be supplied with a sufficient quantity of absorbent and barrier materials to adequately contain and recover spills of on-board fuel and lubricants for the piece of equipment with the largest volume of fuel plus lubricant. These materials may include drip pans, buckets, absorbent pads, containment booms, straw bales, absorbent clay, sawdust, floor-drying agents, spill containment barriers, plastic sheeting, skimmer pumps, covered holding tanks, fire extinguishers, and other materials as necessary.

The Spill Coordinator (Section 4.1) will make known to all personnel involved with industrial activities the locations of spill response equipment and materials. Spill response materials will be readily accessible during operational hours.

2.3 Equipment Inspection

Prior to moving any equipment onto the facility, the personnel will visually inspect each piece of equipment for cracks, excessive corrosion, or other flaws that may compromise the integrity of its fuel, hydraulic, or cooling systems. The employees will repair or replace leaking equipment immediately after a leak is detected and will be responsible for prompt reporting and mitigation of any fuel or lubricant spills from their equipment.

SECTION 3

Regulated Materials Storage and Handling

3.1 Containment

Sapulpa may store fuel, petroleum products, or chemical materials at the facility in safe locations within secondary containment structures. Secondary containment systems normally consist of a bermed area lined with an impervious material to provide a minimum containment volume equal to 150 percent of the volume of the largest storage vessel contained within the bermed area. Sapulpa will construct these containment structures to contain spilled or leaked liquids within the structures. If earthen containment dikes are used, they will be constructed with slopes no steeper than 3:1 (horizontal to vertical) to limit erosion and provide structural stability. Containment areas will not have drains.

Bulk storage tanks will not be placed in areas subject to periodic flooding or erosion. Accumulated rainwater may be removed if authorized by the Spill Coordinator under specific situations. Specifically, if visual inspection and pH indicates that no spillage has occurred in the containment structure and if no sheen is present on the accumulated rainwater, the Sapulpa Spill Coordinator may approve the accumulated water to be pumped out and released on surrounding upland areas. If spillage has occurred in the structure, accumulated wastewater will be drawn off and pumped into a storage vessel for proper disposal.

Sapulpa will visually inspect aboveground bulk tanks frequently and whenever the tank is refilled. Drain valves on temporary storage tanks will be locked to prevent accidental or unauthorized discharges from the tank. Sapulpa will correct visible leaks in tanks as soon as possible.

All fuel nozzles will be equipped with functional automatic shut-off valves. Prior to departure of any fuel tank truck, all outlets on the vehicle will be examined by the driver for leakage and tightened, adjusted, or replaced to prevent leaking while in transit.

Routine equipment maintenance of wheel-mounted vehicles such as oil changes will be accomplished indoors, at the maintenance yards or staging areas, to the greatest extent practical. Routine maintenance of track-mounted equipment will be conducted in a manner to gather all oil and other discharges and removed from the municipal site to a suitable recycling or disposal site.

Storage containers will display labels that identify the contents of the container and whether the contents are hazardous. Sapulpa will provide and maintain copies on site of Material Safety Data Sheets (MSDS) for all materials accessible to all contractor personnel including contractors.

Attachment B presents typical vehicle and equipment fuels, lubricants, and hazardous materials stored or used during municipal industrial activity. Sapulpa will provide, maintain, and make available the appropriate MSDS documents for all hazardous or controlled materials utilized in the facility at an on-site location accessible to all Sapulpa and contractor employees.

3.2 Vehicle and Equipment Maintenance

All vehicle and equipment maintenance on the site involving fluid replacement will be conducted indoors or outside the boundary restrictions for wetlands, waterbodies, and water wells. Before lubricants are drained from the equipment, a suitable containment vessel and plastic sheeting will be placed under the equipment to collect any spilled material. The personnel will take necessary precautions to ensure that material that might accumulate on the liner does not spill on the ground surface. Vehicle maintenance wastes, including used oils and other fluids, will be handled and managed by personnel trained in the procedures outlined in this plan. Vehicle maintenance wastes will be stored and disposed of in accordance with applicable environmental regulations.

SECTION 4

Spill Response

In the event of a spill, the release will be contained and cleaned up as soon as possible. The order of priorities after discovering a spill are to protect the safety of personnel and the public, minimize damage to the environment, and control costs associated with cleanup and remediation. The initial response to an emergency will be to protect human health and safety, and then the environment. If a spill is not contained within a dike, an area of isolation will be established around the spill. The size of this area will depend on the size of the spill and the materials involved. The personnel/contractor will take precautions in the area of a spill to eliminate possible sources of ignition.

4.1 Spill Coordinator

Sapulpa will appoint a Spill Coordinator who will be responsible for the reporting of spills, coordinating contractor personnel for spill cleanup, subsequent site investigations, and associated incident reports. In the event of a spill, the Spill Coordinator will be responsible for determining the extent of the isolation area.

4.2 Immediate Response

All spills, regardless of size, must be reported to the Spill Coordinator. The person observing the incident will take the following actions:

- Assess the safety of the situation (including the risk to the surrounding public).
- If safe to do so, make every effort to remove potential ignition sources and stop the source of the spill.
- Promptly notify the Spill Coordinator.
- Report your name, the spill location, and the extent of the incident.

Upon learning of the spill, the Spill Coordinator will implement the following measures:

- For an upland spill, if necessary, berms will be constructed with available equipment to physically contain the spill.
- Sorbent materials will be applied to the spill area. Contaminated soils and vegetation will be excavated and temporarily placed on and covered by plastic sheeting in a containment area a minimum of 100 feet away from any wetland or waterbody, until proper disposal is arranged.
- If a spill is beyond the scope of on-site equipment and personnel, an Emergency Response Contractor will be secured to further contain and clean up the spill.

A potential Emergency Response Contractor is listed below:
Sooner Emergency Service 1-800-722-4901

SECTION 5

Reporting

The Spill Coordinator is responsible for the completion of the Spill Report Form (Attachment C). Completion of this form will assist in the assessment of the spill and provide information necessary for agency notification. The form will be completed and submitted to the Sapulpa representative within 24 hours of the occurrence. The Sapulpa representative will notify the appropriate agencies (see Section 6.0).

SECTION 6

Notifications

In the event of an accidental release of a reportable quantity, Sapulpa or its representative will notify the appropriate federal, state, and local agencies (Section 6.1).

6.1 Local, Federal and State Agencies

FIRE

SAPULPA FIRE DEPARTMENT
800 EAST DEWEY
SAPULPA, OK 74066
918-224-3359

HOSPITAL

ST. JOHN SAPULPA
1004 EAST BRYAN AVE.
SAPULPA, OK 74066
918-224-4280

POISON CONTROL

POISON CONTROL CENTER
1-800-222-1222
405-271-5062

ENVIRONMENTAL PROTECTION AGENCY

REGIONAL EPA / NATIONAL RESPONSE CENTER REGION #6
1-800-887-6063
214-665-2210
1-800-424-8802

HAZARDOUS MATERIALS

SOONER EMERGENCY SERVICES
1-800-722-4901
918-583-2021
918-584-1804

OKLAHOMA DEPARTMENT OF
EMERGENCY MANAGEMENT
ODEM
405-521-2481

POLICE

SAPULPA POLICE
20 NORTH WALNUT STREET
SAPULPA, OK 74066
918-224-3862

EMERGENCY ROOM

ST. JOHN SAPULPA
1004 EAST BRYAN AVE.
SAPULPA, OK 74066
918-224-4280

AMBULANCE

CALL 911

CREEK COUNTY HEALTH DEPARTMENT

1808 S Hickory St
SAPULPA, OK 74066
918-224-5531

OKLAHOMA DEPARTMENT OF
ENVIRONMENTAL QUALITY
ODEQ
1-800-522-0206
405-702-1000

Attachment A

Response Team Contacts

RESPONSE TEAM CONTACTS

NAME: James Vickery

TITLE/POSITION: Sapulpa Fire Marshall

PHONE NUMBER: 918-2245-3396

SPILL COORDINATOR (SC): James Vickery

AUTHORIZED ALTERNATE (Contact only if you are unable to reach the SC): Josh Woods

TITLE/POSITION: Assistant Fire Marshall

PHONE NUMBER:

OTHER REPRESENTATIVES: Brooke Kononchuk

TITLE/POSITION: Environmental Administrator/Consultant

PHONE NUMBER: 918-636-3983

Attachment B

Typical Fuel, Lubricants, and Hazardous Materials

THE FOLLOWING CHEMICALS ARE PRESENT DURING NORMAL INDUSTRIAL ACTIVITIES.

FUELS:

- GASOLINE / DIESEL FUEL

EQUIPMENT FLUIDS:

- MOTOR OIL / HYDRAULIC FLUID / ANTIFREEZE

Attachment C

Spill Report Form

SAPULPA SPILL REPORT FORM

Date/time of spill: _____

Date/time of spill discovery: _____

Name and title of discoverer: _____

Spill Site Description: _____

Material spilled/Estimated volume: _____

Unique qualifier, if relevant, such as manufacturer: _____

Media in which the release exists: (circle: sand, silt, clay, upland, wetland, surface water, other):

Topography and surface conditions of spill site: _____

Proximity to wetlands and surface waters (including ditches): _____

Proximity to private or public water supply wells: _____

Weather conditions at the time of release: _____

Describe the causes and circumstances resulting in the spill: _____

Describe the extent of observed contamination, both horizontal and vertical (i.e., spill-stained
soil in a 5-foot radius to a depth of 1 inch): _____

Describe immediate spill control and/or cleanup methods used and implementation schedule:

Location of any excavated/stockpiled contaminated soil: _____

Describe the extent of spill-related injuries and remaining risk to human health and environment: _____

Name, company, and telephone number of party causing spill (e.g., contractor): _____

Current status of cleanup actions: _____

Name and company for the following:

Contractor Superintendent: _____

Spill Coordinator: _____

Landowner notified (if appropriate): _____

Date: _____

Form completed by: _____

Date: _____

Government agency notified (to be completed by Sapulpa's Representative): _____

Date: _____

Spill coordinator must complete this form for any spill, regardless of size, and submit the form to the Sapulpa representative within 24 hours of the occurrence.



STANDARD OPERATING PROCEDURES FOR DRY WEATHER FIELD SCREENING

CITY OF SAPULPA, OKLAHOMA DEPARTMENT OF PUBLIC WORKS STORMWATER MANAGEMENT

INTRODUCTION The Dry Weather Field Screening procedures have been developed to guide field and management personnel in Dry Weather Field Screening of all City of Sapulpa major storm sewer outfalls in order to locate and eliminate non-storm water discharges, illicit discharges or illegal dumping in Sapulpa's storm sewer system.

"Storm water" is defined as the runoff produced by natural precipitation i.e. rainwater, snowmelt, hail, sleet, ice melt.

"Illicit discharge" is defined by the EPA to be any discharge not composed entirely of storm water except discharges pursuant to a National Pollutant Discharge Elimination System (NPDES) permit. Examples of illicit discharges would include chlorinated swimming pool drainage, process waste water, parking lot and equipment wash down, water from industrial processes such as industrial brine or sewage discharge.

Dry weather field screening procedures will follow federal NPDES regulatory guidelines. The City must screen all outfalls within the municipal separate storm sewer system (MS4) that discharge to the waters of the State every five years (Permit cycle).

Waters of the state are defined by the Oklahoma Water Quality Standards as:

"All Streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulation of water which are contained within, flow through, or border upon this State or any portion thereof, except privately owned reservoirs into a stream system of the State shall be and become waters of the State"

PURPOSE: This document will provide instructions to employees of Stormwater Management Department who are assigned to perform Dry Weather Field Screening.

WORK GROUP: These procedures will be implemented and used by personnel of Stormwater Management Department assigned to perform Dry Weather Field Screening (DWFS). The personnel currently include the Environmental Administrator (EA), Field Personnel (FP), and GIS Database Administrator (GDA).

Part I Dry Weather Field Screening Strategy

Program In order to comply with OPDES Storm Water Discharge permit # OKR040018, the City of Sapulpa must field screen all major storm sewer outfalls, within the City's MS4, within the 5 year life of the Permit. The City, with assistance from Meshek & Associates, identified all major outfalls. Outfall / watershed maps of the city were created. These maps are used when identifying areas of Sapulpa to target for DWFS. Progress is measured by number of outfalls screened on a weekly, monthly, and yearly basis

1. In order to comply with the aforementioned Permit the following schedule must be followed:

<u>Date</u>	<u>Requirement</u>
Permit year 1	Complete DWFS of all major outfalls in a minimum of the area 20% of City. This equals about 40 major outfalls.
Permit year 2	Complete DWFS of minimum 40% (cumulative) of the area of the City.
Permit year 3	Complete DWFS of minimum 60% (cumulative) of the area of the City.
Permit year 4	Complete DWFS of minimum 80% (cumulative) of the area of the City.
Permit year 5	Complete DWFS of 100% (cumulative) of the areas of the City.

In order to meet the above schedule, DWFS must be performed at a rate of approximately 6.6 square miles (4,224 acres) per year.

It is the responsibility of the EA to monitor and insure the DWFS of an annual average of 6.6 square miles per year throughout the reporting period. It is the responsibility of the EA to monitor the progress regarding the completion of aforementioned schedule along with data entry. This progress will be tracked through the completion of the monthly reports as per step 18 of the SOP.

2. DWFS will be initiated in one of the following ways:
 - Follow-up in response to monthly ambient in-stream sampling results which may indicate potential illicit discharges;
 - Follow-up in response to investigation/complaints which may have identified a basin with potential illicit discharges; and
 - Targeted sections or drainage basins within the City's MS₄ using the aforementioned maps to comply with Part I (1).
3. The EA will determine the reason for DWFS as per Part I, (2). Available information will then be obtained from the GIS Database & field atlas, reviewed, and a target area for field screening will be selected. The GDA will supply maps for the targeted outfall/watershed basin to field personnel. The tracking of this area will use the structure ID Label assigned to this basin/outfall by Meshek & Associates.
4. The EA will assign and schedule the FP to conduct DWFS on the watershed basin/outfalls targeted.

Part II: Dry weather Field screening Procedures

Once DWFS has been initiated, the following steps should be followed.

- Step 1. EA & GDA will maintain the files and prepare documents for targeted outfalls by reviewing all available information about area targeted for DWFS.
 - Review past DWFS data of targeted outfall and confer with FP on any issues in question. Prioritize based on information in the SWMP.
 - Begin a new DWFS data set. This includes preparing maps.
 - Maps of targeted outfall can include:
 - City of Sapulpa Storm Sewer atlas;
 - ArcMap GIS Maps; and

- Web viewer maps.

Step 2. The EA will make all necessary documents available to FP to conduct DWFS.

- a) FP & EA will provide GIS DWFS data to GDA to be placed in an ArcMap file system for tracking purposes.
- b) EA reviews the data sets and correlates with targeted area.
- c) EA schedules FP to conduct DWFS on targeted areas.

Step 3. FP reviews all documents provided to insure accurate and timely screening. FP will obtain the necessary equipment to be able to conduct DWFS. The equipment needed at a minimum is as follows:

- Base map ie: ArcMap created map used DWFS;
- City of Sapulpa storm sewer atlas;
- Geo XH Handheld GPS unit;
- Digital camera;
- Map of Sapulpa area with streams and rivers (see atlas);
- Tape measure;
- Clipboard, pen;
- Rubber gloves;
- Sample bottles 4 per site;
- Flashlight;
- Back pack;
- Device for flow velocity measurements
- Safety equipment; (PPE go-bag, Vehicle safety box)
- Stop watch
- pH meter (4,7,10 pH Std. buffers)
- Calibrated Conductivity meter
- Hach Pocket Colorimeter
- Chlorine with AccuVac DPD Total Chlorine vials
- Hach DPD Chlorine Secondary Standards Kit (Check Standards)
- AccuVac SPADNS Fluoride vials
- Fluoride Check Standards (QA/QC officer Northside Lab)
- Chemets detergent kits,
- Chemets ammonia kits
- Aquacheck phosphate test strips
- Aquacheck nitrate/nitrite test strips

Additional equipment may be needed depending upon current conditions which could be assessed in the office or the field. It is the responsibility of the FP to ensure that the equipment is working properly, including adequate battery supply for each instrument. Once completed proceed to “step 4”.

Step 4. DWFS must be performed during dry weather periods. A dry weather period is defined as: “a period when greater than 72 hours has past since greater than 0.10 of an inch of precipitation”.

To obtain rainfall information, FP can access the following website for 48 hour information <http://www.srh.noaa.gov/data/obhistory/KRVS.html> or obtain monthly information at http://www.srh.noaa.gov/tsa/f6/f6.php?siteName=Riverside_Airport_Jenks_Oklahoma&month=April&year=2011. The National Weather Services can also be contacted for this information at (918) 838-7838. This is rainfall information for Jones Jr. Airport, but can be considered representative of the entire City.

FP must determine when the last rain event greater than 0.10” occurred. If it is less than 72 hours, the DWFS must be postponed until less than 0.10” of rainfall has occurred in the target area during the last 72 hours. Proceed to “step 5” to continue DWFS.

Step 5. Proceed to target area and locate major storm sewer outfall identified by EA. Once the targeted outfall is identified begin DWFS procedures. Proceed to “**step 6**”.

Step 6. Begin the GPS data collection utilizing the GeoXH handheld GPS unit and the “GPS Data Collection SOP”. Enter all of the information and perform all required field analysis at the outfall location.

a) System Type- Check appropriate answer.
 Open Channel Outfall (Closed pipe)
 Manhole Other (briefly describe in the space to the right)

b) Time since last rain greater than 0.10”:>72hours and <72 hours – This information can be obtained from the National Weather Service (see step 4). Select appropriate answer. Select either >72 hrs or <72 hrs. If it has been less than 72 hrs, the information cannot be used for DWFS.

c) Reason for Inspection –which means, “What is the reason for personnel to be performing DWFS in this area?” Only acceptable reasons are;

1. Investigation/Complaint – An investigation/complaint has led investigators to believe that an illicit discharge is in a particular drainage basin. DWFS will then be initiated to locate discharges; or
2. Monthly ambient in-stream sampling results (Other) - which may indicate potential illicit discharges entering the watershed;
3. DWFS Targeted Section of MS₄ - A section of the City’s MS₄ is targeted for field screening. This situation usually occurs when the above 2 situations are not warranted.

d) Date- Enter date in Day-Month-Year format.

e) Time- Enter time in 24 hour, or Military format.

f) Hazardous Location – FP should access whether the site is easily accessed or if special precautions must be taken in order to access the outfall. If yes, specify what measure must be taken in comment section.

g) Basin- Enter the Basin Number in which the outfall/structure is located. This information can be found on the Sapulpa Storm Sewer Atlas.

h) Sewer Atlas Page- Enter the page number of the Sapulpa Storm Sewer Atlas in which the structure/outfall is located.

i) Location – Address or general location of outfall in which DWFS is being performed.

j) Zoning Uses – What is the primary land use of the outfalls drainage basin? Check appropriate answer. If you have a question about land use, see the EA.

k) Width Diameter- Enter the width/diameter of the structure/outfall.

l) Flow Observed- Select for the appropriate presence or absence of flow.
 No flow/Ponded Water Flow
 Evidence of Past Discharge Flow from Obvious Source

m) Width of Water Surface- Enter

n) Name-

o) Depth of Water-

p) Flow Velocity-

q) Flow Rate-

r) Odor-Select the most appropriate description of odor detected at the location.

<u>None</u>	<u>Musty</u>
<u>Sewage</u>	<u>Rotten Eggs</u>
<u>Sour Milk</u>	<u>Other</u> (briefly describe)

s) Color- Select the most appropriate color description.

<u>Clear</u>	<u>Red</u>
<u>Yellow</u>	<u>Green</u>
<u>Grey</u>	<u>Other</u> (briefly describe)

t) Clarity- Select the most appropriate clarity description.

<u>Clear</u>	<u>Cloudy</u>
<u>Opaque</u>	<u>Suspended Solids</u>
<u>Other</u> (briefly describe)	

u) Floatables- Are there any floatables present? Select the best fit choice.

<u>None</u>	<u>Oily Sheen</u>
<u>Garbage/Sewage</u>	<u>Other</u> (briefly describe)

v) Deposits/Stains- Does there appear to be any deposit? Select the most appropriate choice.

<u>None</u>	<u>Sediments</u>
<u>Oily</u>	<u>Other</u> (briefly describe)

w) Vegetation- Select an appropriate choice to describe any vegetation.

<u>Normal</u>	<u>None</u>
<u>Excessive Growth</u>	<u>Inhibited Growth</u>
<u>Other</u> (briefly describe)	

x) Structural Condition- Select the most appropriate description of the structure.

<u>Normal</u>	<u>Cracks</u>
<u>Corrosion</u>	<u>Other</u> (briefly describe)

y) Biological Condition- Biological description of outfall. For example: mosquito larvae, bacteria, or algae present. Check the choice that is the most appropriate.

z) Wind Speed-

aa) Water Temperature- Enter the measured temperature from 0 to 100 in Celsius.

bb) pH Value- Enter pH value from 2.000 to 10.000.

cc) Ammonia- Enter value from 0.000 to 20.000 ppm.

dd) Chlorine- Enter value from 0.000 to 10.000 ppm.

ee) Hardness- Enter value from 0.000 to 500.000. (Measured in grains per gallon)

ff) Conductivity- Enter value from 0.000 to 1,000.000.

gg) Detergent- Enter value from 0.000 to 1,000.000 ppm.

hh) Copper- Enter value from 0.000 to 1,000.000 ppm.

1. Structure ID# - The structure number of the outfall when specifically identified by Meshek & Associates on the atlas page.

When these sections are complete, Proceed to “**step 7**”

Step 7. Is flow present at the outfall? If no, then obtain a photo of the outfall and upload the picture file to the data point. Once this is complete, proceed to “**step 13**”. If flow is present proceed to “**step 8**”.

Step 8. Calculate the flow and enter into the DWFS **GIS Data Dictionary**.

Channel Width or Pipe Diameter – self-explanatory.

The following must also be performed:

- Measure the width in feet of the water surface using a tape measure;
- Measure the depth in feet of the water using a tape measure or yard stick; and
- Approximate flow velocity in feet per second by the method detailed below;

Determine the velocity using the following method.

The stake-to-stake test uses two stakes, which are placed 20 feet apart along the bank of large flows. A floating object tossed into the water upstream of the stake. When the float reaches the first stake, the stop watch is started. When the float reaches the second stake, the stopwatch is stopped at that point. This will indicate velocity in 20 ft/# seconds. For example: if 5 seconds were recorded for the float to travel from stake to stake, the velocity would be 20 ft./5 seconds, or 4 feet/second.

The float used in the stake-to-stake method should be placed in the center of the surface of the flow being measured. Results of the velocity test and the method used should be recorded on a data sheet for calculation of the flow rate.

The flow rate can now be calculated by using this formula:

Flow rate (CFS) = width(ft) x depth(ft) x flow velocity(ft/sec)

Once this is completed, proceed to “**step 9**”.

Step 9. Obtain a photo of the outfall using the Nikon Coolpix S7c camera. Be sure to upload the photo to the data collection dictionary by pressing the button labeled “...”. Proceed to “**step 10**”.

Step 10. Visually inspect the flow at the outfall for the following parameters:

- Odor
- Color
- Clarity
- Floatable
- Deposits/Stains
- Vegetation
- Structural Condition
- Biological Condition

Complete the “Visual Observation” section of the DWFS **“Field Data Sheet”**.

Proceed to “**step 11**”.

Step 11. Complete “Field Analysis” section of DWFS **“Field Data Sheet”**. This can be accomplished through the use of the DWFS equipment either in the field or in the laboratory at 4818 South Elwood Avenue. Follow the analytical SOP to approximate concentration of:

Test Procedures
(Derived from Chemical Methods)

POLLUTANTS	METHODS	TEST KIT USED
Ammonia	EPA350.2	Chemets (R-1501)
Chlorine, Residual (T)	Std. Methods 4500 Cl/G	Hach AccuVacs (DPD Total Chlorine Reagent Cat. 25030-25)
Conductivity	Std. Methods 2510B	
Detergents	Std. Methods 5540C	Chemets (R-9400)
pH	Std. Methods 4500 H+/B	pH Buffer Solution Fisher 4.00 Red Cat. SB101-4 7.00 Yellow Cat. SB107-4 10.00 Blue Cat. SB115-4
Temperature (water)	EPA 170.1	-

At this time, if the possible presence of sewage is observed, a fecal coliform sample must be obtained and turned in to the Quality Assurance Laboratory at the Drinking Water Plant with in 6 hours of sample collection. If it is determined that additional laboratory samples are required, collect them at this time. All samples must be obtained using appropriate sample collection, preservation and transport techniques found in “NPDES Storm water Sampling Guidance Document”, (EPA 833-P-92-001 July, 1992). When this step is completed, proceed to “**step 12**”.

Step 12. If results of pollutant testing are below the action levels listed below, then the flow should be considered natural occurring and no additional follow-up is required. Proceed to “**step 14**”.

Pollutant	Action Level Concentration
Ammonia	1.0 mg/l
Chlorine	0.1 mg/l ^a
Detergent	0.25 mg/l
Oil and Grease	any visible sheen on the water surface ^{a (page 15)}
pH	<6.5 or > 9.0 std. Units ^a

^a Oklahoma Water Quality Standards (chap. 45)

All other levels were derived randomly as a result of detection limits for the field test equipment used.

If results of pollutant testing are above the action levels then the flow should be considered impacted by a pollutant source upstream and DWFS Flow Follow-up procedures should be initiated. Contact the Environmental Administrator for determining whether to start Dry Weather Flow Follow-up at that time.

Step 13. During this step any additional data or comments must be placed in the “Comment Section” of the DWFS **“GIS Data Dictionary”**. This includes damage to the outfall structure. Proceed to “**step 14**”.

Step 14. DWFS of this outfall is completed. If time permits, proceed to next targeted outfall and repeat DWFS procedures. This requires the return to “**step 5**”. If time does not permit continued field screening proceed to “**step 15**” and return to the office.

Step 15. FP must conduct a thorough review of all DWFS “**Field Data Dictionary**” in order to insure the completeness of each. Any sheets not complete must be addressed immediately and completed as soon as time allows. Once review is completed proceed to “**step 16**”.

Step 16. FP must submit the completed DWFS “**GIS Data Dictionary**” to the GDA for review. Any incomplete data identified must be completed before continuing. Proceed to “**step 17**”.

Step 17. The GDA submits completed shape files to EA for final review and inclusion to the GIS database and completes a monthly report of outfall/watersheds screened the previous month. Proceed to “**step 18**”.

Step 18. The appropriate database will be identified by the Quadrant in which the targeted outfall is located, the reporting year followed by identified. Because many illicit discharges are transient, follow-up protocols need to commence as soon as practically possible.

Once a dry weather flow is located, FP will notify the EA to confirm follow-up strategy. This notification will include the completed DWFS GIS Data Dictionary along with any other information and photos of the major outfall in which flow has been located. Once this occurs the following steps will be taken to determine if pollutants are present and locate the “DWFS”. For example “NE 01-02 DWFS” If dry weather flow exists then dry weather flow follow-up for this outfall/watershed, will be scheduled by the EA. Proceed to “**step 19**”.

Step 19. The EA must closely track the progress of the DWFS to insure completion of the schedule specified in Part I(1).The EA must also complete a report summarizing the field screening activities annually that coincides with the completion of the annual report. The a copy of the annual report must be filed in the DWFS file.

POINTS OF INTEREST

- ❖ If at any time, personnel have any questions regarding any steps or procedures, contact an Environmental Administrator in Stormwater Management.



Standard Operating Procedure for GPS Data Collection

1. Turn power on by pressing green power button.
2. Assure wireless connection is working by pressing "START" (located at the top left), press "SETTINGS" (at bottom of list), press "CONNECTIONS" tab at the bottom of screen, then press "TRIMPIX". Press "STOP", and then press "START".
3. Press the "X" at the top right corner twice to close the windows and return to the main screen.
 - You should now be able to see under "DATE/TIME".
"WiFi: Geo48xxxxxx"
4. Turn on power to Nikon Coolpix S7C.
5. Make sure mode is set to wireless. Under "Select SSID", press round "OK" button on "Geo48xxxxxx".
6. Scroll down to "SHOOT AND TRANSFER", then press "OK".
7. Press "GPS" at lower right screen of handheld GPS unit to open TeraSync Software.
8. In the top left corner, click the "I STATUS" box and then select "DATA".
9. Change the file name to the current date in "FORMAT".
 - Example: 090110 (month, date, year)
 - Leave file type as Rover
 - Leave location as default
10. Scroll down to make sure Dictionary Name is "MANHOLES" if collecting manholes, inlets, outfalls, or culverts.
11. Press "CREATE" box in upper right corner.
12. Set the handheld unit on the ground over or next to the feature to be surveyed.
15. Make sure the unit has locked 4 satellites by listening for a beeping sound.
16. Measure to the bottom of the pipe, manhole, etc. and convert to feet (12 inches total).

17. Leaving the unit on the ground, select the “MANHOLE” feature and press the “CREATE” box at the upper right of the screen. When prompted, leave at 0 and press “ENTER”.

18. In the upper right corner, next to the red target symbol, the number should be counting up. Leave the unit on the ground for at least 60 seconds (until target counts to 60).

19. Press “PAUSE” in upper right screen. Now you can pick up or move unit.

20. When you get to the “PHOTO” section, snap a picture with the Nikon Coolpix S7C and it will transfer on its own.

21. Press the “...” button and select your picture.

22. Measure to bottom of own stream pipe.

23. Finish filling out all relevant fields, then press “OK” in the top center of screen. This will take you back to the feature “Name Screen”.

24. Select “MANHOLE” and press “CREATE” to collect another stormwater structure.

25. When finished, press “CLOSE” then press the “X” at the top right. Press “YES” to exit TeraSync.

When prompted to confirm antenna height leave at 0 and press “OK”



SAPULPA STORMWATER MANAGEMENT PROGRAM FIELD TESTKIT SOP

Detergent Test Procedure 0-3ppm

1. Rinse the reaction tube with sample, and then fill it to the 5 mL mark with the sample.
2. While holding the double-tipped ampoule in a vertical position, snap the upper tip using the tip breaking tool.
3. Invert the ampoule and position the open end over the reaction tube. Snap the upper tip and allow the contents to drain into the reaction tube.
4. Cap the reaction tube and shake it vigorously for 30 seconds. Allow the tube to stand undisturbed for approximately **1 minute**.
5. Make sure that the flexible tubing is firmly attached to the ampoule tip.
6. Insert the assembly (tubing first) into the reaction tube making sure that the end of the flexible tubing is at the bottom of the tube. Break the tip of the ampoule by gently pressing it against the side of the reaction tube. The ampoule should draw in fluid only from the organic phase.
7. When filling is complete, remove the assembly from the reaction tube.
8. Remove the flexible tubing from the ampoule and wipe all liquid from the exterior of the ampoule. Place an ampoule cap firmly onto the tip of the ampoule. Invert the ampoule several times, allowing the bubble to travel from end to end each time.
9. Place the ampoule flat end downward into the center tube of the comparator. Direct the top of the comparator up toward a source of bright light while viewing from the bottom. Rotate the comparator until the color standard below the ampoule shows the closest match. If the color of the ampoule is between two color standards, a concentration estimate can be made.

Ammonia Test Procedure 0-1 & 1-10 ppm

1. Fill the sample cup to the 25 mL mark with the sample to be tested.
2. Add 2 drops of A-1500 Stabilizer Solution. Stir briefly with the tip of the ampoule to mix the contents of the sample cup.
3. Place the ampoule in the sample cup. Snap the tip by pressing the ampoule against the side of the cup. The ampoule will fill, leaving a small bubble to facilitate mixing.
4. Mix the contents of the ampoule by inverting it several times, allowing the bubble to travel from end to end each time. Wipe all liquid from the exterior of the ampoule. Wait **1 minute** for color development.
5. Use the appropriate comparator to determine the level of ammonia-nitrogen in the sample. If the color of the ampoule is between two color standards, a concentration estimate can be made.
 - a. Place the ampoule flat end downward into the center tube of the low range comparator. Direct the top of the comparator up toward a source of bright light while viewing from the bottom. Rotate the comparator until the color standard below the ampoule show the closest match.
 - b. Hold the high range comparator in a nearly horizontal position while standing directly beneath a bright source of light. Place the ampoule between the color standards moving it from left to right along the compactor until the best color match is found.

Phenol Test Procedure 0-1 & 0-12 ppm

1. Fill the sample cup to the 25 mL mark with the sample to be tested.
2. Dissolve the crystals on the tip of the ampoule in the sample by stirring the sample briefly with the ampoule tip.
3. Place the ampoule in the sample cup. Snap the tip by pressing the ampoule against the side of the cup. The ampoule will fill, leaving a small bubble to facilitate mixing.
4. Mix the contents of the ampoule by inverting it several times, allowing the bubble to travel from end to end. Dry the ampoule and wait **1 minute** for color development.

Note: After the 1 minute color development, the color in the reacted ampoule may be more orange than the color standards. If this is the case, it is appropriate to wait up to an additional 5 minutes for an improved color match.

5. Use the appropriate comparator to determine the level of phenol in the sample. If the color of the sample is between two color standards, a concentration estimate can be made.
 - a. **Low Range Comparator:** Place the ampoule flat end downward into the center tube of the comparator. Direct the top of the comparator up toward a source of light while viewing from the bottom. Rotate the comparator until the color standard below the ampoule shows the closest match.
 - b. **High Range Comparator:** Hold the comparator in a nearly horizontal position while standing directly beneath a source of light. Place the ampoule between the color standards moving it from left to right along the comparator until the best color match is found.

Copper Test Procedure 0-1 & 1-10 ppm

1. Fill the sample cup to the 25 mL mark with the sample to be tested.
2. Place the ampoule in the sample cup. Snap the tip by pressing the ampoule against the side of the cup. The ampoule will fill, leaving a small bubble to facilitate mixing.
3. Mix the contents of the ampoule by inverting it several times, allowing the bubble to travel from end to end each time. Wipe all liquid from the exterior of the ampoule. Wait **2 minutes** for color development.
4. Use the appropriate comparator to determine the level of copper in the sample. If the color of the sample is between two color standards, a concentration estimate can be made.
 - a. Place the ampoule flat end downward into the center tube of the comparator. Direct the top of the comparator up toward a source of light while viewing from the bottom. Rotate the comparator until the color standard below the ampoule shows the closest match.
 - b. Hold the high range comparator in a nearly horizontal position while standing directly beneath a source of light. Place the ampoule between the color standards moving it from left to right along the comparator until the best color match is found.

Oxygen Test Procedure 1-12 ppm

1. Fill the sample cup to the 25 mL mark with the sample to be tested.
2. Place the ampoule in the sample cup. Snap the tip by pressing the ampoule against the side of the cup. The ampoule will fill, leaving a small bubble to facilitate mixing.
3. Mix the contents of the ampoule by inverting it several times, allowing the bubble to travel from end to end. Dry the ampoule and wait **2 minutes** for color development.
4. Hold the comparator in a nearly horizontal position while standing directly beneath a source of light. Place the ampoule between the color standards moving it from left to right along the comparator until the best color match is found. If the color of the ampoule is between two color standards a concentration estimate can be made.

Chloride Test Procedure 2-20 ppm

1. Fill the sample cup to the 15 mL mark with the sample to be tested.
2. Add 6 drops of A-2003 Normalizer Solution to the same to the sample. Stir briefly. Then add 1 drop of A-2005 Acidifier Solution. Stir again.
3. **Wait 2 minutes.**
4. Gently snap the tip of the ampoule at the black snap ring.

Note: When the tip is snapped, the flexible tubing will remain in place on the tapered neck of the ampoule.

5. Lift the control bar and insert the Titret assembly into the Titrettor.

Note: The rigid sample pipe will extend approximately 1.5 inches beyond the body of the Titrettor.

6. Hold the Tritrettor with the sample pipe in the sample. Press the control bar firmly, but briefly, to pull in a small amount of sample. The contents will turn a **PURPLE** color.

Note: NEVER press the control bar unless the sample pipe is in the sample.

7. With the sample pipe in the sample, press the control bar again briefly to allow another small amount of the sample to be drawn into the ampoule.

8. After each addition, rock the entire assembly to mix the contents of the ampoule. Watch for a color change from **PURPLE** to **PALE YELLOW with a purple tinge**.

9. Repeat steps 7 and 8 until a permanent color change occurs.

10. When the color of the liquid in the ampoule changes to **PALE YELLOW**, remove the ampoule from the Titrettor. Hold the ampoule in a vertical position and read the scale opposite the liquid level.

Nitrate/Nitrite Test Procedure

1. Dip test strip in water sample for **1 second** (or pass under gentle water stream) and remove. Do not shake excess water from the test strip.
2. Hold the strip level, with pad side up, for **30 seconds**. Compare the NITRITE test pad to the color chart.
3. At **60 seconds**, compare the NITRATE test pad to the color chart. Estimate results if the color on the test pad falls between two color standards.

pH Test Procedure

1. Dip a test strip into water sample and remove immediately.
2. Hold the strip level for **15 seconds**. Do not shake excess water from the test strip.
3. Compare the pH test pad to the pH color chart. Estimate results if the color on the test pad falls between two color standards.

Phosphate Test Procedure

1. Dip test strip in water sample for **5 seconds** and remove. Do not shake excess water from the test strip.
2. Hold the strip level, with pad side up, for **45 seconds**. Do not shake excess water from the test strip.
3. Compare the PHOSPHATE test pad to the color chart. Estimate results if the color on the test pad falls between two color standards.

5-in-1 Water Quality Test Strip Procedure

Includes: Total Chlorine, Free Chlorine, Total Hardness, Total Alkalinity, and pH

1. Dip entire test strip into water sample for **1 second** (or pass under water stream), remove. Do not shake excess water from the test strips. Hold the test strip level for **30 seconds**.
2. Compare **TOTAL HARDNESS < TOTAL ALKALINITY**, and pH pads to color chart.
3. Dip test strip into water again and move it back and forth for **30 seconds** (or hold two chlorine pads under water stream for **10 seconds**).
4. Compare **CHLORINE** pads to color chart.

CITY OF SAPULPA, OK

Predevelopment Checklist

Project Name: _____

Project Location: _____

Owner/Developer Name: _____

Contact Number: _____

The following checklist was created to assist Architects, Engineers, project managers and City Staff to ensure that all appropriate information is provided as a part of the Predevelopment and Plans Review processes for all New Commercial Construction (subdivisions, multi-family residential, commercial, or industrial land uses). The list was developed from common development situations and should only be followed as a guideline. In no way does this checklist represent every possible situation or requirement. If additional requirements apply to a particular situation, staff will advise the applicant.

Staff Reviewer: _____ Date: _____

- Strike through any applications or documents not necessary for this project
- Indicate any application or other documents that were provided during review

Permits and Prior Authorizations:

Floodplain Development Permit - if required, shall include BFE Certificates for Pre and Post Construction

Earth Change and Sediment & Erosion Control Permit

For construction sites less than one (1) acre:

- A completed sediment and erosion control permit application, erosion control plan and certification signature must be submitted for review and approval.
- All sediment and erosion control measures must be in place prior to commencement of ground break activities.

For sites one (1) acre or larger, the following must be submitted with the Earth Change and Sediment & Erosion Control Application:

- Oklahoma Department of Environmental Quality (ODEQ) General Permit OKR10 Notice of Intent (NOI) must be completed (in accordance with OKR10 part 2) and submitted to ODEQ for authorization.
- A copy of the signed NOI shall be attached to the sediment and erosion control permit application.
- Stormwater Pollution Prevention Plan (SWP3) must be developed in accordance with the General Permit OKR10 Part 4. A copy of the SWP3 shall be submitted to the City of Sapulpa.
- Receipt of an Authorization to Discharge is required by ODEQ prior to commencement of ground breaking activities. A copy of the Authorization to Discharge shall be submitted to the City of Sapulpa upon receipt.
- All sediment and erosion control measures must be in place prior to commencement of ground break activities.

ODOT Permit Application – required when site connects to a State highway

Right-of-Way Permit

Sign Permit Application – must obtain permit prior to sign placement

Certificate of Occupancy – must be obtained prior to occupancy

Technical Advisory Committee (TAC) Meeting

Digital site plan - 11" x 17" – (see Site Plan Criteria)

Staff will call to schedule TAC meeting

Bring five (5) 11" x 17" hard copies of the drawings to the TAC meeting

Necessity of additional TAC meeting(s) determined during meeting

Building Permit and Accompanying Data

Building Permit Application – completed and signed – application submitted with Construction Documents

Construction Documents

Two (2) complete sets and two (2) digital copies - signed and sealed by Design Professional**
(If applicable, J.C. Carroll will indicate his submittal requirements upon contact.)

Civil Engineering Plans and Hydrology & Hydraulic Engineering Plans*

Two (2) complete sets and two (2) digital copies - signed and sealed by Design Professional**

*Per Sapulpa City Ordinance #2697 -- Engineering Review Fees (Hydraulic & Hydrologic and Civil) are non-refundable and due and payable upon submittal of plans. Plans will not be submitted to reviewing engineer until all fees have been paid. Applicant is responsible and shall pay all costs for engineering review services incurred by City in excess of \$1,000. Such excess costs shall be billed by City and shall be paid by Applicant within thirty (30) days of invoice. Failure to pay shall result in revocation of building permit, issuance of stop work order and shall constitute a separate violation punishable by Section 1-108 of the Sapulpa City Code.

Survey - stamped and signed by Licensed Surveyor

**All plans are prepared by a design professional that is a licensed architect or professional engineer legally registered under the laws of this state regulating the practice of architecture or engineering. He or she shall affix his or her official seal to said drawings, specifications, and accompanying data. All amendments to the permit applications and related construction documents, any inspection reports, and the certification upon completion of the work must be signed and sealed as well.

Criteria and Requirements for Plans, Drawings, and Studies

Site Plan Criteria

Hydrology & Hydraulic Study Requirements

Construction Documents Criteria

Fire Marshal Requirements

Landscaping Requirements

Corridor Design Criteria – required on designated roadways within city limits

ADA Sidewalk Guidelines

Engineering Design Criteria – hard copy or digital – email _____

Possible Approvals

Approval of Corridor Design Criteria Proposal

Approval for any Land Use applications (rezoning, lot split, special exception, variance)

Approval from the Historic Preservation Committee

Additional Planning Information, as applicable

Certificate of Zoning Compliance

Adjacent Property Agreements and Easements

Master Property Development Plan

Project Description Narrative - if applicable, include previous phases' narratives

Additional Information for Commercial Construction

Staff Contact Information

JC Carroll Consulting Price List

City of Sapulpa, OK Fees and Inspections Pricing

Current Code Editions – IBC 2015; IFC 2009; NEC 2015

Additional Information or Notes

Please contact the Urban Development Department with questions about the checklist or the plans review process. 918-248-5917

Typical sequence of events to obtain a commercial building permit

- Predevelopment meeting
- Technical Advisory Committee (TAC) meeting(s)
- Earth Change/Sediment & Erosion Control Application submitted (ODEQ NOI, if applicable)
 - Review and approval
- Earth Change/Sediment & Erosion Control Permit issued
- Civil Engineering Plans submitted (\$500 check with submittal)
 - Review and revisions as needed
- Hydrology & Hydraulic Engineering Plans submitted (\$500 check with submittal)
 - Review and revisions as needed
- Building Permit Application and Construction Documents submitted
 - Copies of Construction Documents to JC Carroll, if applicable
 - Review and revisions as needed
- Building permit is issued following final approvals on all construction and engineering plans (H&H plans, civil plans, and construction documents)

CITY OF SAPULPA, OK

Site Plan Criteria

Please Note: The following requirements are the minimum necessary for a Technical Advisory Committee (TAC) meeting

- Proposed site plan
- Existing site plan, if applicable
- Scale 1" = 20' or 1/16" = 1'
- Legal Description
- Lot Orientation
- Property Lines and Dimensions
- Benchmarks
- Existing utilities
- Existing ROW
- Existing setback lines
- Existing Easements
- Existing contours
- Existing spot elevations
- Proposed Utilities
- Proposed contours
- Proposed spot elevations to define clearly finished grades on parking lots, sidewalks, etc
- Location and size of water meter and sanitary sewer service connection
- Dimensions to define clearly the “pedestrian traveled way,” think ADA
- Location and elevation of floodplain
- Additional notes that describe intent of proposed actions

Additional information needed for site development plans that may not be included on the site plan but on other sheets in the construction drawing set.

- Cover sheet with General Information about the project and an Overall Location Map
- Temporary and Permanent Erosion Control Measures
- Stormwater Pollution Prevention Plan
- Summary of Hydrologic and Hydraulic Design Calculations
- Location of Fire Protection Facilities to be installed
- Demolition Plan
- Paving/Grading Plan
- Landscaping Plan
- Details and Typical Sections
- Plan & Profile Sheets for Water/Sewer/Storm
- Geometric Layout of Facilities

- Summary of Parking, Impervious area, etc
- Anticipated Demand for Water and Loading for Sewer

Please Note: All site plans must be signed and sealed by a Design Professional – Licensed Architect or Professional Engineer

Property Lines: Show and label all property lines with dimensions.

Setback Lines: Show and label all required and proposed setback lines.

Easements: Show and label all existing and proposed easements, including the type of easement.

Street/Right of Way: Show and label all existing and proposed streets, sidewalk, curb cuts, sidewalk under drains, driveways, curb to property line distances, and identify separate permits for all work proposed in the right of way.

Parking Spaces: Provide fully dimensioned details of accessible parking spaces, ramps, curb ramps, sidewalks, and signage. Indicate ADA Parking and Signage. Include Parking Computations

Loading/Unloading Areas: Indicate location and size

Traffic Circulation Pattern: Show pedestrians and vehicle traffic patterns

Off-Street Parking: Show all “off-street” parking spaces that are not within a structure. Identify any disabled parking spaces, and provide parking calculations.

Elevation Labels: Drawings must be separate and labeled North Elevation, South Elevation, East Elevation, and West Elevation. All elevation plans must be accurately scaled and fully dimensioned.

Grades: Clearly show and label existing and proposed grades.

Floor Elevations: Indicate all finished floor elevations.

Building Height: Indicate building heights

Contours: Provide contour intervals at two feet (this may vary depending on the steepness of the grade and the scale of the drawing). Five and ten foot contour intervals may be acceptable provided spot elevations are called out as necessary for the analyst to properly understand the character of the site. Show contours off-site within 50 feet of the property line.

Drainage: Show existing and proposed drainage patterns. Show roof drains and surface area drains

Erosion Control Plan: Show location of all construction BMP's. Reference SWPPP

Structures and Hardscape: Show location and dimensions of all existing and proposed buildings and structures, including accessory structures such as fences, walls, trash enclosures, patio covers. Hardscape (pavement) shall be delineated and identified by a symbol/pattern. Show and label the dimensions between structures and to property lines.

Impervious Surface: Show all buildings, structures, and edges of all pavement and other impervious surfaces. Include Coverage Computations

Buildings/Structures: Show location and dimensions of all existing (to remain) and proposed buildings and structures (e.g., fences, retaining walls, trash enclosures, patio covers, and trellises), use of all existing (to remain) and proposed structures, including number of stories.

Fire Separation Distances: Show the fire separation distance between adjoining buildings or structures and the distance from property lines to all buildings or structures

Utilities: Show all existing and proposed utilities on the property and adjacent right of way, including hydrants, vault, trans-formers, poles, water meters, water and sewer lines etc. Also, include size and type of existing and proposed utility.

Outdoor Storage Areas: Show location, size, boundary, intended use, and method of screening

Refuse & Recycling Areas: Show and label the location and location, including dimensions of existing and proposed refuse and recycling materials storage areas including screening method

Projections: Show all architectural projects such as stairs, balconies, eave overhangs etc.

Conditional - Plumbing Site Plan: For new buildings, include the size and layout of the building sewer, point of connection to the public sewer, and clean outs.

Lighting Plan: Where project proposes outdoor lighting (parking lots, sports fields, security, etc.), a photometric drawing should be provided that clearly demonstrates that the project site lighting does not fall on surrounding properties or create glare hazards within the public rights-of-way

Landscape Site Plan: Indicate planting areas on site plans, demonstrating compliance with landscape regulations. Include the method of maintaining landscaping (water source); Location, size, and type of trees and shrubbery; Buffer strips – width, height, location, and material, and Landscaping Computations

Entrances: Show that all entrances and all ground level exits comply with disabled accessibility requirements.

Business signs: Show location and size of all ground & wall proposed signs – include Signage Computations

Floor Plan: Provide a floor plan of all floors; indicate use of all rooms (existing and proposed); show all balconies.

Dimensions: Show dimensions on floor plans.

Floor Levels: Indicate all floor levels (i.e. ground floor, second, third, etc.)

Architectural Details: Show and label exterior architectural details and location of all windows, doors, balconies, and other architectural features

Label Buildings: If more than one building is located on the project site, clearly label each building elevation to distinguish one from the other.

Roof Plan: Required for all new construction or any modification to the existing roof will require a roof plan. Show the following information for roof plans

Spot Elevations: Show and label spot elevations for all roof peaks, ridges, low points

Roof Detail: Show all hips, valleys, and ridges, drains and overflow drains.

Material: Show roofing material with complete specifications

Screening Elements: Indicate any mechanical equipment and details of any architectural screening element.

Roof Vents/Skylights: Show location and type of all roof vents and skylights if applicable

Smoke & Heat Vents: Show location of smoke and heat vents for high pile stock storage when applicable

Conditional - Environmentally Sensitive Lands: Show, whenever applicable, the boundary lines of environmentally sensitive lands, such as steep hillsides, sensitive biological resources, 100-year flood plains, and setbacks from these boundaries

Best Management Practices (BMP) Plan: Show all post construction BMP'S and Low Impact Development (LID) design feature. Label as BMP Sheet.

Sediment and Erosion Control Submittal Checklist

Construction Sites with Less Than One Acre of Disturbed Area

Required for Approval

- Has the Sediment and Erosion Control Permit Application been filled out and is it complete?
- Have the Project Narrative and Surrounding Watercourse sections been completed?
- Is the Vicinity Map or Erosion Control Plan attached and does it show erosion control placement?
- Has the Certification Statement been signed and dated?

Construction Sites with One Acre or Greater of Disturbed Area

- Has the Sediment and Erosion Control Permit Application been filled out and is it complete?
- Have the Project Narrative and Surrounding Watercourse sections been completed?
- Is the Vicinity Map or Erosion Control Plan attached and does it show erosion control placement?
- Has the Sediment and Erosion Control Permit Application Certification Statement been signed and dated?
- Is the ODEQ General Permit OKR10 Notice of Intent (NOI) attached?
- Is the Stormwater Pollution Prevention Plan (SWP3) attached?
- Is the ODEQ Authorization to Discharge attached?

Sediment & Erosion Control/ Earth Change Permit Checklist

<u>Activities Requiring Sediment & Erosion Control Permit</u>	<u>Check all that apply</u>
New Housing Development	<input type="checkbox"/> Requires Permit
In-Fill House Development	<input type="checkbox"/> Requires Permit
New Commercial Development	<input type="checkbox"/> Requires Permit
Street/Driveway Development	<input type="checkbox"/> May require permit
Multiple/City Wide Utility Installation	<input type="checkbox"/> May require permit
Grading	<input type="checkbox"/> Requires Permit
Berming	<input type="checkbox"/> Requires Permit
Excavating	<input type="checkbox"/> May require permit
Clearing	<input type="checkbox"/> May require permit
Detention/Retention Installation	<input type="checkbox"/> Requires Permit
Installation of Retaining Walls	<input type="checkbox"/> Requires Permit
<u>Activities Requiring Earth Change Permit</u>	
Is the activity to be performed in the floodplain?	<input type="checkbox"/> Requires Permit
Does the tract contain a natural or manmade watercourse?	<input type="checkbox"/> See the next Question
Does the watercourse have a drainage area of over 40 acres?	<input type="checkbox"/> Requires Permit
Excavation (12 inches of cut or fill at any one point)	<input type="checkbox"/> Requires Permit
Filling (12 inches of cut or fill at any one point)	<input type="checkbox"/> Requires Permit
Grading (12 inches of cut or fill at any one point)	<input type="checkbox"/> Requires Permit
Regrading (12 inches of cut or fill at any one point)	<input type="checkbox"/> Requires Permit
Berming	<input type="checkbox"/> Requires Permit
Paving	<input type="checkbox"/> Requires Permit
Diking	<input type="checkbox"/> Requires Permit
Clearing or Grubbing within Floodplain	<input type="checkbox"/> Requires Permit
Detention/Retention Installation	<input type="checkbox"/> Requires Permit
Installation of Retaining Walls	<input type="checkbox"/> Requires Permit

APPENDIX G: SAPULPA OKR04 STORMWATER MANAGEMENT PROGRAM SOPS & GUIDELINES
