

City of Moore

Stormwater Management Program



Small Municipal Separate Storm Sewer System (MS4) ODEQ General Permit OKR04

City of Moore
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January 2016



SIGNATURES OF RESPONSIBLE OFFICIALS

City of Moore, Oklahoma

The statements made in this Storm Water Management Program document, and the programs described herein, are hereby declared to be accurate and fulfill the intent of the City of Moore **to comply with the requirements of the State of Oklahoma's Phase II Small Municipal Separate Storm Sewer System Discharges Within the State of Oklahoma Storm Water General Permit No. OKR04** for municipalities.

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 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.

Mayor Date

City Manager Date

Public Works Director Date

Community Development Director Date

ATTEST:

City Clerk Date



City of Moore
Small Municipal Separate Storm Sewer System
Stormwater Management Program

Table of Contents

Definitionsvi
Acronymsix
Introduction1
Purpose of the SWMP2
1.0 MCM 1 - Public Education and Outreach Program3
1.1 Permit Requirements3
1.2 MCM 1 Program Implementation and Objectives3
1.2.1 Target Audience4
1.2.2 Target Pollutant Sources4
1.2.3 Outreach Strategy5
1.3 MCM 1: Public Education and Outreach Program BMP6
1.3.1 Brochures6
1.3.2 Water Bill Inserts7
1.3.3 City Stormwater Webpage7
1.3.4 School Programs8
1.3.5 Phase II Program Meeting9
1.3.6 Recycling/Pollutant Collection10
1.3.7 Household Hazardous Waste Collection11
1.3.8 Storm Drain Markers19
2.0 MCM 2 – Public Participation and Involvement13
2.1 Permit Requirements13
2.2 MCM 2 Program Implementation and Objectives13
2.2.1 Public Involvement in Program Development14
2.2.2 Public Involvement in Program Implementation14
2.2.3 Target Audience14
2.2.4 Public Involvement Activities15
2.2.5 Management Responsibility15
2.2.6 Evaluating Program Effectiveness15
2.3 MCM2: Public Participation and Involvement Program BMP16
2.3.1 Phase II Program Meeting16
2.3.2 Public Information Hotline17
2.3.3 Clean-up Events/Pollutant Collection18
2.3.4 School Programs19
3.0 MCM 3 – Illicit Discharge Detection and Elimination (IDDE)20
3.1 Permit Requirements20
3.2 MCM 3 Program Implementation and Objectives21
3.2.1 Allowable Non-Stormwater Discharges23
3.2.2 MS4 Map Development and Update24
3.2.3 Education and Training for City Field Staff24
3.2.3.1 Inform Employees and the Public25
3.2.4 Public Reporting of Illicit Discharges, Illicit Dumping and Spills25



3.2.5 Procedure for Spill Prevention and Response to Illicit Discharges and Spills..... 25

3.2.5.1 Ordinance 26

3.2.6 Source Investigation and Elimination 26

3.2.6.1 Notification of Observed Illicit Discharges 26

3.2.7 Inspections..... 27

3.3 MCM 3: Illicit Discharge Detection and Elimination Program BMP 28

3.3.1 Storm Sewer Map Update 28

3.3.2 Education and Training for City Field Staff..... 29

3.3.3 Illicit Discharge/Illegal Dumping Hotline 30

3.3.4 Procedures for Responding to Illicit Discharges and Spills..... 31

3.3.5 Ordinance 32

3.3.6 MS4 IDDE Source Investigation and Elimination 33

3.3.7 Complaint Inspections 34

3.3.8 Existing Data 35

4.0 MCM 4 - Construction Site Stormwater Runoff Control..... 36

4.1 Permit Requirements 36

4.2 MCM 4 Program Implementation and Objectives 37

4.2.1 Ordinance 38

4.2.2 Plan to Ensure Compliance 39

4.2.3 Procedures for Site Plan Review 39

4.2.4 Procedures for Public Input 39

4.2.5 Construction Site Inspections 40

4.2.6 Target Audience 40

4.3 MCM 4: Construction Site Stormwater Runoff Control Program BMP 41

4.3.1 Construction Site Inspections 41

4.3.2 Ordinance 42

4.3.3 Public Information Receipt 43

4.3.4 Site Plan Review 43

5.0 MCM 5 - Post-Construction Management in New Development and Redevelopment 45

5.1 Permit Requirements 45

5.2 MCM 5 Program Implementation and Objectives 46

5.2.1 Non-Structural BMP 47

5.2.2 Structural BMP 47

5.2.3 Ordinance 47

5.2.4 Long-Term Operation & Maintenance..... 47

5.2.5 Low Impact Development/Green Infrastructure 47

5.2.6 Identification and Selection of Structural Controls 49

5.2.7 Target Areas..... 49

5.3 MCM 5: Post-Construction Management in New Development and Redevelopment Program BMP 50

5.3.1 Post-Construction Ordinance 50

5.3.2 Long-Term Operation and Maintenance of Post-Construction Stormwater Controls 51

5.3.3 Post-Construction Stormwater Control Program..... 52

5.3.4 Post-Construction Education..... 53

5.3.5 Post-Construction Notification and Inspection Program 54

6.0 MCM 6 - Pollution Prevention/Good Housekeeping for MS4 Operations 55

6.1 Permit Requirements 55

6.2 MCM 6 Program Implementation and Objectives 56

6.2.1 Operation and Maintenance Program (O&M) 56

6.2.2 Municipal Permitted Facilities..... 56

6.2.3 Employee Training Program..... 57



6.2.4	Pollutant Control Program	57
6.2.5	Flood Management Projects	58
6.2.6	Target Audience	58
6.3	MCM 6 Pollution Prevention/Good Housekeeping for MS4 Operations BMP	59
6.3.1	Storm Drain Markers	59
6.3.2	Survey Municipal Operations and Implement Necessary BMP	60
6.3.3	City Employee/Contractor Training	61
6.3.4	Good Housekeeping Maintenance Program	62
7.0	Impaired Waterbodies and Total Maximum Daily Load (TMDL) Requirements	63
7.1	Permit Requirements	63
7.2	TMDL Program Implementation and Objectives	63
7.3	TMDL Program BMP	64
7.4	TMDL Implementation Report	65
7.5	Evaluating Progress with the TMDL	65
8.0	Deadlines for SWMP Compliance Resources	66
9.0	Roles and Responsibilities	65
10.0	SWMP Resources	66
11.0	SWMP Review and Updates	66
12.0	Retention of SWMP Records	67

ATTACHMENTS

- A. BMP Summary Tables
- B. OPDES Permit No. OKR04 Fact Sheet
- C. OPDES Permit No. OKR04



Definitions

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce **the pollution of "waters of the United States."** **BMPs also include treatment requirements,** operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Construction Site Operator means the party or parties that meet one or more of the following descriptions:

- (1) Has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or;
- (2) Has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a Storm Water Pollution Prevention Plan for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Control Measure as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.

CWA or The Act means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 *et seq.*

Director means the Executive Director or chief administrator of the Department of Environmental Quality or an authorized representative.

Discharge, when used without a qualifier, refers to "discharge of a pollutant" as defined at 40 CFR §122.2.

Illicit Connection means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge is defined at 40 CFR §122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an OPDES or NPDES permit (other than the OPDES permit for discharges from the SMS4) and discharges resulting from fire fighting activities.

MEP is an acronym for "Maximum Extent Practicable," the technology-based discharge standard for Municipal Separate Storm Sewer Systems to reduce pollutants in storm water discharges that was established by CWA §402(p). A discussion of MEP as it applies to SMS4s is found at 40 CFR § 122.34.



Municipal Separate Storm Sewer System (MS4) is defined at 40 CFR § 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

NOI is an acronym for "Notice of Intent" to be covered by this permit and is the mechanism used to "register" for coverage under a general permit.

National Pollutant Discharge Elimination System (NPDES) is a National program for issuing, modifying, revoking and reissuing, terminating, imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA.

Outfall is a point where a municipal separate storm sewer discharges to waters of the United States.

Redevelopment is any alterations of a property that change the footprint of a site or building in such a way that results in the disturbance of equal to or greater than 1 acre of land.

Small Municipal Separate Storm Sewer System is defined at 40 CFR §122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a state, city, town, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of **the State, but is not defined as "large" or "medium" municipal separate storm sewer** system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

Storm Water is defined at 40 CFR §122.26(b)(13) and means storm water runoff, snow melt runoff, and surface runoff and drainage.



Storm Water Management Program (SWMP) refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system.

SWMP is an acronym for **"Storm Water Management Program."**

"You" and "Your" as used in this permit is intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's responsibilities (e.g., the city, the country, the flood control district, the U.S. Air Force, etc.).

Waters of the United States – (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands"; (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial sea; and (g) **"Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.** Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applied only to man-made bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. **Notwithstanding the determination of an area's status as prior converted croplands by any other federal agency, for the purpose of the Clean Water Act, The final authority regarding Clean Water act jurisdiction remains with EPA.**



Acronyms

BMP – Best Management Practice
CGP – Construction General Permit
CWA - Clean Water Act
GPS – Global Positioning System
IDDE – Illicit Discharge Detection and Elimination
LID – Low Impact Development
LPST – Leaking Petroleum Storage Tanks
MCM – Minimum Control Measures
MEP – Maximum Extent Practicable
MS4 – Municipal Separate Storm Sewer System
NOC – Notice of Change
NOI – Notice of Intent
NPDES – National Pollutant Discharge Elimination System
POC – Pollutant of Concern
RP – Responsible Party
SWMP – Stormwater Management Program
SWPPP or SW3P or SWP3 – Stormwater Pollution Prevention Plan
ODEQ – Oklahoma Commission on Environmental Quality
TMDL – Total Maximum Daily Load
OPDES – Oklahoma Pollutant Discharge Elimination System



Introduction

The City of Moore (City) has updated this Stormwater Management Program (SWMP) in accordance with the requirements of the Oklahoma Department of Environmental Quality (ODEQ), Oklahoma Pollutant Discharge Elimination System (OPDES) General Permit No. OKR04 Phase II Small Municipal Separate Storm Sewer System (MS4) permit. The purpose of the SWMP is to describe the Minimum Control Measures (MCM) and Best Management Practices (BMP) for implementation of specific programs, controls and activities with the intent of reducing the potential discharge of pollutants from the MS4 that could reach Waters of the United States.

Regarding the quality of stormwater runoff associated with City activities, it is the intent of the City to maintain a comprehensive SWMP that establishes applicable pollution prevention criteria and guidelines, to comply with specific OPDES requirements, and to continue its proactive stance regarding water quality issues.

The City will be implementing its program on a fiscal year basis, and will submit its annual reports as specified in Part V.C of the Phase II Small MS4 General Permit OKR04.



Purpose of the SWMP

This SWMP includes specific pollution prevention measures, treatment or pollutant removal techniques, stormwater monitoring, use of legal authority and other appropriate means to control the quality of stormwater discharged from the City MS4 to the Maximum Extent Practicable (MEP). The SWMP incorporates measurable goals, whenever practicable, and includes controls necessary to prohibit the discharge of non-stormwater into the MS4. The SWMP covers the term of the permit and will be updated as necessary to ensure compliance.

The SWMP presents **the City's** effort in complying with its environmental policy as well as implementing a successful stormwater program. The SWMP includes the relevant OPDES permit language (depicted in italic) for each MCM. It describes and defines BMP for each of the MCM, measurable goals for each BMP, and an implementation schedule for all activities. Attachment A provides a Summary Table of individual BMP for each MCM. The City will evaluate the need for revision of the SWMP at least annually. Additional BMP may be included, and equivalent BMP substituted, based on these evaluations. The City understands that elimination of a BMP, without the inclusion of an equivalent BMP, requires the City to submit a notice of change (NOC) to ODEQ.



1.0 MCM 1 - Public Education and Outreach Program

1.1 Permit Requirements

You must revise and update your existing public education and outreach program. The revision of the program shall be completed within the first year after effective date of this Permit. You must continue to implement a public education and outreach program to distribute information and educational materials to the community or conduct equivalent outreach activities to promote behavior change by the public to reduce pollutants in stormwater runoff and eliminate illicit discharges. The public education or equivalent outreach activities shall be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities. You must:

(1) Include education and outreach efforts for the following audiences:

- (a) Traditional municipalities such as cities, counties, etc. must address the general public being served by the MS4;*
- (b) Non-traditional municipalities such as universities, hospital complexes, prisons, special districts, etc. and federal facilities must address the community served by the MS4. For example, at a university it would be the faculty, other staff, students, and visitors, while at a military base, it would include military personnel (and dependents) contractors, employees, tenants, visitors, etc.; and*
- (c) Departments of transportation must address the community working on or served by the transportation network within the MS4 including employees, contractors, and the general public.*

(2) Establish or revise (as necessary) measurable goals for each BMP, including target milestones (month and year), frequency of action(s) and identify responsible persons.

(3) Assess your education and outreach program annually as required by Part V.C of this Permit.

1.2 MCM 1 Program Implementation and Objectives

The City uses the appropriate number of public education BMP to inform individuals and groups about the steps they can take to reduce stormwater pollution and become involved in the stormwater program.

Individuals and/or groups are encouraged to volunteer and participate in City events. Efforts utilized to fulfill this control measure will be documented and records of these activities will be summarized in the annual reports.

The City has several programs, publications and forums for educating and involving City employees, businesses, contractors, and the general public on issues affecting stormwater



quality. Elements of the program focus on general public programs and education on environmental issues, such as proper handling and application of pesticides and fertilizers, proper handling of used oil and toxic materials and improvement and awareness of construction and maintenance activities.

1.2.1 Target Audience

Businesses, the general public, contractors, and City employees will be targeted to help reduce potential pollution. For residential chemical (pesticides and herbicides) use and disposal, the City will target education programs to individual homeowners and multi-family residents. For commercial chemical use and disposal, the City will target education programs to commercial retailers and those businesses that store and use chemicals, including construction sites.

1.2.2 Target Pollutant Sources

The City's Public Education program will primarily address household pollutants by educating individual homeowners on the proper use and disposal of:

- Pesticides
- Fertilizers
- Detergents
- Solvents
- Motor oil
- Antifreeze
- Other motor and engine fluids
- Household trash
- Yard waste

Through use of a City contracted recycling program, and household pollutant collection events, the discharge of pollutants will be diminished.



1.2.3 Outreach Strategy

The Tables below will be used to address this MCM for the permit term. Each BMP lists the activity description, schedule of implementation (frequency), target dates, and annual Measurable Goals for the BMP.

The City's public education program will target:

- Homeowners will be educated on the proper use and disposal of fertilizers and other household chemicals as well as proper septic system maintenance, where needed.
- Homeowners will be educated on how to properly dispose of pet waste.
- The City will promote citizen participation in area-wide stream and city cleanup events, use of recycling centers in the vicinity, and participation in pollutant collection events.
- Primary and/or Secondary education grades will learn about water quality and urban **sources of pollution through the Blue Thumb's "Storm Sewer In a Suitcase"** classroom program, or similar adopted programs, for school children.
- **The City's education program will develop** brochures and posters that target residential, commercial and construction activities that may negatively impact the stormwater quality of the MS4.

The City's Public Education program has a goal of providing stormwater education material to all homeowners in the City by the end of the permit cycle. This will be accomplished through the distribution of brochures, the display of posters at City Hall, and water bill inserts.



1.3 MCM 1: Public Education and Outreach Program BMP

1.3.1 Brochures

City brochures will be distributed to specific target audiences. The City will update its distribution list to include the number of brochures to be sent, the specific audiences, as well as the appropriate brochures for specific activities, such as retail gasoline outlets, car washes, restaurants, residents and schoolchildren. The City will distribute brochures to 50 percent of the target audience every 2 years and follow-up with inspection activities to determine the need to modify brochures in years 3 and 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify specific brochure target audiences	Year 1	5/2016	Number of target audiences
Develop a list of the number of brochures/handouts to be created	Year 2	8/2016	Number of brochures/handouts to be created by audience
Create and/or update brochures/handouts	Year 2	11/2016	Number of brochures and handouts created
Distribute brochures and/or handouts	Year 2	2/2017	Meet 50% distribution of target audience
Follow-up inspections	Year 3	2/2018	Number of inspections performed and targets that retained message
Effectiveness of materials assessed and documented	Year 3	5/2018	Overall effectiveness based on follow-up inspections
Evaluate need for modification of brochures and/or handouts	Year 3	11/2018	Number of new brochures/handouts recommended
Re-distribute brochures/handouts	Year 4	2/2019	Meet 50% distribution of target audience
Follow-up inspections	Year 5	2/2020	Number of inspections performed and targets that retained message
Evaluate need for modification of brochures and/or handouts	Year 5	8/2020	Number of new brochures/handouts recommended

Responsible Party: Stormwater Manager or his/her designee



1.3.2 Water Bill Inserts

The City will include a stormwater educational message on 100% of City water bills once annually. The City will then determine the need to modify the message in year 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Create and distribute an educational stormwater message to be included on 100% of City water bills once during the year	Annually	July	Number of water bills distributed
Evaluate the need for modification of the educational message	Year 4	2-2019	Record the new message and an estimate of water bills to be distributed the following year.

Responsible Party: Stormwater Manager or his/her designee

1.3.3 City Stormwater Webpage

The City will continue to use and update its stormwater webpage created in the previous permit term. The City will review the webpage annually and make necessary changes. It will also use the webpage to advertise stormwater-related events, such as annual waste disposal and recycling, construction permits and current programs and updates.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and update the stormwater webpage	Annually	August	Record updates made to the webpage

Responsible Party: Stormwater Manager or his/her designee



1.3.4 School Programs

The City will continue to provide a "School Education Program" by creating awareness in the community about protecting water quality from nonpoint source pollution. The City will identify local schools for participation. The program will be evaluated annually; as well as establishing new goals and identify additional schools.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify benefits of a School Education Program	Year 1	5/2016	Identify beneficial programs
Establish program goals	Year 1	10/2016	Target student audience
Establish schools for distribution	Year 2	2/2017	Number of schools
Implement school program	Year 2-5	May	Dates program(s) presented
Evaluate program and establish new goals	Year 4	2/2019	Receive teacher evaluations
Add additional schools, as needed	Year 4	5/2019	Number of schools added
Assess benefits of program	Year 5	2/2020	Report benefit assessment

Responsible Party: Stormwater Manager or his/her designee



1.3.5 Phase II Program Meeting

The City will discuss its Small Phase II SWMP in one public City Council meeting per year. At the meeting, there will be an opportunity for the public to discuss and provide recommendations to the SWMP. The City will comply with state and local public notice requirements related to each meeting.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop program requirements and commitments and present at meetings	Annually	May	Number of Council and citizens in attendance
Stormwater program status presentation at City Council meeting	Annually	May	Number of Council and citizens in attendance

Responsible Party: Stormwater Manager or his/her designee



1.3.6 Recycling/Pollutant Collection

The City will continue to promote pollutant collection and recycling at its facility and semi-annual Citywide recycling events. This information will be made available in handouts and on the Recycle Moore website. The City will perform a cost effectiveness evaluation in year 5 to determine benefits of the program.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify best way to sponsor and/or promote recycling/pollutant collection	Year 1	4/2016	Method identified
Develop appropriate messages and distribute information	Year 1	5/2016	Group(s) participating
Quantify amount of messages/information hits	Year 1	8/2016	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 2	8/2017	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 3	8/2018	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 4	8/2019	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 5	8/2020	Messages distributed/hits on website
Determine benefits of program	Year 5	9/2020	Cost effectiveness evaluation

Responsible Party: Stormwater Manager or his/her designee



1.3.7 Household Hazardous Waste Collection

The City will continue to promote household hazardous waste collection and recycling. This information will be made available in handouts and on the City of Moore Household Hazardous Waste Collection website. The City will perform a cost effectiveness evaluation in year 5 to determine benefits of the program.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify best way to sponsor and/or promote household hazardous waste collection	Year 1	4/2016	Method identified
Develop appropriate messages and distribute information	Year 1	5/2016	Group(s) participating
Quantify amount of messages/information hits	Year 1	8/2016	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 2	8/2017	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 3	8/2018	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 4	8/2019	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 5	8/2020	Messages distributed/hits on website
Determine benefits of program	Year 5	9/2020	Cost effectiveness evaluation

Responsible Party: Stormwater Manager or his/her designee



1.3.8 Storm Drain Markers

The City will develop a new stencil program to present water quality messages on storm drain inlets. The messages will be specific to particular watersheds and may contain messages regarding TMDL's and/or impaired waters. The stencils will serve as an educational reminder to keep the drains clean.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Install message on storm drain, as necessary	Year 1	5/2016	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 2	5/2017	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 3	5/2018	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 4	5/2019	Total number of storm drains installed/re-installed
Review system and determine future updates/needs	Year 5	4/2020	Updates and assessment

Responsible Party: Stormwater Manager or his/her designee



2.0 MCM 2 – Public Participation and Involvement

2.1 Permit Requirements

Your public participation and involvement program must be reviewed and updated within the first year after the effective date of this Permit, then reviewed annually and revised, if necessary. This program must encourage public involvement and participation in the development and implementation of your SWMP. This must:

- (1) Include a process by which public comments on the SWMP are received and reviewed by the person(s) responsible for the SWMP;*
- (2) Comply with State and local public notice requirements when implementing your public participation and involvement program.*
- (3) Establish or revise (as necessary) measurable goals for each BMP, including target milestones (month and year), frequency of action(s) and identify responsible persons; and*
- (4) Assess your public participation and involvement program annually as required by Part V.C of this Permit.*

2.2 MCM 2 Program Implementation and Objectives

Some of the activities under the Public Education MCM also apply to the Public Participation and Involvement MCM. These include the use of recycling centers, participation in household pollutant collection events, and community cleanup events. Appendix A summarizes each Public Participation BMP, including implementation schedules, and Measurable Goals for each BMP.

The Public Participation MCM is different from the Public Education MCM in that the residents of the City of Moore will actively participate in a program component such as stream cleanups or recycling events. By participating, citizens not only learn about the urban stormwater quality issues but contribute towards improving water quality in the community.

The City will use several public participation BMPs to involve individuals and groups in activities and programs to reduce stormwater pollution and become involved in the stormwater program.



2.2.1 Public Involvement in Program Development

The City will take appropriate steps to inform and include the public in understanding and providing input for the development of the Phase II program. This may include the City:

- Presenting information about the Phase II program in City Council public meetings;
- Making formal presentations to the City Council in a regular open meeting, outlining the regulatory requirements as well as how the public will be affected by the Phase II program;
- Responding to questions from the public, and distributing information to the community upon request;
- Placing notices at City Hall and other available facilities, about the stormwater program that includes requests for citizen input.

2.2.2 Public Involvement in Program Implementation

Throughout the permit cycle, the City will use several methods to educate the public about the Phase II program and opportunities for participation, including:

- Development and distribution of Public Education brochures on how individuals and organizations can become more fully informed and participate in water quality improvement efforts under the Phase II program.
- Development and distribution of information about local and regional activities for citizens.
- City Council agenda discussions related to the stormwater MS4 program (e.g. budget approvals, events, approval of program activities) will be open to the community to receive public comment.
- Establishing procedures (hotline) for receiving public input of reports of illegal dumping and discharges. This hotline will be advertised locally to provide the public with appropriate reporting telephone numbers and procedures.

2.2.3 Target Audience

The public participation program will primarily target community residents, public school classes and organizations, non-profit organizations, and civic organizations. For school-age children, the participation program will focus on utilizing Blue Thumb resources. Local and regional waste collection events and community / stream cleanups will target individual residents in the City by encouraging their participation, and providing event information. All ethnic and socio-economic groups will be encouraged to participate. The Phase II MS4 program for the City of Moore will benefit all city residents and local enterprises.



2.2.4 Public Involvement Activities

The City will use the following types of activities for Public Participation:

- Distribution of brochures to encourage proper use and disposal of household chemicals;
- Distribution of information about local events;
- Promoting recycling, annual cleanup events, and pollutant collection in the city limits;
- Encouraging local schools to participate in Blue Thumb school education, or similar adopted programs;
- Educating the community regarding recycling stations in the vicinity.

The City's public participation program will rely upon its efforts to promote and educate the community about opportunities to play an active role in water quality improvement efforts.

2.2.5 Management Responsibility

The City of Moore Community Development Department has overall project management responsibility. City staff will coordinate all local activities and implementation of all program elements.

2.2.6 Evaluating Program Effectiveness

Measurable Goals will be established for each Public Participation BMP. These are summarized in Appendix A. BMP effectiveness will be demonstrated by keeping records of contacts from individuals and stakeholders. Each contact from the public (email, phone call, fax, letter or personal visit) will be recorded as to the nature of the request and any follow-up action taken by City 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 reduction of pollution.



2.3 MCM2: Public Participation and Involvement Program BMP

2.3.1 Phase II Program Meeting

The City will discuss its Phase II SWMP in one public City Council meeting per year. At the meeting, there will be an opportunity for the public to discuss and provide recommendations to the SWMP. The City will comply with state and local public notice requirements related to each meeting.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop program requirements and commitments and present at meetings	Annually	May	Number Council and Citizens in attendance
Storm water program status presentation at City Council meeting	Annually	May	Number Council and Citizens in attendance

Responsible Party: Stormwater Manager or his/her designee



2.3.2 Public Information Hotline

The City's existing reporting hotline will continue to be used for citizen complaint and reporting. Advertisement of the hotline will also serve public involvement, and will be accomplished through the use of the City Stormwater Website at <http://www.cityofmoore.com/stormwatersavvy>. Funding for the hotline will be assessed in years 2 and 4. The City will evaluate the effectiveness of the program in year 3. Necessary changes to the program will be made in year 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Advertising of Hotline on Stormwater Website	Year 1	4/2016	Report date and nature of advertisement
Assessment of Hotline funding	Year 1	5/2016	Report amount of funding
Continue implementation of hotline	Year 1	8/2016	Report number of calls received and website hits
Continue implementation of hotline	Year 2	8/2017	Report number of calls received and website hits
Hotline effectiveness assessment	Year 3	5/2018	Report findings
Continue implementation of hotline	Year 3	8/2018	Report number of calls received and website hits
Assessment of Hotline funding	Year 4	10/2018	Report amount of funding
Continue implementation of hotline	Year 4	8/2019	Report number of calls received and website hits
Continue implementation of hotline	Year 5	8/2020	Report number of calls received and website hits
Changes to Hotline Program made (as necessary)	Year 5	As Needed	Report changes to program

Responsible Party: Stormwater Manager or his/her designee



2.3.3 Recycling/Pollutant Collection

The City will continue to sponsor and/or conduct semi-annual City wide clean-up events, as well as continue operations of its recycling center. After each event, the City will quantify the amount of refuse/material collected. The City will maintain the quantity of recyclable material collected annually. The City will perform a cost effectiveness evaluation in year 5 to determine benefits of the program.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Sponsor and/or promote City wide clean-up events	Year 1	4/2016	Method identified
Develop appropriate activities and solicit specific groups	Year 1	5/2016	Group(s) participating
Quantify amount of refuse/material collected	Year 1	8/2016	Quantity collected
Quantify amount of refuse/material collected	Year 2	8/2017	Quantity collected
Quantify amount of refuse/material collected	Year 3	8/2018	Quantity collected
Quantify amount of refuse/material collected	Year 4	8/2019	Quantity collected
Quantify amount of refuse/material collected	Year 5	8/2020	Quantity collected
Determine benefits of program	Year 5	9/2020	Cost effectiveness evaluation

Responsible Party: Stormwater Manager or his/her designee



2.3.4 School Programs

The City will continue to present a "School Education Program" in the community about protecting water quality from nonpoint source pollution. The City will continue to identify groups such as elementary and middle schools, as well as other groups such as the Boy and Girl scout programs. The program will be evaluated annually; as well as establishing new goals and identification of additional audiences.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Establish program goals	Year 1	5/2016	Target audiences
Establish curriculum to be delivered	Year 1	10/2016	Types and number of messages
Implement school program	Year 2	5/2017	Dates program(s) presented
Implement school program	Year 3	5/2018	Dates program(s) presented
Implement school program	Year 4	5/2019	Dates program(s) presented
Evaluate program and establish new goals	Year 4	8/2019	Receive teacher evaluations
Add additional schools, as needed	Year 4	10/2019	Number of schools added
Implement school program	Year 5	2/2020	Dates program(s) presented
Assess benefits of program	Year 5	5/2020	Report benefit assessment

Responsible Party: Stormwater Manager or his/her designee



3.0 MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

3.1 Permit Requirements

You must review and revise your existing illicit discharge detection and elimination program, as necessary. The revision of this program shall be completed within the first year after the effective date of this Permit, then as needed. You must develop new elements, as necessary, and continue to implement and enforce the program to detect and eliminate illicit discharges into your small MS4, including a dry weather field screening program to identify non-stormwater flows. You must:

- (1) Enforce ordinances or other regulatory mechanisms that you utilize to effectively prohibit illicit discharges into your small MS4. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your illicit discharge detection and elimination program.*
- (2) Continue to implement a dry weather field screening plan to detect, investigate, and eliminate illicit discharges. Rely on visual indicators and simple field test kits for most work where you are looking for indications of a problem. Laboratory methods can be reserved for situations where you have identified a problem and need to enforce on a suspected illicit discharger. Your field screening program must address the following, at a minimum:
 - (a) Procedures for locating priority areas within your MS4 likely to have illicit discharges (e.g., areas with older sanitary sewer lines), or ambient sampling to locate impacted reaches;*
 - (b) Procedures to address on-site sewage disposal systems that may flow into your storm drainage system;*
 - (c) Procedures for tracing the source of an illicit discharge, including the specific techniques you will use to detect the location of the source;*
 - (d) Procedures for removing the source of the illicit discharge; and*
 - (e) Procedures for illicit discharge detection and elimination program evaluation and assessment.**
- (3) Develop (if necessary), maintain and regularly update a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the State that receive discharges from those outfalls.*
- (4) To the extent allowable under State or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions. If you lack legal authority for direct enforcement action, you must include procedures to notify DEQ when a party fails to comply with the requirements. You may rely on DEQ for assistance in enforcement of this provision of the permit in these cases.*



- (5) *Develop (if necessary) and implement a plan to detect and address non-stormwater discharges, including illegal dumping to your system.*
- (6) *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.*
- (7) *Maintain a list of occasional incidental non-stormwater discharges or flows as allowed in Part I - B2 that will not be addressed as illicit discharges. These non-stormwater discharges must not be reasonably expected (based on information available to you) to be significant sources of pollutants to the small MS4, because of either the nature of the discharges or conditions you have established for allowing these discharges to your small MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive waterbodies, BMPs on the wash water, etc.). You must document in your SWMP any local controls or conditions placed on the discharges. You must include a provision prohibiting any individual non-stormwater discharge that is determined to be contributing significant amounts of pollutants to your MS4.*
- (8) *Establish or revise (as necessary) measurable goals for each BMP, including target milestones (month and year), frequency of action(s) and identify responsible persons.*
- (9) *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 Part V.C of this Permit.*

3.2 MCM 3 Program Implementation and Objectives

The City will implement a comprehensive program to detect and eliminate illicit discharges following the requirements in the OPDES General Permit OKR04. The program will rely upon accepted methods of pollutant detection; specifically the EPA Cooperative Agreement No. X-82907801-0 Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments.

There are two categories of pollutants that will be addressed in different ways.

The first category is pollutants introduced into the MS4 from individuals in a one-time distinct episode at a discrete point of entry. Examples of these are dumping of yard waste, motor oil, antifreeze or trash onto the ground. These types of pollutants, when discovered in the MS4, cannot be effectively investigated as to the source (i.e. the individual causing the pollution). Also, they are not normally discovered using a City-wide MS4 inspection program. One of the best means of discovery will be through input from residents, City crews, police and fire workers, business, and area agency field crews. Prevention of future isolated pollution episodes will rely upon implementation of the Public Education and Public Participation programs presented above.



The second category is pollutants from sources that have a chronic or frequently repeating discharge that can be traced using visual inspections, and possibly, chemical field test kits. Pollutants from these sources are typically 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 in the MS4. These **chronic pollutants are amenable to "source tracking" inspections, and the sources are more likely to be found and mitigated.**

The City will implement an effective illicit discharge detection and elimination program through utilization of the following procedures:

- Ensure that maps and field procedures are effective by performing reconnaissance surveys to verify accuracy and effectiveness;
- Evaluate existing and near-future land uses in the City, and delineate priority areas that have the greatest potential to discharge pollutants;
- Collect illicit discharge and pollution information, as applicable, from citizens, police and fire units, City public works crews, other municipalities, non-profit organizations, volunteer stream monitors, students and educational institutions, construction contractors and workers, local building officials and floodplain administrator, and State and Federal agencies as applicable;
- Investigate, as necessary, and take follow-up action, as appropriate, for different types of pollutants and discharges;
- If source tracking is necessary for chronic or frequently occurring sources, conduct field monitoring to locate the pollutant source, relying upon visual inspections, and simple field test kits (e.g. chlorine residual, pH, dissolved oxygen, temperature, conductivity, etc.) whenever possible, or using contract professionals when necessary;
- 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 inspectors in a timely fashion);
- For sources of known origin and having a designated responsible party, take appropriate remediation/enforcement action to mitigate the pollutant source;
- Develop Quality Assurance training for inspectors and managers;
- Assign authority to a key City staff person to evaluate program effectiveness and ensure data quality;
- Implement procedures for enforcement, including how to approach owners of potential sources during on-sight inspections, how to present field data to owners confirming the source, and what procedures the owner must take to remove the discharge; and



- Periodically evaluate, using the City's management and field staff, the inspection and enforcement program, and make modifications as necessary to improve program effectiveness.

3.2.1 Allowable Non-Stormwater Discharges

The following non-stormwater sources are allowed, and which the City has determined to not be substantial contributors of pollutants to the MS4:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Residential building wash water without detergents
- Uncontaminated pumped ground water
- Uncontaminated ground water infiltration
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual residential car washing
- De-chlorinated swimming pool discharges
- Street wash water
- Fire hydrant flushing
- Non-commercial or charity car washes
- Discharges from riparian areas and wetlands
- Discharges in compliance with a separate OPDES or National Pollutant Discharge Elimination System (NPDES) NPDES permit
- Discharges or flows from firefighting activities (firefighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities)
- Other allowable non-stormwater discharges listed in 40 CFR ' 122.26(d)(2)(iv)(B)(1).
Discharges in compliance with a separate Oklahoma Pollutant Discharge Elimination



System (OPDES) or National Pollutant Discharge Elimination System (NPDES) NPDES permit

The list of all allowable non-stormwater discharges will be maintained by City administrative staff. Any local controls required by the City on these incidental discharges will be placed in the SWMP by written amendment.

3.2.2 MS4 Map Development and Update

To the greatest extent possible, map data will rely upon available GIS, with common attributes to facilitate data development within the City and preparing Annual Reports. Mapping will involve:

- Receiving updates of existing records to determine the extent of available map data;
- Updating common map attributes;
- Collecting field data using City crews/contractors to verify locations and descriptions of MS4 attributes;
- Periodic review of MS4 system map data by staff for possible updates;
- Updating the GIS map database, as necessary;
- Global Positioning System (GPS) will be used, when needed, to provide coordinate data for the MS4 system, facility locations and sampling sites when required;
- Digital and paper aerial photography, and USGS 7.5 Minute Quadrangle maps will be used to assist with development of the GIS map layers; and
- The City will maintain available GIS data and digital and paper aerial photos of the **City's MS4.**

The City will keep records of map deficiencies and errors, and technical staff will periodically update map data as necessary.

3.2.3 Education and Training for City Field Staff

The City trains public employees who are directly responsible for MS4 operations as well as staff who may come into contact with, or otherwise observe, an illicit discharge or illicit connection to the MS4. Personnel who perform MS4 operations are provided with training that contains information on preventing and reducing potential stormwater pollution from the City MS4.



3.2.3.1 Inform Employees and the Public

The City may use the following types of activities when informing the public and City employees about the hazards associated with illegal discharges and improper disposal of waste:

- Place posters at City Hall to encourage proper use and disposal of household chemicals, maintenance of on-site sewage disposal systems, and recycling;
- Discuss the Phase II program in a City council meeting open to the public;
- Support regional household pollutant collection events; and
- Support local and regional recycling of wastes.

3.2.4 Public Reporting of Illicit Discharges, Illicit Dumping and Spills

Specific emphasis on educating the public and training City personnel are important and integral aspects of the SWMP. Many pollution problems can be avoided by having an informed populous willing to participate in improving stormwater quality. The City is committed to establishing a Program to promote, publicize and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from the MS4.

3.2.5 Procedure for Spill Prevention and Response to Illicit Discharges and Spills

The City will continue to implement and improve, as necessary, programs that prevent, contain, and respond to spills that may discharge into the MS4. Where discharge of material resulting from a spill is necessary to prevent loss of life, personal injury or severe property damage, the City will ensure the parties responsible for the spill take all reasonable steps to minimize or prevent any adverse effects to human health or the environment. The program will rely upon accepted methods of pollutant detection; specifically the EPA Cooperative Agreement No. X-82907801-0 Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments.



3.2.5.1 Ordinance

The City will update, as necessary, its ordinance prohibiting illicit discharges to the MS4 and periodically evaluate the need for modifications. This will involve:

- During the first twelve months of the permit, compare model stormwater pollution ordinances to existing City ordinances and make modifications to local codes, if needed;
- During the first year of the permit, evaluate staffing needs and during the second year acquire additional resources, if needed, to ensure that the City will be able to comply with all provisions and perform all required responsibilities in the ordinance;
- Delegate management authority to key City staff to manage all inspection and enforcement activities; and
- Periodically evaluate program effectiveness and make changes, as appropriate, to the ordinance and/or City resources and manpower.

3.2.6 Source Investigation and Elimination

The City requires the elimination of illicit discharges and improper disposal practices as expeditiously as possible. If the responsible party (RP) is identified, the City will notify the RP that a proposed plan of action must be submitted to the City within a reasonable amount of time depending on the situation (usually two weeks). In the interim, the City will require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4.

Where elimination of an illicit discharge within 30 days is not possible, the City will request an expeditious schedule for removal of the discharge. If the City does not agree with the corrective measure(s) and/or the time schedule, the City will initiate enforcement procedures, and/or may refer the case to the ODEQ for further action and/or enforcement.

3.2.6.1 Notification of Observed Illicit Discharges

Upon detection of a potential illicit connection, dumping, other illegal activity or accidental spills, the City will investigate on-site and then report the problem as appropriate. In the event that a possible illicit discharge is identified, the City will trace the flow upstream to the point of origin. The City will report flows origination to the appropriate RP or the adjacent MS4 operator within 72 hours of discharge confirmation for further action. In the event the flow appears to create a hazard or contain toxic or noxious substances, the City will report the flow to the ODEQ within 24 hours orally or by fax, and by written report within five (5) working days.



3.2.7 Inspections

When episodic incidental pollution is reported to the City (e.g. motor oil dumped into a storm drain), **the City's stormwater staff will** perform inspections and record the date, location, information source, and description of the event. If necessary, a public works crewman will be sent to investigate and determine if the site should be cleaned (e.g. removal of yard waste, containment of oil, etc.). After inspection and/or cleanup, the City will keep a record of all actions taken regarding the pollution incident. **The incident data will be included in the City's Annual Report and used to evaluate program effectiveness.**

When chronic pollution is reported, the same incident information will be recorded, and a public works crewman will be sent to investigate. If the source is not immediately obvious, the City will initiate the visual inspection investigation of the site and attempt to track the source upstream from the pollutant incident. If the source is located, the City will contact the owner/RP to request that the source be mitigated within a reasonable time.

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

The source tracking inspections for chronic sources will consist of a visual inspection program performed by City crews, and may include 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, dissolved oxygen, conductivity, 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 more technically sophisticated methods, then the City may use contract professionals to conduct appropriate sampling and information gathering to locate sources.

Standard paper field forms and/or electronic field data recording devices will be used to make data collection systematic. Data may be entered and/or downloaded into computer databases for analysis, sharing and reporting. As needed, field data will be linked to the **City's available GIS of the MS4.**



3.3 MCM 3: Illicit Discharge Detection and Elimination Program BMP

3.3.1 Storm Sewer Map Update

The City will update the existing storm sewer map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls within the MS4. The map may be developed with GIS. Outfalls may be located with GPS field survey equipment. The final map will become a printed atlas for IDDE and spill response use.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Update 20% of the MS4 map	Year 1	10/2016	Total number of outfalls
Update 20% of the MS4 map	Year 2	10/2017	Total number of outfalls
Update 20% of the MS4 map	Year 3	10/2018	Total number of outfalls
Update 40% of the MS4 map	Year 4	10/2019	Total number of outfalls
Review map and determine future updates/needs	Year 5	2/2020	Map updates and assessment

Responsible Party: Stormwater Manager or his/her designee



3.3.2 Education and Training for City Field Staff

Specific emphases on educating and training City personnel are important and integral aspects of the SWMP. Many pollution problems can be avoided by having an informed populous willing to participate in improving stormwater quality. The City is committed to establishing training classes to facilitate the proper management and disposal of used oil and potentially hazardous materials.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
City to develop training classes for IDDE	Year 1	10/2016	Record the name of each training class developed
City staff to attend training classes developed for IDDE	Annually	May	Record the number of participants attending each training class
City to review and update training classes for IDDE	Year 5	2/2020	Record the updates and/or new training classes developed

Responsible Party: Stormwater Manager or his/her designee



3.3.3 Illicit Discharge/Illegal Dumping Hotline

The City's existing reporting hotline will continue to be used for citizen complaint and reporting. Advertisement of the hotline will also serve public involvement, and will be accomplished through the use of the City Stormwater Website at <http://www.cityofmoore.com/stormwatersavvy>. Funding for the hotline will be assessed in years 2 and 4. The City will evaluate the effectiveness of the program in year 3. Necessary changes to the program will be made in year 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Advertising of Hotline on Stormwater Website	Year 1	4/2016	Report date and nature of advertisement
Assessment of Hotline funding	Year 1	5/2016	Report amount of funding
Continue implementation of hotline	Year 1	8/2016	Report number of calls received and website hits
Continue implementation of hotline	Year 2	8/2017	Report number of calls received and website hits
Hotline effectiveness assessment	Year 3	5/2018	Report findings
Continue implementation of hotline	Year 3	8/2018	Report number of calls received and website hits
Assessment of Hotline funding	Year 4	10/2018	Report amount of funding
Continue implementation of hotline	Year 4	8/2019	Report number of calls received and website hits
Continue implementation of hotline	Year 5	8/2020	Report number of calls received and website hits
Changes to Hotline Program made (as necessary)	Year 5	As Needed	Report changes to program

Responsible Party: Stormwater Manager or his/her designee



3.3.4 Procedures for Responding to Illicit Discharges and Spills

To address procedures for responding to illicit discharges and spills, the City will utilize the EPA Cooperative Agreement No. X-82907801-0 Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments. In addition to the Guidance Manual the City will develop field forms and provide training on field inspection and inspection for utilization.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review EPA Manual and develop field forms as necessary	Year 1	8/2016	Report the number of forms developed for field use
Develop training class for field inspections	Year 1	10/2016	Report number and content of training classes developed
Conduct Training Classes	Year 1	11/2016	Report number of inspectors and staff in attendance
Conduct Training Classes	Year 2	11/2017	Report number of inspectors in attendance
Conduct Training Classes	Year 3	11/2018	Report number of inspectors in attendance
Conduct Training Classes	Year 4	11/2019	Report number of inspectors in attendance
Re-Evaluate Training Classes	Year 5	8/2020	Report number of training classes needing update

Responsible Party: Stormwater Manager or his/her designee



3.3.5 Ordinance

The City will review and update, as necessary, the existing stormwater ordinance section consistent with the requirements of the SWMP and OPDES permit. The City will present the ordinance for public comment and then move to adopt and implement the ordinance. The City will review the ordinance in years 3-5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and update the stormwater ordinance section consistent with the requirements of the SWMP and OPDES permit	Year 2	8/2017	Date ordinance reviewed and finding of acceptability
Present ordinance for public comment, if required	Year 3	2/2018	Date of public review and any comments received
Adopt ordinance, if necessary	Year 3	10/2018	Date adopted, if necessary
Implement new ordinance	Year 4	11/2019	Date implemented
Review ordinance and revise as necessary	Year 5	8/2020	Date reviewed

Responsible Party: Stormwater Manager or his/her designee



3.3.6 MS4 IDDE Source Investigation and Elimination

The City will respond to, identify, and screen for the presence of illicit discharges. During the screening activity, if the RP is identified, the City will notify the RP that a proposed plan of action must be submitted to the City within a reasonable amount of time depending on the situation (usually two weeks). In the interim, the City will require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4. All outfalls in the MS4 will be screened at least once per permit term.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
MS4 Screening	Year 1	5/2016	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.
MS4 Screening	Year 2	5/2017	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.
MS4 Screening	Year 3	5/2018	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.
MS4 Screening	Year 4	5/2019	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.
MS4 Screening	Year 5	5/2020	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.

Responsible Party: Stormwater Manager or his/her designee



3.3.7 Complaint Inspections

The City will conduct inspections, as determined appropriate, in response to complaints, and shall conduct follow-up inspections as needed to ensure that corrective measures have been implemented by the RP. If a RP is identified: the City will notify the RP that a proposed plan of action must be submitted to the department within a reasonable amount of time depending on the situation (usually 2 weeks); the City will require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4; where elimination of an illicit discharge within 30 days is not possible, the City will request an expeditious schedule for removal of the discharge; and if the City does not agree with the corrective measure(s) and/or the time schedule, the City will begin enforcement procedures, and/or refer the case to the ODEQ for further action and/or enforcement.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
MS4 Inspections	Year 1	As Requested	Report the number of illicit discharges /connections inspected and the number of enforcement actions
MS4 Inspections	Year 2	As Requested	Report the number of illicit discharges / connections inspected and the number of enforcement actions
MS4 Inspections	Year 3	As Requested	Report the number of illicit discharges / connections inspected and the number of enforcement actions
MS4 Inspections	Year 4	As Requested	Report the number of illicit discharges / connections inspected and the number of enforcement actions
MS4 Inspections	Year 5	As Requested	Report the number of illicit discharges / connections inspected and the number of enforcement actions

Responsible Party: Stormwater Manager or his/her designee



3.3.8 Data Management

The City will update existing databases, and perform assessments to identify the best way to manage Phase II permit information. The City may continue to utilize existing off-the-shelf GIS software for data development and retention, or its own developed spreadsheets. The City will also utilize the database to develop reports for submission to ODEQ.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify database needs	Year 1	5/2016	Record needs and establish goals
Evaluate database standards	Year 1	10/2016	Provide database update needs
Obtain database funding	Year 2	8/2017	Date funding obtained
Implement database operations	Year 2-5	Ongoing	Date implemented
Review database benefits	Year 4	10/2019	Date reviewed
Establish new goals and funding needs	Year 5	8/2020	Provide dates of funding and new goals

Responsible Party: Stormwater Manager or his/her designee



4.0 MCM 4 - Construction Site Stormwater Runoff Control

4.1 Permit Requirements

You must review and revise your existing construction site stormwater runoff control program, as necessary. The revision shall be completed within the first year after the effective date of this Permit, then as needed. You must develop new elements, as necessary, and continue to implement and enforce the program to reduce pollutants in any stormwater runoff to your MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. You must:

- (1) Develop (if necessary), implement and enforce an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law. Review and revise your existing ordinance to meet the permit requirements. If you lack legal authority for direct enforcement action, you must include procedures to notify DEQ if a construction site operator fails to comply with your construction site stormwater runoff control program. You may rely on DEQ for assistance in enforcement of this provision of the permit in these cases;*
- (2) Develop (if necessary), implement and enforce requirements for construction site operators to implement appropriate BMPs for erosion and sediment control;*
- (3) Develop (if necessary), implement and enforce requirements for construction site operators to select and implement appropriate erosion and sediment control measures to reduce or eliminate the impacts to receiving waters, and control waste at the construction site that may cause adverse impacts to water quality such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste;*
- (4) Develop (if necessary), implement and enforce procedures for site plan review which incorporate consideration of potential water quality impacts including erosion and sediment controls, controls of other wastes, and any other impacts that must be examined according to the requirements of the local ordinance or other regulatory mechanism;*
- (5) Develop (if necessary), implement and enforce procedures for receipt and consideration of information submitted by the public;*
- (6) Develop (if necessary), implement and enforce procedures for site inspection and enforcement of control measures including enforcement escalation procedures for recalcitrant or repeat offenders. Document inspection findings and take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure site compliance;*



- (7) *Establish or revise (as necessary) measurable goals for each BMP, including target milestones (month and year), frequency of action(s) and identify responsible persons; and*
- (8) *Evaluate the appropriateness of your identified BMPs for this MCM. Your evaluation shall verify compliance with permit requirements and more importantly, documents that efforts have been made towards achieving your identified measurable goals and reducing the impacts of stormwater runoff from the small MS4 (as required by Part V.C of this Permit).*

4.2 MCM 4 Program Implementation and Objectives

The City will continue to implement a comprehensive inspection and enforcement program to address the pollution of stormwater runoff from active construction sites of one acre or more. The City will review, and update as necessary, an ordinance prohibiting the discharge of pollutants and sediment from construction sites one acre or more, and **require the deployment of adequate erosion control measures. The City's building inspector** will perform periodic inspections of compliance with local codes while on site during other construction inspections.

The City will also rely upon the existing statewide OPDES general permit for construction activities (OKR10), presently administered by the ODEQ, to fulfill requirements of this MCM. The City will perform, as needed, periodic inspections of construction sites for compliance with OKR10 requirements. The City will perform inspections on construction sites one acre or more, and record any apparent non-compliance related activities. The City will enact enforcement remedies as necessary to mitigate non-compliant activities.

Measurable goals will be established for each Construction Site Runoff Control BMP. BMP effectiveness will be demonstrated by compiling and evaluating data from inspections performed. If pollution sources are mitigated as a result of the inspection and enforcement program, then the mitigation action will be recorded as a BMP success. Data from the stormwater inspections will be used to verify successful implementation of on-site construction BMP.

The City will continue to develop a program to control construction site runoff by taking the following measures:

- Review and/or update as necessary an ordinance to require erosion and sediment controls, as well as sanctions to ensure compliance;
- Require construction site operators to implement appropriate erosion and sediment control BMP;
- Require construction site operators to control waste such as discarded building materials, sanitary waste and chemicals;
- Review and continue to implement, as necessary, a program to receive and consider information submitted from the public;



- Continue to implement procedures, such as site plan review, that incorporates consideration of potential water quality impacts; and
- Continue to implement a construction site inspection and enforcement program.

4.2.1 Ordinance

The City will update, as necessary, an effective ordinance prohibiting construction related discharges to the MS4 and periodically evaluate the need for modifications. This will involve:

- During the first 12 months of the permit, compare model construction ordinances to existing City ordinances and evaluate necessary modifications to City codes, if needed;
- The ordinance will include at least the following prohibited discharges:
 - Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;
 - Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;
 - Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
 - Soaps or solvents used in vehicle and equipment washing; and
 - Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMP.
- During the second year of the permit, evaluate staffing needs and acquire additional resources, if needed, to ensure that the City will be able to inspect and enforce all provisions in the ordinance;
- Delegate management authority to key City staff to manage inspection and enforcement activities; and
- Periodically evaluate program effectiveness and make changes, as appropriate, to the ordinance and/or City resources and manpower.



4.2.2 Plan to Ensure Compliance

The City will continue to implement a comprehensive program to address construction related activities to ensure compliance with erosion and sediment control measures at construction sites. These will include:

- Construction sites will be required through City ordinance to establish erosion and sediment controls;
- The ordinance will have enforcement provisions to ensure that the necessary controls are implemented. This may include non-monetary penalties, fines, bonding requirements, and permit denial;
- The City will establish guidelines and requirements for erosion and sediment control BMP and methods to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste; and
- Enforcement measures will be used as appropriate to take corrective actions. Escalated enforcement may be used when egregious conditions exist.

4.2.3 Procedures for Site Plan Review

The administrative review process will include consideration of water quality issues for these activities. The City will continue to:

- Implement administrative procedures for site plan review to ensure consistency with City erosion and sediment control requirements; and
- Ensure that construction activities are in compliance with local floodplain ordinances.

4.2.4 Procedures for Public Input

The City will continue to use an administrative process for receiving input from the public. This includes:

- Educating administrative staff on how to document public input from email, letters, faxes, phone calls and personal contacts;
- Documenting response actions tied to each request for assistance; and
- Evaluating success and taking follow-up action on unresolved problems.



4.2.5 Construction Site Inspections

The City will continue to implement a program for inspection of construction activities one acre or more. Stormwater control inspections will be performed by the City staff or their designees and integrated into their normal construction inspection activities.

- A stormwater inspection form will be used to document inspection results of site visits;
- Stormwater inspections will be conducted during the routine construction inspections by the City designated inspector, or other designee;
- The stormwater inspection form documents the adequacy of the erosion and sediment control measures being used and note any deficiencies and remedial actions necessary;
- Inspection data from the forms will be retained in paper form or entered into a computer database;
- Best professional judgment of the designated inspector and/or City Engineer will be used to determine stormwater inspection frequency, taking into account local site-specific conditions and activities;
- Enforcement will rely upon initially encouraging mitigation by the owner/operator, followed by a written warning to mitigate within a reasonable time, followed by issuance of a fine under authority of the local ordinance; and
- Any immediate and significant threat to health and safety will be enforced immediately.

4.2.6 Target Audience

The target audience for MCM 3 will focus on construction site operators and City administration, developers, and builders.



4.3 MCM 4: Construction Site Stormwater Runoff Control Program BMP

4.3.1 Construction Site Inspections

The City will continue to utilize its Construction Site Inspections program, which receives notification of new construction sites that have an area of at least one acre or more soil disturbance. The program will include site inspections for the proper use of BMP for erosion, sediment and waste control. Fifty percent of all construction sites of one acre or more will be inspected. The program will also include review of the Stormwater Pollution Prevention Plan (SWPPP) and procedures for receiving and considering public comment. The city will train 100 percent of construction inspectors by year 2.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop construction notification program to include requirements for construction site operators to implement appropriate BMP for erosion and sediment controls and control waste	Year 1	5/2016	Report date program adopted
Utilize procedures for SWPPP receipt for proposed construction sites one acre or more	Year 1	6/2016	Report date procedures adopted
Maintain and use inspection procedures for the BMP	Year 1	8/2016	Report date procedures adopted
Develop Construction Inspector training program	Year 1	10/2016	Report date program adopted
Train Construction Site Inspectors	Year 2	2/2017	Report number of Training sessions conducted and inspectors trained
Inspect 50% of construction sites one acre or more	Year 2-5	May	Number of inspections and finding
Inspect 100% of complaint driven sites one acre or more	Year 2-5	As Required	Number of inspections and finding
Evaluate the need for training program revisions	Year 5	2/2020	Number of training programs revised

Responsible Party: Stormwater Manager or his/her designee



4.3.2 Ordinance

The City will adopt an effective ordinance prohibiting construction related discharges to the MS4 and periodically evaluate the need for modifications. During the first twelve months of the permit, the City will compare model construction ordinances to existing City ordinances and evaluate necessary modifications to local codes, if needed. The City will evaluate staffing needs and acquire additional resources, if needed, to ensure the City will be able to inspect and enforce all provisions in the ordinance during year 2. The City will delegate management authority to a key City staff person to manage all inspection and enforcement activities. The City will periodically evaluate program effectiveness and make changes, as appropriate to the ordinance and/or City resources and manpower.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and update the stormwater ordinance section consistent with the requirements of the SWMP and OPDES permit	Year 2	8/2017	Date ordinance reviewed and finding of acceptability
Present ordinance for public comment if required	Year 3	2/2018	Date of public review and any comments received
Revise ordinance, if necessary	Year 3	10/2018	Date revised, if necessary
Implement ordinance	Year 4	11/2019	Date implemented
Review ordinance and revise as necessary	Year 5	8/2020	Date reviewed

Responsible Party: Stormwater Manager or his/her designee



4.3.3 Public Information Receipt

The City's existing reporting hotline will continue to be used for citizen complaint and reporting. Advertisement of the hotline will also serve public involvement, and will be accomplished through the use of the City Stormwater Website at <http://www.cityofmoore.com/stormwatersavvy>. Funding for the hotline will be assessed in years 2 and 4. The City will evaluate the effectiveness of the program in year 3. Necessary changes to the program will be made in year 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Advertising of Hotline on Stormwater Website	Year 1	4/2016	Report date and nature of advertisement
Assessment of Hotline funding	Year 1	5/2016	Report amount of funding
Continue implementation of hotline	Year 1	8/2016	Report number of calls received and website hits
Continue implementation of hotline	Year 2	8/2017	Report number of calls received and website hits
Hotline effectiveness assessment	Year 3	5/2018	Report findings
Continue implementation of hotline	Year 3	8/2018	Report number of calls received and website hits
Assessment of Hotline funding	Year 4	10/2018	Report amount of funding
Continue implementation of hotline	Year 4	8/2019	Report number of calls received and website hits
Continue implementation of hotline	Year 5	8/2020	Report number of calls received and website hits
Changes to Hotline Program made (as necessary)	Year 5	As Needed	Report changes to program

Responsible Party: Stormwater Manager or his/her designee



4.3.4 Site Plan Review

The City will continue to use its building site review checklist for site plan review of construction sites one acre or more. The City will continue to implement plan review, and review all site plans annually. The City will evaluate the effectiveness of the program and modify as necessary.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop administrative procedures for site plan review	Year 1	5/2016	Report date procedures adopted
Implement plan review	Year 1-3	Ongoing	Report number reviews
Evaluate effectiveness of program	Year 3	8/2018	Report findings
Modify program as necessary	Year 3	10/2018	Report updates
Implement plan review	Year 3-5	Ongoing	Report number of reviews
Evaluate effectiveness of program	Year 5	8/2020	Report findings
Modify program as necessary	Year 5	10/2020	Report updates

Responsible Party: Stormwater Manager or his/her designee



5.0 MCM 5 - Post-Construction Management in New Development and Redevelopment

5.1 Permit Requirements

You must review and revise your existing new development and redevelopment post-construction management program, as necessary. The revision shall be completed within the first year after the effective date of this Permit, then as needed. You must develop new elements, as necessary, and continue to implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one (1) acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must attempt to maintain pre-development runoff conditions and ensure that controls are in place that would prevent or minimize water quality impacts. You must:

- (1) Develop (if necessary), implement and enforce strategies which include a combination of structural and/or non-structural BMPs appropriate for your community;*
- (2) Develop (if necessary), implement and enforce an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law;*
- (3) 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;*
- (4) Develop (if necessary), implement and enforce procedures to ensure adequate long-term operation and maintenance of BMPs that are installed during and left in place after the completion of a construction project, including inspections of each BMP;*
- (5) Participate in an education program for developers and the public about project designs that minimize water quality impacts, including LID strategies. This would coordinate with your public education MCM and your pollution prevention and good housekeeping MCM programs;*
- (6) Establish or revise (as necessary) measurable goals for each BMP, including target milestones (month and year), frequency of action(s) and identify responsible persons; and*
- (7) 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 (as required by Part V.C of this Permit).*



5.2 MCM 5 Program Implementation and Objectives

This MCM will require, through City ordinance, all operators of construction activities, that disturb one acre or more, to develop and implement structural and/or non-structural BMPs based on the local site conditions that minimize water quality impacts, as well as the development of procedures to inspect post-construction runoff from new development and redevelopment projects and development of a mechanism to ensure the long-term operation and maintenance of the BMP.

The post-construction program will be developed to address local conditions within the City. Factors that will be considered in developing the local post-construction program are:

- Proximity of the site to impaired waterbodies **on the State's 303(d) list;**
- Erosivity of the site (e.g. slope, soil type, vegetative cover, etc.);
- Size of construction activities and site disturbance;
- Receiving water characteristics (flows, depths, riparian cover, etc.)

The post-construction ordinance may require contractors to implement BMP to prevent erosion and non-stormwater runoff from sites after construction has ceased. The ordinance will provide options for ensuring long-term operation and maintenance of the site.

The City's **existing floodplain management strategy** may be developed to establish post-runoff flow rates not to exceed pre-development runoff flow rates. The City may require that any flow reduction structures in new development or re-development areas (e.g. on-site or regional stormwater detention) will consider impacts on downstream water quality.

Specific water quality needs will be identified and addressed through administrative procedures when local zoning codes and floodplain management codes are amended. All public comments concerning water quality issues will be considered during amendment of zoning and floodplain management codes. The City will encourage protection of sensitive water quality areas (e.g. wetlands, riparian areas, etc.) and encourage use of buffers along sensitive waterbodies.



5.2.1 Non-Structural BMP

The City will implement and encourage the use of the following non-structural City policies and BMP at new development and redevelopment sites:

- Utilization of the most recent Comprehensive Plan for the City to direct growth to identified areas and protect sensitive water resources such as local wetlands and riparian zones;
- Encourage new development and re-development projects to maintain open spaces, provide buffers along sensitive waterbodies and minimize impervious surfaces and disturbance of soils and vegetation wherever practical;
- Develop education brochures for builders and the public about project designs that minimize water quality impacts; and
- Encourage developers to implement source control measures as good housekeeping practices.

5.2.2 Structural BMP

The City will implement and encourage the use of the following structural BMP at new development and redevelopment sites:

- Encourage contractors to use stormwater storage structures such as wet ponds and detention basins; and
- Encourage contractors to use filtration practices such as grassy swales and filter strips and infiltration practices such as infiltration basins and infiltration trenches.

5.2.3 Ordinance

The City will update as necessary and adopt an ordinance to address the post-construction policies and BMP described above.

5.2.4 Long-Term Operation & Maintenance

The City will ensure long-term operation and maintenance (O&M) of the BMP by requiring that developers either transfer ownership of structural BMP (storm sewer infrastructure, detention basins, etc.) to the City or provide for third-party ownership and maintenance responsibility (e.g. transfer ownership to a **homeowner's** association).

5.2.5 Low Impact Development/Green Infrastructure

Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles, such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional, and safe site drainage that treat stormwater as a resource rather than a waste product. There are many practices that have been used to adhere to these principles, such as bio-retention facilities, vegetated



swales, xeriscape landscaping, and permeable pavements. By implementing LID principles and practices where safe, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within a watershed.

Green Infrastructure (GI) is a relatively new and flexible EPA term, and it has been used differently in different contexts. However, EPA intends the term to generally refer to systems and practices that use or mimic natural processes to infiltrate, evapotranspire (the return of water to the atmosphere either through evaporation or by plants), or reuse stormwater or runoff on the site where it is generated. GI can be used at a wide range of landscape scales in place of, or in addition to, more traditional stormwater control elements to support the principles of LID. GI approaches currently in use include green roofs, vegetated swales, vegetated median strips, and protection and enhancement of riparian buffers and floodplains. GI can be used almost anywhere where soil and vegetation can be safely worked into the City landscape. GI also allows stormwater to be absorbed and cleansed by soil and vegetation and allowed to flow back into groundwater or surface water resources. The LID/GI strategies that the City may employ are as follows:

- Structural Controls may include the following:
 - Retention/irrigation ponds
 - Extended detention (wet/dry basins)
 - Vegetative filter strips
 - Vegetated swales
 - Constructed wetlands
 - Sedimentation ponds/traps
 - Infiltration ponds
 - Catch basins
 - Grated inlets
 - Outfall velocity dissipation controls
- Non-Structural Controls may include the following:
 - Street sweeping
 - Litter collection
 - **"No Mow" areas**
 - Storm drain markers



5.2.6 Identification and Selection of Structural Controls

The hydraulics and necessary structural controls for stormwater runoff will be identified by the City during the plan review phase for construction or redevelopment projects located within the City. The City maintains a number of manuals and guidance documents that will be relied upon both during the plan review phase of projects one acre or more and during the maintenance activities that follow completion of the projects requiring post-construction controls.

The City will maintain copies of the most recent guidance manuals in locations readily accessible to staff and contractors.

Post-construction inspections will be conducted at least once at project sites requiring post-construction controls after construction has ceased. The inspection of these sites will be used to evaluate the effectiveness of the post-construction BMP. Information gathered will be used to evaluate the measurable goals for **the permit's** annual report.

5.2.7 Target Areas

The City has determined that certain construction activities, under some circumstances, have a greater potential to cause water quality problems. The following areas are hereby designated as high priority and will be targeted:

- Post-construction sites that have had larger than 5 acres disturbed at the time of active construction;
- Construction sites of one acre or more that have not had any post-construction BMP or other effective controls implemented to control post-construction runoff; and
- Construction sites that are within a watershed of an impaired stream as indicated on **the State's 303(d) list and have the potential to discharge pollutants that could cause violations of State Water Quality Standards.**



5.3 MCM 5: Post-Construction Management in New Development and Redevelopment Program BMP

5.3.1 Post-Construction Ordinance

The City will update, as necessary, its Post-Construction ordinance section consistent with the requirements of the SWMP and OPDES permit related to post-construction control measures. The City will present the ordinance for public comment, update the ordinance as necessary, implement the ordinance, and review the ordinance in years 3-5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and update the stormwater ordinance section consistent with the requirements of the SWMP and OPDES permit	Year 2	8/2017	Date ordinance reviewed and finding of acceptability
Present ordinance for public comment	Year 3	2/2018	Date of public review and any comments received
Adopt ordinance, if necessary	Year 4	10/2018	Date adopted, if necessary
Implement new ordinance	Year 4	11/2019	Date implemented
Review ordinance and revise as necessary	Year 5	8/2020	Date reviewed

Responsible Party: Stormwater Manager or his/her designee



5.3.2 Long-Term Operation and Maintenance of Post-Construction Stormwater Controls

The City will identify the type of long-term operation and maintenance procedures for adopted post-construction structural and/or non-structural controls. Long-term operation and maintenance procedures for adopted post-construction structural and/or non-structural controls that would be most effective for the City will be evaluated and documented. Effectiveness of controls will be measured as the amount of pollutants removed. The City will evaluate the benefits of controls and modify as necessary.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify the type of long-term operation and maintenance procedures for structural and/or non-structural controls	Year 1	10/2016	List of available controls
Evaluation and documentation of long-term operation and maintenance procedures	Year 2	5/2017	List of adopted procedures
Review existing ordinance and regulations, and develop a schedule to remove barriers that prohibit LID practices in the permit term	Year 2	10/2017	Identification of barriers and resolution
Ordinance incorporation	Year 3	10/2018	Date adopted, if necessary
Implement the type of long-term operation and maintenance procedures for structural and/or non-structural controls	Year 3	11/2018	Number of sites affected and cost to implement
Evaluate benefits of controls and modify as necessary	Year 4	5/2019	Report any modifications
Implement the type of long-term operation and maintenance procedures for structural and/or non-structural controls	Year 5	11/2019	Number of sites affected and cost to implement

Responsible Party: Stormwater Manager or his/her designee



5.3.3 Post-Construction Stormwater Control Program

The City will utilize structural and/or non-structural controls needed to promote effective post-construction stormwater management that would prevent or minimize water quality impacts and attempt to maintain pre-development runoff conditions. Evaluation of controls that are appropriate and most effective for the City. The effectiveness of controls will be measured as the amount of pollutants removed (i.e. cubic yards of sediment). Evaluate the benefits of controls. The City will modify controls as necessary.

ACTIVITY	IMPLEMENT	TARGET DATE	MEASURABLE GOAL
Identify structural and/or non-structural controls needed to promote effective post-construction stormwater management	Year 1	10/2016	List of controls
Implement Post-construction BMP in areas of construction one acre or more	Year 1-3	May	Report number of sites and types of controls used
Evaluate benefits of controls and modify as necessary	Year 4	2/2019	Report any modifications
Implement Post-construction BMPs in areas of construction one acre or more	Year 4-5	May	Report number of sites and types of controls used

Responsible Party: Stormwater Manager or his/her designee



5.3.4 Post-Construction Education

The City will review and modify as needed appropriate brochures for specific development and/or re-development sites. The City will distribute appropriate post-construction brochures to construction contractors filing for permits. The City will follow-up brochure distribution with inspection activities to determine effectiveness and modify brochures as necessary.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and modify, as necessary, post-construction educational materials such as brochures, specifications, and/or requirements	Year 1	10/2016	Report educational materials utilized
Review and modify, as needed, post-construction inspection procedures for City inspectors	Year 2	5/2017	Report inspection procedures utilized
Distribute post-construction educational materials	Year 2-5	Ongoing	Number and types of materials distributed
Train post-construction inspectors	Year 2	10/2017	Number of inspectors training and training presented
Review benefit of educational materials	Year 4	8/2019	Report Cost Benefit analysis
Continue distribution of post-construction educational materials	Year 5	Ongoing	Date implemented

Responsible Party: Stormwater Manager or his/her designee



5.3.5 Post-Construction Notification and Inspection Program

The City will update its program to receive notification of post-construction stormwater implementation devices to the City Stormwater Program for comment. The City will provide training to 100 percent of post-construction inspectors by end of Year 1. The program will include site inspections of 50 percent of the post-construction BMP annually, beginning in Year 2 for the proper use of BMP erosion, sediment, and waste control.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Update the post-construction notification program to promote effective post-construction stormwater management, and that would prevent or minimize water quality impacts and attempt to maintain pre-development runoff conditions	Year 1	10/2016	Report date notification activities developed
Implement post-construction notification program	Year 2	2/2017	Number of notifications distributed
Inspect 50% of post-construction sites one acre or more	Year 2-5	Ongoing	Number of inspections and finding
Inspect 100% of complaint driven post-construction sites one acre or more	Year 2-5	As Needed	Number of inspections and finding

Responsible Party: Stormwater Manager or his/her designee



6.0 MCM 6 - Pollution Prevention/Good Housekeeping for MS4 Operations

6.1 Permit Requirements

You must review and revise your existing pollution prevention and good housekeeping program, as necessary. The revision shall be completed within the first year after the effective date of this Permit, then as needed. You must develop new elements, as necessary, and continue to implement and enforce the operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from MS4 operations. You must:

- (1) Use training materials that you develop or that are available from EPA, DEQ, or other reputable organizations. Your pollution prevention and good housekeeping program must include 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;*
- (2) Implement a municipal employee training and education program that you will use to prevent and reduce stormwater pollution from MS4 activities. Describe any existing, available materials you plan to use. Describe how this training program will be coordinated with the outreach programs developed for the public information minimum measure and the illicit discharge MCM;*
- (3) 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. Include the authorization number or a copy of the Industrial NOI form for each facility. You must review this inventory annually and update as necessary;*
- (4) 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;*
- (5) Implement procedures to ensure that new flood management projects are assessed for impacts on water quality;*
- (6) 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;*
- (7) List and define the BMPs that you or another entity will implement in the pollution prevention and good housekeeping program. You must include, as appropriate, the months and years in which you will undertake required actions, including interim milestones and the frequency of the action. Also you must identify who will be responsible for implementing or coordinating the BMPs in this program;*



- (8) *Establish or revise (as necessary) measurable goals for each BMP, including target milestones (month and year), frequency of action(s) and identify responsible persons; and*
- (9) *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 (as required by Part V.C of this Permit).*

6.2 MCM 6 Program Implementation and Objectives

The **City's goal is to** perform municipal activities in a careful and proper manner that prevents and/or reduces pollutant runoff. Municipal operations include parks and open space maintenance, fleet and building maintenance, new construction and land disturbances, building oversight and stormwater system maintenance.

6.2.1 Operation and Maintenance Program (O&M)

The following operations and facilities are owned by the City and are subject to the requirements of this MCM:

- Maintenance yard located at 512 NW. 27th St.;
- Storage yard located at 601 Vermeer Dr.;
- Recycling facility located at 220 N. Telephone Rd.; and,
- Parks and Recreation storage area located at 1561 NE. 12th St.

6.2.2 Municipal Permitted Facilities

The following facilities are owned/operated by the City and subject to the EPA Multi-Sector General Permit (MSGP) for stormwater:

- Moore Municipal Landfill, OPDES Permit No. 3555028.

The following facilities are owned/operated by the City and subject to NPDES/OPDES discharge permits:

- Moore wastewater treatment plant, OPDES Permit No. OK00279391; and,
- Moore water treatment plant, OPDES Permit No. PWSID2001412.



6.2.3 Employee Training Program

The City will update and implement a training program for City employees. The program will address MS4 maintenance and prevention of stormwater pollution from City activities. Areas to be addressed by the training program include:

- Park and open space maintenance;
- Fleet and building maintenance;
- New construction and land disturbance; and
- Stormwater system maintenance.

6.2.4 Pollutant Control Program

The City will implement a program to control and reduce floatables and other pollutants to the MS4, including maintenance activities and schedules as well as long-term inspection procedures. The following areas will be addressed:

- City streets and roads;
- Municipal parking lots;
- City maintenance and storage yards;
- City operated recycling stations;
- City fleet maintenance shops with outdoor storage areas; and,
- Municipal salt/sand storage locations.

The City will implement structural BMP where appropriate to control contaminated runoff from City-owned storage areas for vehicles, equipment, and materials exposed to rainfall. These may include silt fencing, grassy swales, sediment ponds and/or others as deemed appropriate.

The City will rely upon public education to reduce the amount of trash and chemical pollutants placed on City streets.

City Public Works crews will be instructed to report observed pollution problems and/or trash buildup on City streets or in the City's **stormwater collection system**. City Public Works crews will remove debris and trash from streets and the MS4 system as necessary.

The City will store materials in areas that have sufficient berms and other flow control structures to prevent excess runoff of salt into local streams. The City will dispose of removed materials in a proper manner.



6.2.5 Flood Management Projects

The City will ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of water quality protection devices or practices.

6.2.6 Target Audience

The City operations and facilities are owned by the City and are subject to the requirements of this MCM training and implementation of MCM 5 will focus on City employees and their contractors.



6.3 MCM 6 Pollution Prevention/Good Housekeeping for MS4 Operations BMP

6.3.1 Storm Drain Markers

The City will develop a new stencil program to present water quality messages on storm drain inlets. The messages will be specific to particular watersheds and may contain messages regarding TMDL's and/or impaired waters. The stencils will serve as an educational reminder to keep the drains clean.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop specific message(s) for storm drain, as necessary	Year 1	10/2016	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 2	5/2017	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 3	5/2018	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 4	5/2019	Total number of storm drains installed/re-installed
Review system and determine future updates/needs	Year 5	10/2020	Updates and assessment

Responsible Party: Stormwater Manager or his/her designee



6.3.2 Survey Municipal Operations and Implement Necessary BMP

City staff will perform a complete survey of City municipal operations to determine if any BMP needs to be updated and/or implemented. The City will research the type of controls needed to obtain the best results for stormwater quality and obtain necessary funding to implement the controls. The City will continue to implement BMP at designated locations, and will develop training procedures for implementation of BMP. City staff will inspect BMP for proper implementation.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Survey of municipal/industrial operations	Year 1	5/2016	Report findings of survey
Develop a list of City facilities, as necessary, subject to the DEQ Multi-Sector General Permit or individual OPDES or NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to the City SMS4.	Year 1	8/1016	Report list
Assess the need of specific BMP required	Year 1	10/2010	Report BMPs selected
Develop training for BMP implementation	Year 2	5/2017	Report on training program developed
Train City personnel on BMP implementation	Year 2	8/2017	Report number of personnel trained and training program presented
Implement necessary BMPs where applicable	Year 2-5	Ongoing	Report the number and type of BMPs utilized, and their location
Re-survey municipal/industrial operations for additional BMP utilization	Year 3-5	May	Number of surveys completed and findings

Responsible Party: Stormwater Manager or his/her designee



6.3.3 City Employee/Contractor Training

The City will provide training to identified City employees, and contractors hired by the City, who are responsible for municipal and industrial stormwater operations. The training will be an annual requirement. The training program will include education on preventing and reducing stormwater pollution. Attendees will receive a certificate for completion of the program and the City will document trained employees and/or contractors. The City of Moore will annually send appropriate staff members to the MS4 Stormwater Conference when held in the U.S. EPA Region 6 area and/or other areas when funding allows.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop training programs	Year 1	10/2016	Report training programs developed
Perform training	Year 2	2/2017	Report training program presented and number and type of personnel
Perform training	Year 3	2/2018	Report training program presented and number and type of personnel
Perform training	Year 4	2/2019	Report training program presented and number and type of personnel
Assess effectiveness of training	Year 4	8/2019	Provide results of assessment
Perform training	Year 5	2/2020	Report training program presented and number and type of personnel

Responsible Party: Stormwater Manager or his/her designee



6.3.4 Good Housekeeping Maintenance Program

The City will inspect and assess current structural controls and maintenance efforts to reduce floatables and other pollutants to include street sweeping, catch basin, and ditch/swale cleaning efforts. City staff will determine if the controls are effective and develop an ongoing schedule for good housekeeping maintenance activities. City staff will perform annual inspections of facilities, structural controls, and maintenance efforts.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Waste oil recycling	Annually	As Needed	Record the number of gallons of oil waste recycled from City activities
Develop inspection and assessment procedures.	Year 1	8/2016	Report inspection and assessment procedures developed
Perform inspection on 20% of the MS4 and repair as necessary	Annually	10/2016	Report findings and repairs
Inspect and assess 20 % of current MS4 structural controls and maintenance efforts	Annually	10/2016	Develop report of findings
Perform street sweeping on major streets, as required	Year 1-5	Ongoing	Report number of miles swept
Perform street sweeping on residential streets, as required	Year 1-5	Ongoing	Report number of miles swept
Perform catch-basin cleaning, as required	Year 1-5	Ongoing	Report number of basins cleaned
Perform ditch/swale cleaning as required	Year 1-5	Ongoing	Report linear feet of ditch/swale cleaning performed
Assess effectiveness of maintenance program	Year 4	8/2019	Provide results of assessment

Responsible Party: Stormwater Manager or his/her designee



7.0 Impaired Waterbodies and Total Maximum Daily Load (TMDL) Requirements

7.1 Permit Requirements

III. B Established Total Maximum Daily Load Allocations

*1. If a TMDL or watershed plan in lieu of a TMDL is established for any waterbody into which a MS4 discharges prior to the date that the MS4 submits a NOI, and if that TMDL includes a wasteload allocation (WLA) or load allocation (LA) for a parameter likely to be discharged by the MS4, **the MS4's** discharges must meet any limitations, conditions, or other requirements of the implementation plan associated with that WLA, LA and/or TMDL within any timeframes established in the TMDL or watershed plan.*

Monitoring and reporting of the discharges may also be required as appropriate to ensure compliance with the TMDL, or watershed plan. The MS4 must adopt any WLAs assigned to its discharges specified in the TMDL, or similar targets in the watershed plan, as measurable goals in the SWMP. If the TMDL or watershed plan relies on a BMP-based approach, effective implementation of additional TMDL or watershed plan-related BMPs will be sufficient to implement applicable WLAs. This BMP-based approach is consistent with EPA memoranda dated November 22, 2012¹ (EPA 2002) and November 26, 2014² (EPA 2014). If the TMDL or watershed plan specifies additional requirements, the MS4 must also meet these additional requirements.

7.2 TMDL Program Implementation and Objectives

Lake Thunderbird is on Oklahoma's 2012 303(d) list for impaired beneficial uses of public/private water supply and warm water aquatic community life. Causes of impairment have been identified in the Final Lake Thunderbird Report for Nutrient, Turbidity, and Dissolved Oxygen TMDLs, approved by the EPA on November 13, 2013, as low oxygen levels, high levels of chlorophyll-*a*, and high turbidity (DEQ, 2010a). Lake Thunderbird is designated by the Oklahoma Water Quality Standards (OWRB 2011) as a Sensitive Water Supply (SWS) since the Lake serves as the primary public water supply source for the cities of Norman, Midwest City and Del City. There are three municipalities within the Lake Thunderbird watershed: the City of Moore, the City of Norman and Oklahoma City.

The City of Moore Compliance Plan is a plan for achieving the required 35% waste load (WL) reduction of total suspended solids (TSS), total nitrogen (TN), total phosphorous (TP), and carbonaceous biological oxygen demand (CBOD) established in the TMDL. The "waste load" (WL) reduction activities are also included as minimum control measures in the City of Moore Oklahoma Pollutant Discharge Elimination System (OPDES) Phase II Small MS4 permit required Storm Water Management Plan.



The CP presents the strategies to meet the WL reductions and TMDL goals as specified in the TMDL and current MS4 permit. Specifically, the CP will provide the basis for the City to:

1. Provide Best Management Practices (BMPs) to achieve an equivalent of 35% WL reductions of its contributing watershed which stormwater runoff is managed to the maximum extent practicable (MEP).
2. Meet TMDL Waste load Allocations (WLAs) approved by the Oklahoma Department of Environmental Quality (DEQ) and EPA.
3. Educate and involve residents, businesses, and stakeholder groups in achieving measurable water quality improvements.
4. Establish a reporting framework that will be used for annual reporting as required **in the City's OPDES MS4 Permit.**
5. Identify necessary maintenance, adaptive management, staffing, and financial strategies to implement the CP.

7.3 TMDL Program BMP

To meet the 35% reduction goal, the City will utilize a diverse and comprehensive approach for meeting the TMDL requirements as needed. This includes:

- Implementing stormwater management projects, including traditional BMPs and LID practices where applicable, and Educational BMP;
- Employing a variety of programs to improve water quality, including mechanical street sweeping, construction site inspections, and IDDE; and
- Fostering partnerships to encourage private development of stormwater management practices.

Finally, the City believes that by implementing stormwater management projects, employing a variety of programs, and fostering partnerships, it will be on track to meet the TMDL goals. Implementing these practices will provide a reduction of 35% of its current WL to meet the TMDL requirement of 205.1 Kg/day of TN, 44.5 Kg/day of TP, 781.3 Kg/day of CBOD, and 16,236.0 Kg/day of TSS by the end of the third MS4 permit period. Education and enforcement programs focused on illicit discharges, in concert with water and sanitary sewer infrastructure improvements, will also result in a reduction of nutrients. A monitoring program focused on illicit discharges will address the TMDL for TSS and nutrients from construction and industrial permittees.



7.4 TMDL Implementation Report

The City of Moore will include a TMDL implementation report as part of its MS4 annual report. The TMDL implementation report will include the status and actions taken by the City to implement the TMDL compliance plan and monitoring program. The TMDL implementation report will document relevant actions taken by the City that affect MS4 stormwater discharges to the waterbody segments that are the subject of the TMDL. This TMDL implementation report will also identify the status of any applicable TMDL implementation schedule milestones, monitoring data, and BMP implementation.

7.5 Evaluating Progress with the TMDL

Compliance with the TMDL and progress toward achieving the wasteload allocations and load reduction goals will be evaluated at each renewal of the MS4 permit, generally every 5 years. Consideration will be given to:

- Water quality data and results from the pollutant monitoring and tracking program;
- The status of achieving milestones and accomplishing items in the current compliance plan;
- Any revisions that have been made to or proposed for the compliance plan; and,
- Any proposed enhancements to the compliance plan for the next permit term.

If sufficient progress is not demonstrated, an updated compliance plan and implementation schedule will be required to be submitted within 6 months. Noncompliance may subject the permittee to enforcement action.

8.0 Deadlines for SWMP Compliance

Full implementation of the SWMP will be developed and implemented as included in individual MCM BMP.

9.0 Roles and Responsibilities

Per OPDES permit requirements, the SWMP, together with any local agreements, must clearly identify the roles and responsibilities of the City. Roles and responsibilities for the City's OPDES Permit requirements are included in individual MCM BMP.



10.0 SWMP Resources

The City provides adequate funds, staff, equipment and support capabilities to implement its activities under the SWMP. The cost of the SWMP and permit implementation is funded by the City.

If warranted, additional controls will be developed and implemented in accordance with the City's OPDES permit.

Current Staff

Community Development Director - Elizabeth Jones

Stormwater Manager - Mike Harlan

Stormwater Contractor - _____

11.0 SWMP Review and Updates

The SWMP will be evaluated annually to determine the plan's effectiveness and efficiency. The SWMP will be revised as necessary to support needed changes based on the SWMP evaluation and/or requests made through permit requirements. The annual review of the current SWMP will be conducted in conjunction with the preparation of the annual report required under this permit.

If required, the SWMP will be revised by the City during the term of the permit in accordance with the approved permit procedures. Though not anticipated, the City will implement the SWMP on all new areas added to their portion of the MS4 (or for which they become responsible for implementation of stormwater quality controls) as expeditiously as practicable, but not later than three years from addition of the new areas. Within 90 days of a transfer of ownership, operational authority or responsibility for SWMP implementation, the City will create a plan for implementing the SWMP on all affected areas.

If warranted, additional controls will be developed and implemented in accordance with the City's OPDES Permit.



12.0 Retention of SWMP Records

The City retains the SWMP and all associated records for at least three years after coverage under this permit terminates.

If warranted, additional controls will be developed and implemented in accordance with the City's OPDES permit.

ATTACHMENT A

BMP Summary Tables

1.0 MCM 1 - Public Education, Outreach Program BMP

1.3.1 Brochures

City brochures will be distributed to specific target audiences. The City will update its distribution list to include the number of brochures to be sent, the specific audiences, as well as the appropriate brochures for specific activities, such as retail gasoline outlets, car washes, restaurants, residents and schoolchildren. The City will distribute brochures to 50 percent of the target audience every 2 years and follow-up with inspection activities to determine the need to modify brochures in years 3 and 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify specific brochure target audiences	Year 1	5/2016	Number of target audiences
Develop a list of the number of brochures/handouts to be created	Year 2	8/2016	Number of brochures/handouts to be created by audience
Create and/or update brochures/handouts	Year 2	11/2016	Number of brochures and handouts created
Distribute brochures and/or handouts	Year 2	2/2017	Meet 50% distribution of target audience
Follow-up inspections	Year 3	2/2018	Number of inspections performed and targets that retained message
Effectiveness of materials assessed and documented	Year 3	5/2018	Overall effectiveness based on follow-up inspections
Evaluate need for modification of brochures and/or handouts	Year 3	11/2018	Number of new brochures/handouts recommended
Re-distribute brochures/handouts	Year 4	2/2019	Meet 50% distribution of target audience
Follow-up inspections	Year 5	2/2020	Number of inspections performed and targets that retained message
Evaluate need for modification of brochures and/or handouts	Year 5	8/2020	Number of new brochures/handouts recommended

Responsible Party: Stormwater Manager or his/her designee

1.3.2 Water Bill Inserts

The City will include a stormwater educational message on 100% of City water bills once annually. The City will then determine the need to modify the message in year 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Create and distribute an educational stormwater message to be included on 100% of City water bills once during the year	Annually	July	Number of water bills distributed
Evaluate the need for modification of the educational message	Year 4	2-2019	Record the new message and an estimate of water bills to be distributed the following year.

Responsible Party: Stormwater Manager or his/her designee

1.3.3 City Stormwater Webpage

The City will continue to use and update its stormwater webpage created in the previous permit term. The City will review the webpage annually and make necessary changes. It will also use the webpage to advertise stormwater-related events, such as annual waste disposal and recycling, construction permits and current programs and updates.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and update the stormwater webpage	Annually	August	Record updates made to the webpage

Responsible Party: Stormwater Manager or his/her designee

1.3.4 School Programs

The City will continue to provide a "School Education Program" by creating awareness in the community about protecting water quality from nonpoint source pollution. The City will identify local schools for participation. The program will be evaluated annually; as well as establishing new goals and identify additional schools.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify benefits of a School Education Program	Year 1	5/2016	Identify beneficial programs
Establish program goals	Year 1	10/2016	Target student audience
Establish schools for distribution	Year 2	2/2017	Number of schools
Implement school program	Year 2-5	May	Dates program(s) presented
Evaluate program and establish new goals	Year 4	2/2019	Receive teacher evaluations
Add additional schools, as needed	Year 4	5/2019	Number of schools added
Assess benefits of program	Year 5	2/2020	Report benefit assessment

Responsible Party: Stormwater Manager or his/her designee

1.3.5 Phase II Program Meeting

The City will discuss its Small Phase II SWMP in one public City Council meeting per year. At the meeting, there will be an opportunity for the public to discuss and provide recommendations to the SWMP. The City will comply with state and local public notice requirements related to each meeting.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop program requirements and commitments and present at meetings	Annually	May	Number of Council and citizens in attendance
Stormwater program status presentation at City Council meeting	Annually	May	Number of Council and citizens in attendance

Responsible Party: Stormwater Manager or his/her designee

1.3.6 Recycling/Pollutant Collection

The City will continue to promote pollutant collection and recycling at its facility and semi-annual Citywide recycling events. This information will be made available in handouts and on the Recycle Moore website. The City will perform a cost effectiveness evaluation in year 5 to determine benefits of the program.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify best way to sponsor and/or promote recycling/pollutant collection	Year 1	4/2016	Method identified
Develop appropriate messages and distribute information	Year 1	5/2016	Group(s) participating
Quantify amount of messages/information hits	Year 1	8/2016	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 2	8/2017	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 3	8/2018	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 4	8/2019	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 5	8/2020	Messages distributed/hits on website
Determine benefits of program	Year 5	9/2020	Cost effectiveness evaluation

Responsible Party: Stormwater Manager or his/her designee

1.3.7 Household Hazardous Waste Collection

The City will continue to promote household hazardous waste collection and recycling. This information will be made available in handouts and on the City of Moore Household Hazardous Waste Collection website. The City will perform a cost effectiveness evaluation in year 5 to determine benefits of the program.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify best way to sponsor and/or promote household hazardous waste collection	Year 1	4/2016	Method identified
Develop appropriate messages and distribute information	Year 1	5/2016	Group(s) participating
Quantify amount of messages/information hits	Year 1	8/2016	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 2	8/2017	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 3	8/2018	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 4	8/2019	Messages distributed/hits on website
Quantify amount of messages/information hits	Year 5	8/2020	Messages distributed/hits on website
Determine benefits of program	Year 5	9/2020	Cost effectiveness evaluation

Responsible Party: Stormwater Manager or his/her designee

1.3.8 Storm Drain Markers

The City will develop a new stencil program to present water quality messages on storm drain inlets. The messages will be specific to particular watersheds and may contain messages regarding TMDL's and/or impaired waters. The stencils will serve as an educational reminder to keep the drains clean.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Install message on storm drain, as necessary	Year 1	5/2016	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 2	5/2017	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 3	5/2018	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 4	5/2019	Total number of storm drains installed/re-installed
Review system and determine future updates/needs	Year 5	4/2020	Updates and assessment

Responsible Party: Stormwater Manager or his/her designee

2.0 MCM 2 – Public Participation and Involvement Program BMP

2.3.1 Phase II Program Meeting

The City will discuss its Phase II SWMP in one public City Council meeting per year. At the meeting, there will be an opportunity for the public to discuss and provide recommendations to the SWMP. The City will comply with state and local public notice requirements related to each meeting.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop program requirements and commitments and present at meetings	Annually	May	Number Council and Citizens in attendance
Storm water program status presentation at City Council meeting	Annually	May	Number Council and Citizens in attendance

Responsible Party: Stormwater Manager or his/her designee

2.3.2 Public Information Hotline

The City's existing reporting hotline will continue to be used for citizen complaint and reporting. Advertisement of the hotline will also serve public involvement, and will be accomplished through the use of the City Stormwater Website at <http://www.cityofmoore.com/stormwatersavvy>. Funding for the hotline will be assessed in years 2 and 4. The City will evaluate the effectiveness of the program in year 3. Necessary changes to the program will be made in year 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Advertising of Hotline on Stormwater Website	Year 1	4/2016	Report date and nature of advertisement
Assessment of Hotline funding	Year 1	5/2016	Report amount of funding
Continue implementation of hotline	Year 1	8/2016	Report number of calls received and website hits
Continue implementation of hotline	Year 2	8/2017	Report number of calls received and website hits
Hotline effectiveness assessment	Year 3	5/2018	Report findings
Continue implementation of hotline	Year 3	8/2018	Report number of calls received and website hits
Assessment of Hotline funding	Year 4	10/2018	Report amount of funding
Continue implementation of hotline	Year 4	8/2019	Report number of calls received and website hits
Continue implementation of hotline	Year 5	8/2020	Report number of calls received and website hits
Changes to Hotline Program made (as necessary)	Year 5	As Needed	Report changes to program

Responsible Party: Stormwater Manager or his/her designee

2.3.3 Recycling/Pollutant Collection

The City will continue to sponsor and/or conduct semi-annual City wide clean-up events, as well as continue operations of its recycling center. After each event, the City will quantify the amount of refuse/material collected. The City will maintain the quantity of recyclable material collected annually. The City will perform a cost effectiveness evaluation in year 5 to determine benefits of the program.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Sponsor and/or promote City wide clean-up events	Year 1	4/2016	Method identified
Develop appropriate activities and solicit specific groups	Year 1	5/2016	Group(s) participating
Quantify amount of refuse/material collected	Year 1	8/2016	Quantity collected
Quantify amount of refuse/material collected	Year 2	8/2017	Quantity collected
Quantify amount of refuse/material collected	Year 3	8/2018	Quantity collected
Quantify amount of refuse/material collected	Year 4	8/2019	Quantity collected
Quantify amount of refuse/material collected	Year 5	8/2020	Quantity collected
Determine benefits of program	Year 5	9/2020	Cost effectiveness evaluation

Responsible Party: Stormwater Manager or his/her designee

2.3.4 School Programs

The City will continue to present a "School Education Program" in the community about protecting water quality from nonpoint source pollution. The City will continue to identify groups such as elementary and middle schools, as well as other groups such as the Boy and Girl scout programs. The program will be evaluated annually; as well as establishing new goals and identification of additional audiences.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Establish program goals	Year 1	5/2016	Target audiences
Establish curriculum to be delivered	Year 1	10/2016	Types and number of messages
Implement school program	Year 2	5/2017	Dates program(s) presented
Implement school program	Year 3	5/2018	Dates program(s) presented
Implement school program	Year 4	5/2019	Dates program(s) presented
Evaluate program and establish new goals	Year 4	8/2019	Receive teacher evaluations
Add additional schools, as needed	Year 4	10/2019	Number of schools added
Implement school program	Year 5	2/2020	Dates program(s) presented
Assess benefits of program	Year 5	5/2020	Report benefit assessment

Responsible Party: Stormwater Manager or his/her designee

3.0 MCM 3 – Illicit Discharge Detection and Elimination (IDDE) Program BMP

3.3.1 Storm Sewer Map Update

The City will update the existing storm sewer map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls within the MS4. The map may be developed with GIS. Outfalls may be located with GPS field survey equipment. The final map will become a printed atlas for IDDE and spill response use.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Update 20% of the MS4 map	Year 1	10/2016	Total number of outfalls
Update 20% of the MS4 map	Year 2	10/2017	Total number of outfalls
Update 20% of the MS4 map	Year 3	10/2018	Total number of outfalls
Update 40% of the MS4 map	Year 4	10/2019	Total number of outfalls
Review map and determine future updates/needs	Year 5	2/2020	Map updates and assessment

Responsible Party: Stormwater Manager or his/her designee

3.3.2 Education and Training for City Field Staff

Specific emphases on educating and training City personnel are important and integral aspects of the SWMP. Many pollution problems can be avoided by having an informed populous willing to participate in improving stormwater quality. The City is committed to establishing training classes to facilitate the proper management and disposal of used oil and potentially hazardous materials.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
City to develop training classes for IDDE	Year 1	10/2016	Record the name of each training class developed
City staff to attend training classes developed for IDDE	Annually	May	Record the number of participants attending each training class
City to review and update training classes for IDDE	Year 5	2/2020	Record the updates and/or new training classes developed

Responsible Party: Stormwater Manager or his/her designee

3.3.3 Illicit Discharge/Illegal Dumping Hotline

The City's existing reporting hotline will continue to be used for citizen complaint and reporting. Advertisement of the hotline will also serve public involvement, and will be accomplished through the use of the City Stormwater Website at <http://www.cityofmoore.com/stormwatersavvy>. Funding for the hotline will be assessed in years 2 and 4. The City will evaluate the effectiveness of the program in year 3. Necessary changes to the program will be made in year 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Advertising of Hotline on Stormwater Website	Year 1	4/2016	Report date and nature of advertisement
Assessment of Hotline funding	Year 1	5/2016	Report amount of funding
Continue implementation of hotline	Year 1	8/2016	Report number of calls received and website hits
Continue implementation of hotline	Year 2	8/2017	Report number of calls received and website hits
Hotline effectiveness assessment	Year 3	5/2018	Report findings
Continue implementation of hotline	Year 3	8/2018	Report number of calls received and website hits
Assessment of Hotline funding	Year 4	10/2018	Report amount of funding
Continue implementation of hotline	Year 4	8/2019	Report number of calls received and website hits
Continue implementation of hotline	Year 5	8/2020	Report number of calls received and website hits
Changes to Hotline Program made (as necessary)	Year 5	As Needed	Report changes to program

Responsible Party: Stormwater Manager or his/her designee

3.3.4 Procedures for Responding to Illicit Discharges and Spills

To address procedures for responding to illicit discharges and spills, the City will utilize the EPA Cooperative Agreement No. X-82907801-0 Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments. In addition to the Guidance Manual the City will develop field forms and provide training on field inspection and inspection for utilization.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review EPA Manual and develop field forms as necessary	Year 1	8/2016	Report the number of forms developed for field use
Develop training class for field inspections	Year 1	10/2016	Report number and content of training classes developed
Conduct Training Classes	Year 1	11/2016	Report number of inspectors and staff in attendance
Conduct Training Classes	Year 2	11/2017	Report number of inspectors in attendance
Conduct Training Classes	Year 3	11/2018	Report number of inspectors in attendance
Conduct Training Classes	Year 4	11/2019	Report number of inspectors in attendance
Re-Evaluate Training Classes	Year 5	8/2020	Report number of training classes needing update

Responsible Party: Stormwater Manager or his/her designee

3.3.5 Ordinance

The City will review and update, as necessary, the existing stormwater ordinance section consistent with the requirements of the SWMP and OPDES permit. The City will present the ordinance for public comment and then move to adopt and implement the ordinance. The City will review the ordinance in years 3-5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and update the stormwater ordinance section consistent with the requirements of the SWMP and OPDES permit	Year 2	8/2017	Date ordinance reviewed and finding of acceptability
Present ordinance for public comment, if required	Year 3	2/2018	Date of public review and any comments received
Adopt ordinance, if necessary	Year 3	10/2018	Date adopted, if necessary
Implement new ordinance	Year 4	11/2019	Date implemented
Review ordinance and revise as necessary	Year 5	8/2020	Date reviewed

Responsible Party: Stormwater Manager or his/her designee

3.3.6 MS4 IDDE Source Investigation and Elimination

The City will respond to, identify, and screen for the presence of illicit discharges. During the screening activity, if the RP is identified, the City will notify the RP that a proposed plan of action must be submitted to the City within a reasonable amount of time depending on the situation (usually two weeks). In the interim, the City will require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4. All outfalls in the MS4 will be screened at least once per permit term.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
MS4 Screening	Year 1	5/2016	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.
MS4 Screening	Year 2	5/2017	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.
MS4 Screening	Year 3	5/2018	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.
MS4 Screening	Year 4	5/2019	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.
MS4 Screening	Year 5	5/2020	Report the number of illicit discharges and/or connections, and the approximate area of the MS4 screened.

Responsible Party: Stormwater Manager or his/her designee

3.3.7 Complaint Inspections

The City will conduct inspections, as determined appropriate, in response to complaints, and shall conduct follow-up inspections as needed to ensure that corrective measures have been implemented by the RP. If a RP is identified: the City will notify the RP that a proposed plan of action must be submitted to the department within a reasonable amount of time depending on the situation (usually 2 weeks); the City will require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4; where elimination of an illicit discharge within 30 days is not possible, the City will request an expeditious schedule for removal of the discharge; and if the City does not agree with the corrective measure(s) and/or the time schedule, the City will begin enforcement procedures, and/or refer the case to the ODEQ for further action and/or enforcement.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
MS4 Inspections	Year 1	As Requested	Report the number of illicit discharges /connections inspected and the number of enforcement actions
MS4 Inspections	Year 2	As Requested	Report the number of illicit discharges / connections inspected and the number of enforcement actions
MS4 Inspections	Year 3	As Requested	Report the number of illicit discharges / connections inspected and the number of enforcement actions
MS4 Inspections	Year 4	As Requested	Report the number of illicit discharges / connections inspected and the number of enforcement actions
MS4 Inspections	Year 5	As Requested	Report the number of illicit discharges / connections inspected and the number of enforcement actions

Responsible Party: Stormwater Manager or his/her designee

3.3.8 Data Management

The City will update existing databases, and perform assessments to identify the best way to manage Phase II permit information. The City may continue to utilize existing off-the-shelf GIS software for data development and retention, or its own developed spreadsheets. The City will also utilize the database to develop reports for submission to ODEQ.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify database needs	Year 1	5/2016	Record needs and establish goals
Evaluate database standards	Year 1	10/2016	Provide database update needs
Obtain database funding	Year 2	8/2017	Date funding obtained
Implement database operations	Year 2-5	Ongoing	Date implemented
Review database benefits	Year 4	10/2019	Date reviewed
Establish new goals and funding needs	Year 5	8/2020	Provide dates of funding and new goals

Responsible Party: Stormwater Manager or his/her designee

4.0 MCM 4 - Construction Site Stormwater Runoff Control Program BMP

4.3.1 Construction Site Inspections

The City will continue to utilize its Construction Site Inspections program, which receives notification of new construction sites that have an area of at least one acre or more soil disturbance. The program will include site inspections for the proper use of BMP for erosion, sediment and waste control. Fifty percent of all construction sites of one acre or more will be inspected. The program will also include review of the Stormwater Pollution Prevention Plan (SWPPP) and procedures for receiving and considering public comment. The city will train 100 percent of construction inspectors by year 2.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop construction notification program to include requirements for construction site operators to implement appropriate BMP for erosion and sediment controls and control waste	Year 1	5/2016	Report date program adopted
Utilize procedures for SWPPP receipt for proposed construction sites one acre or more	Year 1	6/2016	Report date procedures adopted
Maintain and use inspection procedures for the BMP	Year 1	8/2016	Report date procedures adopted
Develop Construction Inspector training program	Year 1	10/2016	Report date program adopted
Train Construction Site Inspectors	Year 2	2/2017	Report number of Training sessions conducted and inspectors trained
Inspect 50% of construction sites one acre or more	Year 2-5	May	Number of inspections and finding
Inspect 100% of complaint driven sites one acre or more	Year 2-5	As Required	Number of inspections and finding
Evaluate the need for training program revisions	Year 5	2/2020	Number of training programs revised

Responsible Party: Stormwater Manager or his/her designee

4.3.2 Ordinance

The City will adopt an effective ordinance prohibiting construction related discharges to the MS4 and periodically evaluate the need for modifications. During the first twelve months of the permit, the City will compare model construction ordinances to existing City ordinances and evaluate necessary modifications to local codes, if needed. The City will evaluate staffing needs and acquire additional resources, if needed, to ensure the City will be able to inspect and enforce all provisions in the ordinance during year 2. The City will delegate management authority to a key City staff person to manage all inspection and enforcement activities. The City will periodically evaluate program effectiveness and make changes, as appropriate to the ordinance and/or City resources and manpower.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and update the stormwater ordinance section consistent with the requirements of the SWMP and OPDES permit	Year 2	8/2017	Date ordinance reviewed and finding of acceptability
Present ordinance for public comment if required	Year 3	2/2018	Date of public review and any comments received
Revise ordinance, if necessary	Year 3	10/2018	Date revised, if necessary
Implement ordinance	Year 4	11/2019	Date implemented
Review ordinance and revise as necessary	Year 5	8/2020	Date reviewed

Responsible Party: Stormwater Manager or his/her designee

4.3.3 Public Information Receipt

The City's existing reporting hotline will continue to be used for citizen complaint and reporting. Advertisement of the hotline will also serve public involvement, and will be accomplished through the use of the City Stormwater Website at <http://www.cityofmoore.com/stormwatersavvy>. Funding for the hotline will be assessed in years 2 and 4. The City will evaluate the effectiveness of the program in year 3. Necessary changes to the program will be made in year 5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Advertising of Hotline on Stormwater Website	Year 1	4/2016	Report date and nature of advertisement
Assessment of Hotline funding	Year 1	5/2016	Report amount of funding
Continue implementation of hotline	Year 1	8/2016	Report number of calls received and website hits
Continue implementation of hotline	Year 2	8/2017	Report number of calls received and website hits
Hotline effectiveness assessment	Year 3	5/2018	Report findings
Continue implementation of hotline	Year 3	8/2018	Report number of calls received and website hits
Assessment of Hotline funding	Year 4	10/2018	Report amount of funding
Continue implementation of hotline	Year 4	8/2019	Report number of calls received and website hits
Continue implementation of hotline	Year 5	8/2020	Report number of calls received and website hits
Changes to Hotline Program made (as necessary)	Year 5	As Needed	Report changes to program

Responsible Party: Stormwater Manager or his/her designee

4.3.4 Site Plan Review

The City will continue to use its building site review checklist for site plan review of construction sites one acre or more. The City will continue to implement plan review, and review all site plans annually. The City will evaluate the effectiveness of the program and modify as necessary.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop administrative procedures for site plan review	Year 1	5/2016	Report date procedures adopted
Implement plan review	Year 1-3	Ongoing	Report number reviews
Evaluate effectiveness of program	Year 3	8/2018	Report findings
Modify program as necessary	Year 3	10/2018	Report updates
Implement plan review	Year 3-5	Ongoing	Report number of reviews
Evaluate effectiveness of program	Year 5	8/2020	Report findings
Modify program as necessary	Year 5	10/2020	Report updates

Responsible Party: Stormwater Manager or his/her designee

5.0 MCM 5 - Post-Construction Management in New Development and Redevelopment Program BMP

5.3.1 Post-Construction Ordinance

The City will update, as necessary, its Post-Construction ordinance section consistent with the requirements of the SWMP and OPDES permit related to post-construction control measures. The City will present the ordinance for public comment, update the ordinance as necessary, implement the ordinance, and review the ordinance in years 3-5.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and update the stormwater ordinance section consistent with the requirements of the SWMP and OPDES permit	Year 2	8/2017	Date ordinance reviewed and finding of acceptability
Present ordinance for public comment	Year 3	2/2018	Date of public review and any comments received
Adopt ordinance, if necessary	Year 4	10/2018	Date adopted, if necessary
Implement new ordinance	Year 4	11/2019	Date implemented
Review ordinance and revise as necessary	Year 5	8/2020	Date reviewed

Responsible Party: Stormwater Manager or his/her designee

5.3.2 Long-Term Operation and Maintenance of Post-Construction Stormwater Controls

The City will identify the type of long-term operation and maintenance procedures for adopted post-construction structural and/or non-structural controls. Long-term operation and maintenance procedures for adopted post-construction structural and/or non-structural controls that would be most effective for the City will be evaluated and documented. Effectiveness of controls will be measured as the amount of pollutants removed. The City will evaluate the benefits of controls and modify as necessary.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Identify the type of long-term operation and maintenance procedures for structural and/or non-structural controls	Year 1	10/2016	List of available controls
Evaluation and documentation of long-term operation and maintenance procedures	Year 2	5/2017	List of adopted procedures
Review existing ordinance and regulations, and develop a schedule to remove barriers that prohibit LID practices in the permit term	Year 2	10/2017	Identification of barriers and resolution
Ordinance incorporation	Year 3	10/2018	Date adopted, if necessary
Implement the type of long-term operation and maintenance procedures for structural and/or non-structural controls	Year 3	11/2018	Number of sites affected and cost to implement
Evaluate benefits of controls and modify as necessary	Year 4	5/2019	Report any modifications
Implement the type of long-term operation and maintenance procedures for structural and/or non-structural controls	Year 5	11/2019	Number of sites affected and cost to implement

Responsible Party: Stormwater Manager or his/her designee

5.3.3 Post-Construction Stormwater Control Program

The City will utilize structural and/or non-structural controls needed to promote effective post-construction stormwater management that would prevent or minimize water quality impacts and attempt to maintain pre-development runoff conditions. Evaluation of controls that are appropriate and most effective for the City. The effectiveness of controls will be measured as the amount of pollutants removed (i.e. cubic yards of sediment). Evaluate the benefits of controls. The City will modify controls as necessary.

ACTIVITY	IMPLEMENT	TARGET DATE	MEASURABLE GOAL
Identify structural and/or non-structural controls needed to promote effective post-construction stormwater management	Year 1	10/2016	List of controls
Implement Post-construction BMP in areas of construction one acre or more	Year 1-3	May	Report number of sites and types of controls used
Evaluate benefits of controls and modify as necessary	Year 4	2/2019	Report any modifications
Implement Post-construction BMPs in areas of construction one acre or more	Year 4-5	May	Report number of sites and types of controls used

Responsible Party: Stormwater Manager or his/her designee

5.3.4 Post-Construction Education

The City will review and modify as needed appropriate brochures for specific development and/or re-development sites. The City will distribute appropriate post-construction brochures to construction contractors filing for permits. The City will follow-up brochure distribution with inspection activities to determine effectiveness and modify brochures as necessary.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Review and modify, as necessary, post-construction educational materials such as brochures, specifications, and/or requirements	Year 1	10/2016	Report educational materials utilized
Review and modify, as needed, post-construction inspection procedures for City inspectors	Year 2	5/2017	Report inspection procedures utilized
Distribute post-construction educational materials	Year 2-5	Ongoing	Number and types of materials distributed
Train post-construction inspectors	Year 2	10/2017	Number of inspectors training and training presented
Review benefit of educational materials	Year 4	8/2019	Report Cost Benefit analysis
Continue distribution of post-construction educational materials	Year 5	Ongoing	Date implemented

Responsible Party: Stormwater Manager or his/her designee

5.3.5 Post-Construction Notification and Inspection Program

The City will update its program to receive notification of post-construction stormwater implementation devices to the City Stormwater Program for comment. The City will provide training to 100 percent of post-construction inspectors by end of Year 1. The program will include site inspections of 50 percent of the post-construction BMP annually, beginning in Year 2 for the proper use of BMP erosion, sediment, and waste control.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Update the post-construction notification program to promote effective post-construction stormwater management, and that would prevent or minimize water quality impacts and attempt to maintain pre-development runoff conditions	Year 1	10/2016	Report date notification activities developed
Implement post-construction notification program	Year 2	2/2017	Number of notifications distributed
Inspect 50% of post-construction sites one acre or more	Year 2-5	Ongoing	Number of inspections and finding
Inspect 100% of complaint driven post-construction sites one acre or more	Year 2-5	As Needed	Number of inspections and finding

Responsible Party: Stormwater Manager or his/her designee

6.0 MCM 6 - Pollution Prevention and Good Housekeeping for MS4 Operations Program BMP

6.3.1 Storm Drain Markers

The City will develop a new stencil program to present water quality messages on storm drain inlets. The messages will be specific to particular watersheds and may contain messages regarding TMDL's and/or impaired waters. The stencils will serve as an educational reminder to keep the drains clean.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop specific message(s) for storm drain, as necessary	Year 1	10/2016	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 2	5/2017	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 3	5/2018	Total number of storm drains installed/re-installed
Install message on storm drain, as necessary	Year 4	5/2019	Total number of storm drains installed/re-installed
Review system and determine future updates/needs	Year 5	10/2020	Updates and assessment

Responsible Party: Stormwater Manager or his/her designee

6.3.2 Survey Municipal Operations and Implement Necessary BMP

City staff will perform a complete survey of City municipal operations to determine if any BMP needs to be updated and/or implemented. The City will research the type of controls needed to obtain the best results for stormwater quality and obtain necessary funding to implement the controls. The City will continue to implement BMP at designated locations, and will develop training procedures for implementation of BMP. City staff will inspect BMP for proper implementation.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Survey of municipal/industrial operations	Year 1	5/2016	Report findings of survey
Develop a list of City facilities, as necessary, subject to the DEQ Multi-Sector General Permit or individual OPDES or NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to the City SMS4.	Year 1	8/1016	Report list
Assess the need of specific BMP required	Year 1	10/2010	Report BMPs selected
Develop training for BMP implementation	Year 2	5/2017	Report on training program developed
Train City personnel on BMP implementation	Year 2	8/2017	Report number of personnel trained and training program presented
Implement necessary BMPs where applicable	Year 2-5	Ongoing	Report the number and type of BMPs utilized, and their location
Re-survey municipal/industrial operations for additional BMP utilization	Year 3-5	May	Number of surveys completed and findings

Responsible Party: Stormwater Manager or his/her designee

6.3.3 City Employee/Contractor Training

The City will provide training to identified City employees, and contractors hired by the City, who are responsible for municipal and industrial stormwater operations. The training will be an annual requirement. The training program will include education on preventing and reducing stormwater pollution. Attendees will receive a certificate for completion of the program and the City will document trained employees and/or contractors. The City of Moore will annually send appropriate staff members to the MS4 Stormwater Conference when held in the U.S. EPA Region 6 area and/or other areas when funding allows.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Develop training programs	Year 1	10/2016	Report training programs developed
Perform training	Year 2	2/2017	Report training program presented and number and type of personnel
Perform training	Year 3	2/2018	Report training program presented and number and type of personnel
Perform training	Year 4	2/2019	Report training program presented and number and type of personnel
Assess effectiveness of training	Year 4	8/2019	Provide results of assessment
Perform training	Year 5	2/2020	Report training program presented and number and type of personnel

Responsible Party: Stormwater Manager or his/her designee

6.3.4 Good Housekeeping Maintenance Program

The City will inspect and assess current structural controls and maintenance efforts to reduce floatables and other pollutants to include street sweeping, catch basin, and ditch/swale cleaning efforts. City staff will determine if the controls are effective and develop an ongoing schedule for good housekeeping maintenance activities. City staff will perform annual inspections of facilities, structural controls, and maintenance efforts.

ACTIVITY	FREQUENCY	TARGET DATE	MEASURABLE GOAL
Waste oil recycling	Annually	As Needed	Record the number of gallons of oil waste recycled from City activities
Develop inspection and assessment procedures.	Year 1	8/2016	Report inspection and assessment procedures developed
Perform inspection on 20% of the MS4 and repair as necessary	Annually	10/2016	Report findings and repairs
Inspect and assess 20 % of current MS4 structural controls and maintenance efforts	Annually	10/2016	Develop report of findings
Perform street sweeping on major streets, as required	Year 1-5	Ongoing	Report number of miles swept
Perform street sweeping on residential streets, as required	Year 1-5	Ongoing	Report number of miles swept
Perform catch-basin cleaning, as required	Year 1-5	Ongoing	Report number of basins cleaned
Perform ditch/swale cleaning as required	Year 1-5	Ongoing	Report linear feet of ditch/swale cleaning performed
Assess effectiveness of maintenance program	Year 4	8/2019	Provide results of assessment

Responsible Party: Stormwater Manager or his/her designee

ATTACHMENT B

OPDES Permit No. OKR04 Fact Sheet

ATTACHMENT C

OPDES Permit No. OKR04