

Phase II Stormwater Management Program

for

City of Harrah, Oklahoma



Effective Date:
March, 2018



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah
STORMWATER MANAGEMENT Program – March 2018
SIGNATURES OF RESPONSIBLE OFFICIALS

for the City of Harrah, Oklahoma

The statements made in this Stormwater Management Program document, and the programs described herein, are hereby declared to be accurate and fulfill the intent of City of Harrah the requirements of the State of Oklahoma’s Phase II Stormwater General Permit for municipalities (OKR04).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information 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 Superintendent Date

City Engineer Date

ATTEST:

City Clerk Date



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

EXECUTIVE SUMMARY

The City of Harrah has prepared this Stormwater Management Program (SWMP) document which provides descriptions of all activities that will be conducted on behalf of The City Harrah to meet its obligations under the Oklahoma Department of Environmental Quality (ODEQ) General Permit for Phase II Small Municipal Separate Storm Sewer System Discharges Within the State of Oklahoma (OKR04) dated November 1, 2015.

This SWMP is being submitted along with the Notice of Intent (NOI) that together constitutes the application for coverage under the OKR04 General Permit. Alternatively, portions of the SWMP document will be attached to the NOI as the application submittal as requested by ODEQ. In either case, copies of this SWMP will be kept in-house for review by ODEQ upon request.

All six Minimum Control Measures (MCMs) have been addressed in this SWMP. In addition, the City of Harrah has elected to incorporate the “Optional Permit Requirements for Municipal Construction Activities (Part VIII of OKR04)” into the SWMP.

Each MCM has several Best Management Practices (BMPs) that constitute the core activities pertaining to each MCM. Appendices summarize the BMPs and provide Measurable Goals for each BMP, along with activity descriptions and implementation schedules. In addition, the SWMP text includes a BMP summary table for each MCM.

Every reasonable effort has been made to comply with all requirements in the State’s OKR04 General Permit for Small Municipal Separate Storm Sewer Systems (SMS4s). To this end, relevant passages of the OKR04 text were copied verbatim into this SWMP as an appendix.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

TABLE OF CONTENTS PHASE II STORMWATER MANAGEMENT PROGRAM

SECTION	TITLE	PAGE
	Signatures of Responsible Officials	i
	Executive Summary	ii
	Table of Contents	iii
I	Introduction	4
II	SWMP Program Overview	5
III	Minimum Control Measures	6
III.A	MCM 1: Public Education and Outreach	6
III.B	MCM 2: Public Participation and Involvement	9
III.C	MCM 3: Illicit Discharge Detection and Elimination	13
III.D	MCM 4: Construction Site Stormwater Runoff Control	18
III.E	MCM 5: Post-Construction Runoff Control	22
III.F	MCM 6: Pollution Prevention / Good Housekeeping	24
III.G	303(d) Impaired Water bodies	27
III.H	Aquatic Resources of Concern	27
III.I	Special Consideration for Water bodies of Concern	28
IV	Definitions	28
Appendix A	Selected Verbatim Text of Final OKRO4 Permit	30
Appendix B	Summary of Best Management Practices	46
Appendix C	Schedule of Implementation and Measurable Goals	52
Appendix D	Flow Chart for Investigations of Stormwater Pollution	55



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

Appendix E	One Page Summaries of Each BMP	56
Appendix F	303(d) List Reasonable Potential Certification	82
Appendix G	Map of City Limits of The City of Harrah	83
Appendix H	Stormwater Pollution Prevention Plan (SWP3) Template	83

I. INTRODUCTION

In 1990 the U.S. Environmental Protection Agency (EPA) promulgated regulations for establishing water quality based municipal storm water programs to address storm water runoff from certain industrial and construction activities and from medium and large municipal separate storm sewer systems (MS4s) serving populations of 100,000 or greater. These “Phase I” regulations were incorporated into the existing National Pollutant Discharge Elimination System (NPDES) permit rules that address point source dischargers. Thus, urban non-point source runoff became regulated as a point source. On December 8, 1999, EPA published final regulations that address urban storm water runoff from cities under 100,000 population and counties that lie within the Urbanized Area as defined by the latest US Bureau of Census designation or otherwise designated by the Oklahoma Department of Environmental Quality (ODEQ) as being required to obtain coverage under the State’s Phase II Stormwater program.

These “Phase II” cities and counties must develop a comprehensive Stormwater Management Program (SWMP) that addresses six “Minimum Control Measures” (MCMs). These are:

- 1. Public Education and Outreach*
- 2. Public Participation and Involvement*
- 3. Illicit Discharge Detection and Elimination*
- 4. Construction Site Stormwater Runoff Control*
- 5. Post Construction Management in New Development and Re-Development*
- 6. Pollution Prevention and Good Housekeeping*

The ODEQ has primary jurisdiction over permitting and enforcement of the Phase II Stormwater Program for Oklahoma. On February 8, 2005, the ODEQ finalized their General Permit (OKR04) for Phase II Small Municipal Separate Storm Sewer System Discharges within the State of Oklahoma.

The ODEQ reissued this General Permit (OKR04) to replace the 2005 Phase II General Permit (OKR04) which expired on February 7, 2010. The new 2015 General Permit became effective on November 1, 2015.

This new OKR04 will have a term five (5) years from the effective date. The permit requires that the City of Harrah submits a Notice of Intent (NOI) to apply for coverage under the Oklahoma Stormwater General Permit (OKR04) along with a Stormwater Management Program (SWMP) document that specifies, for each MCM, what activities will be performed (Best Management Practices – BMPs), along with schedules and measurable goals for each BMP.

This SWMP document fulfills the OKR04 General Permit requirement to prepare details of how the City of Harrah will address non-storm water discharges, as well as storm water discharges into impaired stream within its city limits and urbanized Area.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

II. SWMP PROGRAM OVERVIEW

Regulatory Authority

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

The ODEQ's OKR04 General Permit is a new issue with an effective date of November 1, 2015. The general permit and the authorization to discharge shall expire at midnight October 31, 2020. As provided in the permit, operators of Phase II MS4s who submit a Notice of Intent and a Storm Water Management Program (SWMP) in accordance with PART IV of the general permit are authorized to discharge pollutants to waters of the State in accordance with the conditions and requirements set forth in the permit.

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

This SWMP document specifies all the actions that the City of Harrah will take to comply with the storm water regulations and address the six "Minimum Control Measures" required by General Permit OKR04 for a successful storm water program.

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

SWMP Organization

This SWMP addresses all elements of the ODEQ's General Permit (OKR04) for MS4s. The six Minimum Control Measures are written in the same sequence as the OKR04 text, and supporting tables and summary forms are included as SWMP appendices. Appendix A is verbatim text taken from OKR04 on essential program requirements. Appendix B is a summary table of all BMPs to be used in The City of Harrah's program. Appendix C is an annual schedule of implementation and measurable goals. Appendix D is a flow chart for conduction inspections. Appendix E has one-page summaries of each BMP. Appendix F documents the Endangered Species determination of the city, and includes the 303(d)-list certification.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

III. MINIMUM CONTROL MEASURES

For each of the following Minimum Control Measures (MCMs), the City of Harrah will implement Best Management Practices (BMPs), develop implementation schedules, and establish Measurable Goals for each BMP. An Annual Report will be submitted to the ODEQ that documents implementation and BMP effectiveness under each of the six MCMs.

This SWMP provides information on the BMPs and other activities that will be implemented to address each of the MCMs. A verbatim copy of the OKRO4 General Permit text is provided in Appendix A. These OKRO4 passages drive development of the SWMP plan content and individual program elements and BMPs.

A. MCM 1: PUBLIC EDUCATION AND OUTREACH:

OKRO4 requires Phase II cities to develop and implement a public education program to distribute information and education materials to the community and conduct equivalent outreach activities to promote behavior change by the public to reduce pollutants in stormwater runoff and eliminate illicit discharges. The stormwater public outreach program that addresses BMPs and measurable goals will be documented in this SWMP.

A.1 Best Management Practices for Public Education

The City of Harrah will use several public education Best Management Practices (BMPs) to inform individuals and groups about the steps they can take to reduce storm water pollution and become involved in the storm water program. Appendix B summarizes all BMPs that will be used for this MCM.

Appendix E provides a one-page description of each BMP, along with Measurable Goals and schedule of implementation. The BMPs are summarized in Table 1 below:

TABLE 1: BMP's FOR PUBLIC EDUCATION PROGRAM

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Brochure: <i>Water quality impacts from urban storm water</i>	General public – adults	Distribute at local events and public buildings
Brochure: <i>Household chemical disposal options</i>	General public - adults	Distribute at local events and public buildings
Brochure: <i>Proper on-site sewage disposal system maintenance</i>	Homeowners with on-site sewage disposal systems	Distribute at local events and public buildings
Brochure: <i>Chemical storage and disposal at businesses</i>	Business owners	Distribute at local events and public buildings; mail
Brochure: <i>How to use Low Impact Development for New and Re-developments</i>	General public	Distribute at local events and public buildings
Training: <i>water quality and regulations</i>	City staff and crews	Annual – in conjunction with MCM #6 requirement



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah STORMWATER MANAGEMENT Program – March 2018

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Seminar: <i>Support regional agency-hosted seminar</i>	Municipal public works staff, public	At least once during permit cycle
Meeting: <i>discuss Phase II program in public City council meeting</i>	General public	At least once during permit cycle
Website: <i>Support regional/City storm water website</i>	General public	Continuous access
Clean-up Events: <i>sponsor / participate</i>	General public, City staff and crews	Annual
Display Board: <i>create and set up at local events</i>	General public	Annual and at City Hall during storm water meetings
Signs: <i>Public awareness signs at streams and public facilities</i>	General public, City staff and crews	Continuous posting
Marking: storm drain marking program.	General public, schools, non-profits, city crews	Ongoing, periodic
Pollutant Collection: <i>promote use of and support regional household pollutant collection events</i>	General public	Semi-annual regional events
Recycling: <i>promote use of and support regional recycling centers</i>	General public	Continuous use of centers

A.2 Target Audience

The following target audiences were selected because the City of Harrah considers them to be most likely to have significant storm water impacts: For residential chemical use and disposal, the City of Harrah will target education programs to individual homeowners, renters, and multi-family residents. For commercial chemical use and disposal, the City of Harrah will target education programs to commercial retailers and those businesses that store and use chemicals, including construction sites. Secondary schools will also have education programs using Blue Thumb volunteer instruction that focus on basic water quality impacts and options for pollutant disposal (e.g. recycling and collection events).

A.3 Target Pollutant Sources

The City of Harrah’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
- rubbish (“floatable” materials)



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- yard waste (grass clippings, leaves)

By encouraging the public about and supporting regional recycling centers and household pollutant collection events, additional household pollutants can be addressed such as heavy metals, solvents, acids and discardable poisons. Proper storage, use and disposal of the same chemicals by local businesses will also be addressed in the education program.

A.4 Outreach Strategy

Table 1 (above) and Appendices B, C, and E list all BMPs that will be used to address this MCM. Each BMP summary in Appendix E lists the activity description, schedule of implementation, and annual Measurable Goals for the BMP.

The City of Harrah public education program will target several different areas:

- Homeowners will be educated on how to properly use and disposal of fertilizers and other household chemicals as well as proper septic system maintenance.
- The public education program will also provide information on how to be involved in stream cleanups, restoration activities and other local conservation efforts that may periodically be conducted in the City of Harrah.
- The City of Harrah 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.
- The City of Harrah stormwater web site will provide to the public timely information about local and regional water quality and program issues as well as numerous web links to water quality resources.
- The City of Harrah education program will develop written materials that target commercial enterprises that have business activities that may negatively impact the stormwater quality of the MS4.

The City of Harrah's Public Education program has a goal of providing storm water education material to at least half of the homeowners in the City of Harrah by the end of the first five-year permit cycle.

A.5 Management Responsibility

The City of Harrah has overall project management responsibility. The City manager will coordinate all local activities and implementation of all program elements.

A.6 Evaluating Program Effectiveness

Measurable Goals have been established for each Public Education BMP. These are summarized in Appendix C and include implementation schedules and milestones for each BMP. The Measurable Goals and target dates for the BMPs in Appendix C were selected by the City of Harrah to accommodate local resources with the intent of establishing as many BMPs as possible within the first few years of the permit cycle so that corrective actions can be taken to improve the program by the end of the permit cycle.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP effectiveness will be demonstrated by keeping records of contacts from individuals and stakeholders. Contacts 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 the City of Harrah 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. Changes in types of issues reported by the public over a few years of BMP implementation should demonstrate improvements in water quality.

Also, City of Harrah will use a survey to evaluate audience knowledge prior to commencement of the educational message followed by an evaluation after delivery of the message. This survey shall be identified measurable goals of the program and the overall objective of changes in behavior and knowledge.

B. MCM 2: PUBLIC PARTICIPATION AND INVOLVEMENT:

Some of the activities under the Public Education MCM also apply to the Public Participation and Involvement MCM. These include the Blue Thumb stream monitoring, use of recycling centers, participation in household pollutant collection events, storm drain marking, and community cleanup events such as Adopt-A-Street. Appendix B lists each SWMP activity and the associated MCMs each address. Appendix C 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 citizens of Harrah will actively participate in a program component such as stream cleanups or storm drain marking. By participating, citizens not only learn about the urban storm water quality issues but contribute towards improving water quality in their community.

B.1 Best Management Practices for Public Participation

The City of Harrah will use several public participation Best Management Practices (BMPs) to involve individuals and groups in activities and programs to reduce storm water pollution and become involved in the storm water program. Appendix B summarizes all BMPs that will be used for this MCM. Appendix C provides a one-page description of each BMP, along with Measurable Goals and schedule of implementation. The BMPs are summarized in Table 2 below:

TABLE 2: BMP's FOR PUBLIC PARTICIPATION PROGRAM

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Public Meetings: Comply with State and local public notice requirements	General public	All public meetings
Brochure: <i>Water quality impacts from urban storm water</i>	General public - adults	Distribute at local events and public buildings
Brochure: <i>Household chemical disposal options</i>	General public - adults	Distribute at local events and public buildings
Brochure: <i>How to become involved in storm water program</i>	General public - adults	Distribute at local events and public buildings
Seminar: <i>Support regional agency-hosted seminar</i>	Municipal public works staff, public	At least once during permit cycle



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Meeting: <i>discuss Phase II program in public City council meeting</i>	General public	At least once during 5-year permit cycle
Website: <i>Support storm water website</i>	General public	Continuous access
Clean-up Events: <i>sponsor / participate</i>	General public, City staff and crews	Twice during 5-year permit cycle
Marking: <i>storm drain marking program</i>	General public, schools, non-profits	Ongoing, periodic
Pollutant Collection: <i>promote use of and support regional household pollutant collection events</i>	General public	Semi-annual regional events
Recycling: <i>promote use of and support recycling</i>	General public	Continue curbside program

B.2 Public Involvement in Program Development

The City of Harrah has taken several steps to inform and include the public in understanding and providing input in the development of the Phase II program. These include:

- The City of Harrah has presented staff and budget information about the Phase II program in City Council public meetings.
- The City of Harrah SWMP has been made available through the City’s web site.
- City staff has responded to questions from the public, and the City has distributed information to the community upon request.
- The ODEQ hosted two public meetings and had a formal 30-day public period in December 2016 on the draft OKR04 General Permit, and responded to all comments in writing.
- The ODEQ has placed all relevant information about the Phase II program, including cities affected and activities required under Phase II, on their public website with links to various types of technical information for the public.
- The ODEQ will place a copy of the Notice of Intent (NOI) on the ODEQ web site, and provide a 30-day public comment period for any organization or individual to make formal comments or inquiries. The City of Harrah will make available to any group or individual, upon request, a copy of the NOI and SWMP.

B.3 Public Involvement in Program Implementation

Throughout the first five-year permit cycle, the City of Harrah will use several methods to educate the public about the Phase II program and opportunities for participation. These include:

- The City of Harrah will include in its Public Education brochures information on how individuals and organizations can become more fully informed and participate in water quality improvement efforts under the Phase II program.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- The City of Harrah storm water web site will have information about local and regional activities for citizens.
- City Council agenda items dealing with aspects of the program (e.g. budget approvals, approval of program activities) will be open to the public and receive public comment.

B.4 Target Audience

The public participation program will primarily target homeowners, adult residents, public and private school classes and organizations, non-profit organizations (e.g. Boy Scouts), and civic organizations. For school-age children, the participation program will focus on storm drain marking using Blue Thumb resources. 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 program for the City of Harrah will benefit all City residents and local enterprises.

B.5 Public Involvement Activities

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

- Distribute brochures to encourage proper use and disposal of household chemicals;
- Comply with all State and local public notice requirements during program implementation;
- Provide information on the City's storm water web site and events;
- Sponsor the storm drain marking program;
- Establish a process to receive and review comments on the SWMP from the public and document responses to issues raised;
- Promote and help fund area-wide household pollutant collection events; and
- Encourage citizens to use curbside recycling.

The City of Harrah's public participation program will rely upon the City's effort to promote and educate its citizens about opportunities to play an active role in water quality improvement efforts. The city will provide a household pollutant collection event and will make Oklahoma Town's household hazardous waste disposal center available to residents of The City.

The City of Harrah will financially support local storm drain marking and other activities listed above to inform citizens about upcoming events.

The City of Harrah will encourage citizen participation in area wide stream and city cleanup events and the use of curbside recycling. The city will financially support and promote regional education efforts as organized and conducted by regional agencies.

The City of Harrah will financially support and promote the Blue Thumb's "Storm Sewer in a Suitcase" classroom program for school children as well as the Blue Thumb volunteer stream monitoring program.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

The City's education program will compliment the public participation efforts by providing timely information about upcoming events.

B.6 Management Responsibility

The City of Harrah has overall project management responsibility. The city manager will coordinate all local activities and implementation of all program elements.

B.7 Evaluating Program Effectiveness

Measurable Goals will be established for each Public Participation BMP. These are summarized in Appendix C. BMP effectiveness will be demonstrated by keeping records of contacts from individuals and stakeholders. 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 Harrah 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 participation as well as reduction of pollution. Changes in types of issues reported by the public over a few years of BMP implementation should demonstrate improvements in water quality.

C. MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION:

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

The first category is pollutants introduced into the MS4 from individuals in a one-time episode at a discrete point of entry in which the responsible party or source is not traceable. Examples of these are dumping of yard waste, motor oil, antifreeze or trash into a creek or storm drain. These types of pollutants, when discovered in the MS4 or local streams, cannot be effectively investigated as to the source (i.e. the individual causing the pollution). Discovery of this type of pollutant will be from incident reports from citizens, city crews, police and fire workers, businesses, and State and Federal agency field crews. Prevention of future episodic pollution incidents will rely upon implementation of the Public Education and Public Participation programs presented above.

The second category is pollutants from sources that are frequently occurring or otherwise traceable through stream channels and the MS4 system using one or more methods of visual inspections, use of simple chemical field test kits and/or formal chemical sampling via laboratory analysis. Pollutants from these sources will be dispersed downstream as a detectable odor, visual color, increased turbidity, excessive algae growth, or changes in water chemistry (e.g. pH or conductivity) when compared to uncontaminated water in the stream or MS4. These potentially traceable pollutants are amenable to "source tracking" inspections, and the sources are more likely to be found and remediated. Appendix D illustrates a decision flow chart that the City of Harrah will use to address each pollutant incident report.

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



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

The City of Harrah will use several Best Management Practices (BMPs) to implement an effective detection and elimination program for illicit discharges. Several of the brochure BMPs from the Public Education program will be useful for this MCM as well and are listed accordingly. Likewise, several Public Participation BMPs will also apply to this MCM. Appendices B and C summarize all BMPs that will be used for this MCM. Appendix E provides a one-page description of each BMP, along with Measurable Goals and schedule of implementation. The BMPs are summarized in Table 3 below:

TABLE 3: BMP's FOR ILLICIT DISCHARGE PROGRAM

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Brochure: <i>Household chemical disposal options</i>	General public - adults	Distribute at local events and public buildings
Brochure: <i>Chemical storage and disposal at businesses</i>	Business owners	Distribute at local events and public buildings; mail
Brochure: <i>Proper on-site sewage disposal system maintenance</i>	Homeowners with on-site sewage disposal systems	Distribute at local events and public buildings
Training: <i>data quality and data management</i>	City staff and crews	Annual
Training: <i>how to conduct inspections and monitor effectively</i>	City staff and crews	Annual
Mapping: <i>regional and local MS4 system maps</i>	City technical staff	Within first two years of permit
Mapping: <i>regional and local data / designate priority areas</i>	City technical staff	Within first two years of permit
Ordinance: <i>Adopt ordinance prohibiting illicit discharges</i>	City administration	Within first two years of permit
Seminar: <i>Support regional agency-hosted storm water seminar</i>	Municipal public works staff, public	At least once during permit cycle
Meeting: <i>discuss Phase II program in public City council meeting</i>	General public	At least once during permit cycle
Website: <i>Support regional and/or City storm water website</i>	General public	Continuous access
Existing Data: <i>Collect local and regional pollution data / discharger data</i>	Municipal technical and public works staff	Continuous, regional data coordination
Inspections: <i>conduct MS4 inspections to trace sources</i>	City-wide	As necessary using city crews and/or contractors
Enforcement: <i>take appropriate action to abate source</i>	City wide, all sources	Continuous, as necessary
Clean-up Events: <i>sponsor / participate in City-wide event</i>	General public, City staff and crews	Twice during 5-year permit period
Marking: <i>storm drain marking program</i>	General public, schools, non-profits	Ongoing, periodic
Pollutant Collection: <i>promote use of and support regional household pollutant collection events</i>	General public	Semi-annual regional events
Recycling: <i>promote recycling</i>	General public	Encourage participation in curbside recycling



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

C.2 Allowable and Occasional Incidental Discharges

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

- a. Water line flushing
- b. Landscape irrigation
- c. Diverted stream flows
- d. Rising ground waters
- e. Residential building wash water without detergents
- f. Uncontaminated pumped ground water
- g. Uncontaminated ground water infiltration
- h. Discharges from potable water sources
- i. Foundation drains
- j. Air conditioning condensate
- k. Irrigation water
- l. Springs
- m. Water from crawl space pumps
- n. Footing drains
- o. Lawn watering
- p. Individual residential car washing
- q. De-chlorinated swimming pool discharges
- r. Street wash water
- s. Fire hydrant flushing
- t. Non-commercial or charity car washes
- u. Discharges from riparian areas and wetlands
- v. Discharges in compliance with a separate Oklahoma Pollutant Discharge Elimination System (OPDES) or National Pollutant Discharge Elimination System (NPDES) NPDES permit.
- w. Unless otherwise permitted or regulated by DEQ discharges of gray water from municipal splash pads (aka, spray parks or spray grounds) as defined in Oklahoma Statutes §27A-2-6-107 provided the discharges comply with all applicable municipal or county ordinances enacted pursuant to law, Discharges from recirculating systems shall be de-chlorinated prior to discharge; and
- x. Discharges or flows from emergency firefighting activities provided that the Incident Commander, Fire Chief, or other on-scene firefighting official in charge makes an evaluation regarding potential releases of pollutants from the scene. Measures will be taken to reduce any such pollutant releases to the maximum extent practicable subject to all appropriate actions necessary to ensure public health and safety. Discharges or flows from firefighting training activities are not authorized by OKR04 as allowable discharges.

The local incident commander of the fire-fighting scene will report to The City of Harrah storm water coordinator any observed releases of chemicals into the MS4 and/or water bodies. Local remediation will be implemented and consist of deploying absorbents, chemical neutralizers and/or booms and water skimmers to contain, neutralize and/or remove the chemicals. If the release is beyond the capability of



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

local resources to remediate safely and effectively, then The City will contract with a qualified company for large-scale hazardous waste remediation.

Occasional incidental non-storm water discharges (e.g. non-commercial or charity car washes, etc.) may periodically be identified by the City of Harrah. The Harrah administrative staff will maintain the list of all allowable non-storm water discharges. Any local controls required by the City of Harrah on these incidental discharges will be placed in the SWMP by written amendment.

C.3 Map Development and Update

The City of Harrah will develop a map of The City of Harrah MS4 system showing basic system features, major outfalls, and prominent receiving streams. Map data from sub state planning agencies and State and Federal agencies will be used along with city maps. Over the course of the first few years, it is expected that the map features will be amended, particularly regarding outfalls as The City determines the usefulness of the initial outfall designations. As more system inspections are performed, outfall locations and descriptions will be compiled by city staff and the system map will be updated accordingly. The mapping process will involve:

- Initially collecting all existing records at public offices to determine the extent of available map data;
- Collecting field data during inspections by City crews to verify locations and descriptions of MS4 attributes;
- Periodic review of MS4 system map data by the City Engineer and other City and outside professional staff, and updating maps as needed;
- Global Positioning System (GPS) will be used when needed to provide coordinate data for the MS4 system, facility locations and sampling sites, while other coordinate data will be collected using aerials and GIS map layers that show structures and sites;
- Digital and paper aerial photography and USGS 7.5 Minute Quadrangle maps will be used to assist with development of the outfall locations.

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

C.4 Ordinance

The City of Harrah will adopt an effective ordinance prohibiting illicit discharges to the MS4 and periodically evaluate the need for modifications. This will involve:

- During the first six months of the permit, compare model storm water 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 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;
- Adopt a local ordinance addressing illicit discharge detection and elimination;



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- Delegate management authority to a key City staff person 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.

C.5 Plan to Detect and Address Illicit Discharges

The City of Harrah will ensure the implementation of an effective illicit discharge detection and elimination program through the following procedures (also presented in Appendix D):

- Ensure that maps are effective by collecting map feature data during inspections to verify accuracy;
- Evaluate existing and near-future land uses in the City, and delineate high priority areas that have the greatest potential to discharge pollutants;
- Collect illicit discharge and pollution information from citizens, police and fire units, City public works crews, local businesses, other municipalities, non-profit organizations, volunteer stream monitors, students and educational institutions, construction contractors and workers, local building officials, floodplain administrator, and State and Federal agencies;
- Investigate, as necessary, and take follow-up action, as appropriate, for different types of pollutants and discharges, including those from on-site sewage disposal systems (see procedures below and in Appendix D);
- If source tracking is necessary for frequently occurring or otherwise traceable sources, conduct field monitoring of streams and the MS4 system 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 MS4 inspectors in a timely fashion);
- Ensure that inspection results and field and laboratory data are properly documented with a level of quality assurance appropriate to the use of the data;
- For sources of known origin and having a designated responsible party, take appropriate remediation / enforcement action to abate the pollutant source;
- The Harrah storm water coordinator will evaluate program effectiveness and ensure data quality;
- Implement procedures for enforcement, including how to approach owners of potential sources for on-sight inspections, how to present field data to owners that confirms the source, and what procedures the owner must take to remove the discharge; and
- Periodically evaluate, using the City's management and field staff, the inspection and enforcement program, and make modifications as necessary to improve program effectiveness.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

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

Standard paper field forms and/or electronic field data recording devices (e.g. laptops, PDAs, GPS, or Tablet PCs) will be used to make data collection systematic. Data will be entered and/or downloaded into computer databases for analysis, sharing and reporting. As needed, field data will be linked to the City's MS4 map attributes. If requested to do so by ODEQ, certain monitoring data will be reported to ODEQ on ODEQ's Discharge Monitoring Report (DMR) forms.

C.6 Administrative Procedures for Source Control

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

When potentially traceable 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 and/or hire professional 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 / responsible party to request that the source be abated within a reasonable time in accordance with local ordinance.

The City will perform a follow-up inspection to confirm that the source of pollution has been abated. If not, then the City will take increasingly more strict action leading up to assessment of penalties 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.

C.7 Inform Employees and the Public

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



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- Distribute brochures to encourage proper use and disposal of household chemicals, maintenance of on-site sewage disposal systems, and recycling;
- Support a regional seminar dealing with one or more Phase II storm water issues;
- Discuss the Phase II program in a City council meeting open to the public;
- Provide information on the City’s storm water web site about pollutant reduction;
- Support local stream clean-up events conducted by non-profits, organizations or State / Federal agencies and programs;
- Support local Blue Thumb volunteer monitoring and public education programs;
- Support local Blue Thumb storm drain marking program;
- Support regional household pollutant collection events and programs; and
- Support local and regional recycling of wastes.

C.8 Management Responsibility

The City of Harrah has overall project management responsibility. The City manager will coordinate all local activities and implementation of all program elements.

C.9 Evaluating Program Effectiveness

Measurable Goals will be established for each Illicit Discharge BMP. These are summarized in Appendices C and E. 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. These incident reports will be summarized in the Annual Report to ODEQ.

D. MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL:

The City of Harrah will implement a comprehensive inspection and enforcement program to address the pollution of storm water runoff from active construction sites. The City will develop an ordinance prohibiting the discharge of pollutants and sediment from construction sites, and require the deployment of adequate erosion control measures. The City’s building inspector will perform periodic inspections of compliance with local storm water codes while on site for other construction inspections.

D.1 Best Management Practices for Construction Site Runoff Control

The City of Harrah will use several Best Management Practices (BMPs) to implement an effective erosion and pollutant control program for active construction sites. Appendix E provides a one-page description of each BMP, along with Measurable Goals and schedule of implementation. The BMPs are summarized in Table 4 below:

TABLE 4: BMP’s FOR CONSTRUCTION SITE RUNOFF PROGRAM



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Brochure: <i>Construction / erosion control BMPs</i>	Contractors, City public works crews	Distribute to contractors with Building Permit issuance
Inspections: <i>City inspection of active construction sites</i>	Site inspections during construction activities	At least once per month during construction
Ordinance: <i>Adopt ordinance requiring construction BMPs</i>	City administration	Completed.
Seminar: <i>Support regional agency-hosted seminar</i>	City public works staff, contractors, builders	At least once during permit cycle
Site Plan Review: <i>incorporate water quality into pre-construction review of site plans</i>	Developers, builders	All site plans will be reviewed if disturbance is over 1 acre
Public Information receipt: <i>create a program to receive and consider information from the public</i>	General public, developers	Continuous program

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

- Develop 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 BMPs;
- Require construction site operators to control waste such as discarded building materials, sanitary waste, and chemicals;
- Implement procedures for site plan review that incorporate consideration of potential water quality impacts;
- Implement a program to receive and consider information submitted from the public; and
- Implement a construction site inspection and enforcement program.
- The City of Harrah will mirror in its own local ordinance the requirements provided in the ODEQ’s construction general permit (OKR10). In this way, the local program will compliment and strengthen the statewide program. The City of Harrah will exchange information with the ODEQ concerning inspections and actions taken during the year if local actions warrant ODEQ involvement.

D.2 Ordinance

The City of Harrah will adopt an effective ordinance prohibiting construction related discharges to the MS4 and periodically evaluate the need for modifications. The ordinance will mirror requirements contained in ODEQ’s statewide storm water permit for construction activities (OKR10). Local ordinance adoption will involve:



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- During the first six months of the permit, compare sample construction ordinances to existing City ordinances and make modifications to local codes, if needed;
- During the first year of the permit, evaluate staffing needs and acquire additional resources, if needed, to ensure that the City will be able to implement all provisions in the ordinance;
- Adopt a local ordinance controlling storm water discharges from construction sites;
- Delegate management authority to a key City staff person 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.

D.3 Plan to Ensure Compliance

The City of Harrah will 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 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 MS4 will establish guidelines and requirements for erosion and sediment control Best Management Practices (BMPs) and methods to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste; and
- Sanctions will be used in an increasing severity when corrective action has been ignored or not fully achieved, with the most drastic penalties being reserved for the worst offenses.

D.4 Procedures for Site Plan Review

The City of Harrah will require all new development and redevelopment construction to consider potential impacts on water quality from construction activities. Requirements will include sediment and erosion control and control of other on-site wastes that can impact water quality. The City of Harrah will:

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

D.5 Procedures for Public Input

The City of Harrah will establish an administrative process for taking input from the public. This will include:



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- 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.

D.6 Construction Site Inspections

The City of Harrah will develop a program for inspection of construction activities. Stormwater control inspections will be performed by The City's building inspectors and performed when a complaint is received from the public and periodically during the other City construction inspection activities.

- A separate stormwater inspection form will be created to document inspection results of each site visit;
- A stormwater inspection will be conducted whenever a complaint is received, and periodically during the routine construction inspections by the building inspector;
- The stormwater inspection form will document the adequacy of the erosion and sediment control measures being used and note any remedial action needed;
- Inspection data from the forms will be entered a computer database or otherwise stored in City paper files;
- Enforcement will rely upon initially encouraging remediation by the construction owner / operator, followed by a warning to remediate within a reasonable time, followed by issuance of a fine under authority of the local ordinance; and
- Any immediate and significant threat to health, safety or the environment will be enforced immediately using best professional judgment of the City inspector and/or The Harrah administrative / public works staff, including police and fire personnel, as the situation merits, including reporting the violation to ODEQ for OKR10 enforcement.

D.7 Management Responsibility

The City of Harrah has overall project management responsibility. The City manager will coordinate all local activities and implementation of all program elements.

D.8 Evaluating Program Effectiveness

Measurable Goals will be established for each Construction Site Runoff Control BMP. These are summarized in Appendix C. BMP effectiveness will be demonstrated by compiling and evaluating data from inspection forms. If pollution sources are abated as a result of the inspection and enforcement program, then the abatement action will be logged as a BMP success. Data from the storm water inspections will be used to verify successful implementation of on-site construction BMPs.

D.9 Optional Permit Requirements for City Construction (seventh MCM)



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

The City of Harrah elects to comply with the alternative provided in Part VIII of OKR04 relating to construction activities on land owned by the City and to activities that are directly controlled by the City.

By selecting this option, all municipal construction discharges are herein authorized so long as the City meets all terms and requirements under OKR04. The City of Harrah will develop, for each City construction project of one acre or greater in size, a Stormwater Pollution Prevention Plan (SWP3) that meets all requirements of OKR04 and applies to all municipal construction activities within The City of Harrah limits. This option applies to all City construction activities where the City meets the definition of “construction site operator” as defined in OKR04.

The City of Harrah will have potentially several types of construction activities in the future: 1) new buildings 2) cleared and/or paved areas such as parking lots or park ball fields, and 3) utility line entrenchment. The City of Harrah will either hire a contractor to perform the work or use City crews and equipment. Standard construction practices will be used on all projects. Local conditions include construction in accessible areas with sufficient easement and/or city ownership of property. Appendix G shows a map of the City of Harrah boundaries within which this option applies.

The City of Harrah’s Project Manager will ensure that the project-specific SWP3 is developed and a copy kept at the construction site for review. When the City hires a contractor to perform the work, the City will require the contractor to prepare and maintain access to the SWP3, and will be verified by the City construction inspector or other City official. The City will inspect the project site as with any other construction project within the City’s jurisdiction. Part of this inspection process will be to ensure that all SWP3 requirements are being met. The City’s SWP3 contents will meet all requirements of OKR04 (see Appendix H).

E. MCM 5: POST-CONSTRUCTION RUNOFF CONTROL:

Post-construction storm water management in new development and redevelopment focuses on implementation of controls and practices that will try to maintain good water quality conditions after an area has been developed and after construction activities have been completed. This Minimum Control Measure includes three parts. First, the City of Harrah will require review ordinance and regulations, and identify any legal/regulatory barriers to Low Impact Development (LID), and develop a schedule to remove those barriers that prohibit LID practices selected by the City or provide a justification for each barrier not removed. The BMPs should be appropriate for the local site conditions and should be selected to minimize water quality impacts. Second, the City of Harrah will adopt an ordinance to control runoff from new development and redevelopment projects. Third, the City will develop a mechanism to ensure that there is long-term operation and maintenance of the BMPs.

E.1 Best Management Practices for Post Construction Runoff Control

Appendix B lists the BMPs that will be used by the City of Harrah to address the Post-Construction MCM. The individual BMPs are summarized in Appendices B and C and include the Measurable Goals for each as well as an implementation schedule for each BMP. The City of Harrah will perform the following activities:

TABLE 5: BMP’s FOR POST-CONSTRUCTION MANAGEMENT PROGRAM



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Brochure: <i>Construction / erosion control BMPs</i>	Contractors, City public works crews	Distribute to contractors with Building Permit issuance
Brochure: <i>Post-Construction / erosion control BMPs, such as LID</i>	Contractors, City public works crews	Distribute to contractors with Building Permit issuance
Inspections: <i>City inspection of construction sites after completion</i>	Site inspections after completion of construction	At least once after construction is completed
Ordinance: <i>Adopt ordinance requiring post-construction BMPs, such as LID</i>	City administration	Completed
Seminar: <i>Support regional agency-hosted seminar</i>	City public works staff, contractors, builders	At least once during permit cycle

E.2 Priority Areas

The City of Harrah 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:

- Post-construction sites that have had greater than one (1) acres disturbed at the time of active construction;
- Construction sites of any size that have not had any post-construction BMPs or other effective controls implemented to control post-construction runoff; and
- Construction sites that are within a watershed of an impaired stream listed on the State’s 303(d) list and have the potential to discharge pollutants that would most probably cause violations of the State water quality standards.

E.3 Locally Tailored Program

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

- Proximity of the site to impaired water bodies on the State’s 303(d) list;
- Erodibility of soils (e.g. slope, soil type, vegetative cover, etc.);
- Size of construction activities and site disturbance;
- Locations of point source and any significant non-point source dischargers; and
- Receiving water characteristics (flows, depths, riparian cover, etc.)

The post-construction ordinance will require contractors to implement best management practices to prevent erosion and non-storm water runoff from sites after active construction has ceased. The ordinance will provide several options for ensuring long term operation and maintenance of the site. The City will employ and require all contractors to employ a combination of structural and non-structural BMPs.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

The City’s existing floodplain management strategy requires that post-runoff flow rates not exceed pre-development runoff flow rates. All public comments concerning water quality issues will be considered during amending of zoning codes and floodplain management codes. As part of the administrative review of plans, the City will encourage protection of sensitive water quality areas (e.g. wetlands, riparian areas, etc.) and encourage use of buffers along sensitive water bodies. At the time of local building permit issuance, the City will provide education materials to developers on post-construction requirements and options.

E.4 Management Responsibility

The City of Harrah has overall project management responsibility. The City manager will coordinate all local activities and implementation of all program elements.

E.5 Evaluating Program Effectiveness

Measurable Goals will be established for each Post-Construction Runoff Control BMP. These are summarized in Appendix C. BMP effectiveness will be demonstrated by compiling and evaluating information from City administrative staff. If pollution sources are abated as a result of the post-construction program, then the abatement action will be logged as a BMP success. Data from the post-construction program will be used to verify successful implementation of on-site post-construction BMPs.

F. MCM 6: POLLUTION PREVENTION / GOOD HOUSEKEEPING:

Pollution prevention/good housekeeping for municipal operations is a minimum control measure designed to emphasize the operation and maintenance (O&M) of the MS4 and proper training of municipal employees. Performing municipal activities in a careful and proper manner prevents or reduces pollutant runoff. Municipal operations include parks and open space maintenance, vehicle fleet and building maintenance, new construction, and land disturbances, building oversight, and storm water system maintenance.

F.1 Best Management Practices for Good Housekeeping

During the first two years of the permit, the City of Harrah will develop and implement strategies that address the following Pollution Prevention and Good Housekeeping requirements:

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Brochure: <i>Chemical storage and disposal at City operations</i>	City public works crews, City staff	Distribute at local training for City crews and staff
Brochure: <i>City good housekeeping options</i>	City public works crews, City staff	Distribute at local training for City crews and staff
Training: <i>storage and disposal of chemicals at municipal operations</i>	City staff and crews	Annual
Training: <i>water quality impacts and regulations</i>	City staff and crews	Annual
Training: <i>storm water and City activities</i>	City staff and crews	Annual



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP ACTIVITY	TARGET AUDIENCE	FREQUENCY
Inspections: <i>conduct MS4 inspections to track chronic sources</i>	City-wide	As necessary using City crews and/or contractors
Enforcement: <i>take appropriate action to abate source</i>	City wide, all sources	Continuous, as necessary
MS4 O&M Program: <i>inspect and maintain MS4 system</i>	Throughout MS4 system and at City facilities	Continuous, as necessary
Clean-up Events: <i>sponsor / participate</i>	General public, City staff and crews	Twice during 5-year permit cycle

F.2 List of Operation and Maintenance (O&M) Activities and Facilities

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

- Maintenance garage located at 19745 Manek Dr., Harrah Ok. 73045
- Vehicle fueling area located at 19745 Manek Dr., Harrah Ok. 73045
- Wastewater Treatment Plant at 330 North Pottawatomie Rd., Harrah OK. 73045
- City Hall at 19625 N. E. 23rd., Harrah OK.73045
- Police Dept. at 1900 North Church Ave., Harrah OK. 73045
- Fire Dept. #1 at 1870 Tim Holt. Harrah OK. 73045
- Fire Dept. # 2 at 18460 N.E. 23rd. Harrah OK. 73045
- Operation: Sewer line repairs / replacements
- Operation: City parks maintenance
- Old Town Well and Tower at 20801 Gold Street. Harrah OK. 73045
- Maintenance Well at 19745 Manek. Harrah OK. 73045
- Maxey Well and Tower at 23rd and Maxey. Harrah OK. 73045
- 29th Well and Tower at 21123 29th Street. Harrah OK. 73045
- Echo Valley Tower at 20245 Palmer. Harrah OK. 73045
- Harrah Chamber of Commerce at 1971 North Church Ave. Harrah Ok. 73045
- Harrah Senior Citizen Center at 2696 Summer Ave. Harrah OK. 73045
- Senior Citizen lift station at 2550 White Meadows Dr. Harrah OK. 73045
- Linda Ln. lift station at 19499 Linda Ln. Harrah OK. 73045
- 29th Street lift station at 3801 Harrah Rd. Harrah OK.73045
- 5th Street lift station at 500 N. Harrah Rd. Harrah OK. 73045



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- Main lift Station at 1600 S. Church Ave. Harrah OK. 73045
- Old Town lift station at the Corner of Calvin and Church Ave. Harrah OK. 73045
- Cappella lift station at 20231 Tuscany Dr. Harrah OK. 73045

F.3 List of Municipal Permitted Facilities

The following facilities are owned / operated by the City of Harrah and subject to the ODEQ Multi-Sector General Permit or individual OPDES or NPDES permits for discharges of waste water associated with industrial and residential activity that ultimately discharge to the MS4:

Permit NO# OKOO38482

None.

F.4 Employee Training Program

The City of Harrah will participate in the regional training programs as may be developed by regional agencies for city employees that address MS4 maintenance and reduction and prevention of storm water pollution from City activities. In the absence of regional training options, the City will conduct its own training program. Areas to be addressed by the training programs include:

- Park and open space maintenance;
- Fleet and building maintenance;
- Proper use, storage, and disposal of chemicals;
- New construction and land disturbance; and
- Stormwater system maintenance.

F.5 MS4 Inspection, Maintenance, and Pollutant Control Program

The City of Harrah 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 fleet maintenance shops with outdoor storage areas;
- Municipal salt/sand storage locations; and

City Facilities: During the second year of the permit, the City will perform an initial inspection of its facilities to determine potential pollutant sources via storm water into the MS4 and, where possible, move all such materials under cover or inside to prevent contact with storm water runoff. For those



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

materials that cannot be sheltered, such as salt piles for snow removal, the City will implement structural BMPs where appropriate to control contaminated runoff from the storage areas. These will include straw bales, silt fencing, grassy swales, sediment ponds and/or other measures as deemed appropriate. At least once a year, the City will inventory these areas to ensure that the BMPs and storage controls are deployed properly and working.

MS4 System: The City will rely upon public education to reduce the amount of trash and chemical pollutants placed on City streets. This program will include educating citizens about not disposing of chemicals and yard waste into the streets and drop inlets. The City will also use misdemeanor labor assigned from local courts and/or City crews for trash pickups along City streets when necessary and continue its Adopt-A-Street program.

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. When reported, City Public Works crews will remove debris and trash from streets and the MS4 system as necessary.

The City will store sand and salt 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 local landfill (East Oak Landfill). The material to be disposed of includes dredge spoil, accumulated sediments, floatables, and other debris.

F.6 Flood Management Projects

The City of Harrah 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. The City's Floodplain Administrator and Public Works technical staff will ensure that potential water quality impacts of new construction and new development projects are considered during administrative review of the project plans. New projects will be evaluated during the site plan review process, while existing structures will be evaluated on a case-by-case basis when a water quality problem is documented and the structure is suspected of being a contributor.

F.7 Management Responsibility

The City of Harrah has overall project management responsibility. The City manager will coordinate all local activities and implementation of all program elements.

F.8 Evaluating Program Effectiveness

Measurable Goals will be established for each Good Housekeeping BMP. These are summarized in Appendix C. BMP effectiveness will be demonstrated by compiling and evaluating information from City administrative staff. If pollution sources are abated as a result of the Good Housekeeping program, then the abatement action will be logged as a BMP success. Data from the Good Housekeeping program will be used to verify successful implementation of the BMPs.

G. 303(D) IMPAIRED WATERBODIES:

The OKR04 general permit requires that water bodies listed as Category 5 impaired on the State's latest EPA approved Integrated Water Quality Assessment Report receive special consideration to ensure that water quality standards are not caused to be exceeded by discharges from the MS4. A Category 5 listing



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

is equivalent to a 303(d) listing for designating impaired water bodies. Using the checklist evaluation form in Appendix F for water bodies to which the City of Harrah MS4 has the potential to discharge, it has been determined that:

It has been determined that the storm water discharge from The City of Harrah MS4 has the potential to contribute one or more pollutants of concern for which the water body has been listed. The following segments meet this condition:

Water body ID	Name	Pollutant(s) that may potentially come from the MS4
WBID 520510000110_20 WBID 520520000_00	North Canadian River Harrah Creek	Turbidity, TMDL
WBID 520520000320_00	Unnamed Tributary of North Canadian River	

H. AQUATIC RESOURCES OF CONCERN:

The OKR04 general permit requires that if any portion of the City’s MS4 lies within the Aquatic Resources of Concern area designated in Exhibit 1 of OKR04, then the segment should receive special consideration to ensure that the MS4 discharges do not negatively impact any protected species and/or habitat to which the designation applies. Using Exhibit 1, it has been determined that:

There are no Aquatic Resources of Concern to which The City of Harrah MS4 has the potential to discharge.

I. SPECIAL CONSIDERATION FOR WATERBODIES OF CONCERN:

For the water bodies listed in the table above, the City of Harrah stormwater program will take the following special measures to ensure protection of water quality standards and/or ensure protection of protected species and their habitat:

- 1) Designate a high priority area within that portion of the MS4’s watershed that has the potential to impact the designated water body;
- 2) Focus additional education efforts within the high priority area(s) targeting citizens and businesses;
- 3) Increase MS4 inspections and observations within the high priority area(s);
- 4) Coordinate City efforts with any water quality monitoring or other scientific studies being conducted by State agencies; and



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- 5) Request that the Blue Thumb BMPs be implemented as a priority within the designated area.

IV. DEFINITIONS

All definitions contained in Section 502 of the Act and 40 CFR §122 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided, but in the event of a conflict, the definition found in the Statute or Regulation takes precedence.

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 State. BMPs also include treatment requirements, operating procedures, and practices to control 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 MS4) 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



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

established by CWA §402(p). A discussion of MEP as it applies to MS4s is found at 40 CFR § 122.34.

MS4 is an acronym for "Municipal Separate Storm Sewer System" and is used to refer to either a Large, Medium, or Small Municipal Separate Storm Sewer System. The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities (e.g., the Oklahoma Town MS4 includes MS4s operated by Oklahoma Town, the Oklahoma Department of Transportation, and others).

Municipal Separate Storm Sewer System 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, Town, 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.

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, Town, 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."

APPENDIX A Verbatim Text Excerpts of OKR04 (November 1, 2015)

PART I.B TYPES OF AUTHORIZED DISCHARGES



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

1. Storm Water Discharges

This permit authorizes discharges from Phase II MS4s to waters of the State except as listed in PART I.C.

2. Authorized Non-Storm Water Discharges

You are authorized to discharge the following non-storm water sources provided you have not determined these sources to be substantial contributors of pollutants to your SMS4. Your list of allowable non-storm water discharges and determination documentation must be included in your SWMP.

- a. Water line flushing
- b. Landscape irrigation
- c. Diverted stream flows
- d. Rising ground waters
- e. Residential building wash water without detergents
- f. Uncontaminated pumped ground water
- g. Uncontaminated ground water infiltration
- h. Discharges from potable water sources
- i. Foundation drains
- j. Air conditioning condensate
- k. Irrigation water
- l. Springs
- m. Water from crawl space pumps
- n. Footing drains
- o. Lawn watering
- p. Individual residential car washing
- q. De-chlorinated swimming pool discharges
- r. Street wash water
- s. Fire hydrant flushing
- t. Non-commercial or charity car washes
- u. Discharges from riparian areas and wetlands
- v. Discharges in compliance with a separate Oklahoma Pollutant Discharge Elimination System (OPDES) or National Pollutant Discharge Elimination System (NPDES) NPDES permit.
- w. Unless otherwise permitted or regulated by DEQ discharges of gray water from municipal splash pads (aka, spray parks or spray grounds) as defined in Oklahoma Statutes §27A-2-6-107 provided the discharges comply with all applicable municipal or county



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

ordinances enacted pursuant to law, Discharges from recirculating systems shall be de-chlorinated prior to discharge; and

- x. Discharges or flows from emergency firefighting activities provided procedures are in place for the Incident Commander, Fire Chief, or other on-scene firefighting official in charge to make an evaluation regarding potential releases of pollutants from the scene. Measures must be taken to reduce any such pollutant releases to the maximum extent practicable subject to all appropriate actions necessary to ensure public health and safety. These procedures must be documented in your SWMP. Discharges or flows from firefighting training activities are not authorized by this permit.

PART I.C LIMITATIONS ON COVERAGE

This permit does not authorize:

1. Discharges Mixed with Non-Storm Water

Unless such discharges are:

- a. In compliance with a separate OPDES or NPDES permit, or
- b. Determined not to be a substantial contributor of pollutants to waters of the State in accordance with PART I.B.2. of this permit.

2. Storm Water Discharges Associated with Industrial Activity

As defined in OAC 252.606-1-3 (b)(3) adopting and incorporating by reference 40 CFR §122.26(b) (14) (i)-(ix) and (xi).

3. Storm Water Discharges Associated with Construction Activity

As defined in OAC 252.606-1-3 (b)(3) adopting and incorporating by reference 40 CFR §122.26(b) (14) (x) or 40 CFR §122.26(b) (15), except as provided by PART VIII.

4. Storm Water Discharges Currently Covered under Another Permit

5. Discharges Exceeding Water Quality Standards

Your storm water management program must include a description of the Best Management Practices (BMPs) and other measures that you will be using to ensure that discharges or future discharges will not cause, have the reasonable potential to cause, or contribute to an exceedance of water quality standards. The DEQ may require corrective action or an application for an individual permit or alternative general permit if a small MS4 is determined to cause, have the reasonable potential to cause, or contribute to an exceedance of water quality standards.

6. Discharges not consistent with a Total Maximum Daily Load (TMDL)

Discharge of a pollutant into any water for which a TMDL, or watershed plan in lieu of a TMDL, for that pollutant has been either established or approved by DEQ or U.S. Environmental Protection Agency (EPA) is prohibited, unless your discharge is consistent with that TMDL, or watershed plan. You must incorporate into your SWMP any conditions necessary to ensure discharges are consistent with the assumptions and requirements of any such TMDL, or watershed plan. This eligibility condition and compliance with Part III.B applies at the time you submit a Notice of Intent (NOI) (see Exhibit 2) for coverage.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

If conditions change after you have permit coverage, you may remain covered by the permit provided you comply with the applicable requirements of PART III. For discharges, not eligible for coverage under this permit, you must apply for and receive an individual or other applicable general OPDES permit.

PART III. SPECIAL CONDITIONS

Part III.A COMPLIANCE WITH WATER QUALITY STANDARDS

1. Operators seeking coverage under this permit shall not be causing or have the reasonable potential to cause or contribute to a violation of a water quality standard. If you have discharges to receiving waters included on the latest CWA § 303(d) list of impaired waters, you must document in your SWMP how you will comply with this requirement.

2. If you discharge to waters identified on the latest CWA § 303(d) list of impaired waters, you must include all necessary BMPs that will ensure that the impairment caused by identified pollutants (e.g., nitrogen, phosphorus, bacteria) in your receiving waters will, not cause, have the reasonable potential to cause, or contribute to an in-stream exceedance of water quality standards. You must include the following in development or revision of your SWMP:
 - a. You must develop a plan which lists the BMPs you have implemented or will implement to reduce the pollutants of concern and describe how you expect the selected controls to reduce the pollutants of concern.

 - b. Your outreach programs must be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant storm water impacts on your impaired waters.

 - c. You must identify any non-storm water discharges that contribute significant pollutants to your impaired waters.

 - d. You must locate those areas likely to have illicit discharges and conduct inspections based on the priority areas in the watershed of your 303(d) listed waterbodies.

 - e. You must include any operation and maintenance procedures for structural and non-structural storm water controls to reduce pollutants discharged into your impaired water. You must ensure that new flood management projects assess the impacts on water quality and examine existing projects to determine if incorporating additional water quality protection devices and practices are necessary.

 - f. You must choose BMPs from EPA's menu or select others that can be used for managing the identified pollutants (e.g., nitrogen, phosphorus, bacteria) in your discharges. The details of the BMPs can be viewed from EPA's website at: <http://water.epa.gov/polwaste/npdes/swbmp/index.cfm> .

 - g. If the pollutant of concern is bacteria, you must include a list of identified BMPs addressing the below areas, as applicable, in the SWMP and implement as appropriate. You may not exclude BMPs associated with the minimum control measures required



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

under this Permit (see Part IV.C). The proposed BMPs will be required to be submitted to ODEQ for review.

The BMPs shall, as appropriate, address the following:

1) *Sanitary Sewer Systems*

- (a) *Make improvements to sanitary sewers;*
- (b) *Address lift station inadequacies;*
- (c) *Improve reporting of violations; and*
- (d) *Strengthen controls.*

2) *On-site Sewage Facilities (for entities with appropriate jurisdiction)*

- (a) *Identify and address failing systems; and*
- (b) *Address inadequate maintenance of On-Site Sewage Facilities.*

3) *Illicit Discharges and Dumping*

Place additional effort to reduce waste sources of bacteria; for example, from septic systems, grease traps, and grit traps;

4) *Animal Sources*

Expand existing management programs to identify and target animal sources such as zoos, pet waste, horse stables, and livestock sale barns.

5) *Resident Education*

Increase focus to educate residents on:

- (a) *Bacteria discharging from a residential site either during runoff events or directly;*
- (b) *Fats, oils, and grease clogging sanitary sewer lines and resulting overflows;*
- (c) *Decorative ponds; and*
- (d) *Pet waste.*

3. Where a discharge is already authorized under this general permit and is later determined to cause or contribute to the in-stream exceedence of an applicable water quality standard, DEQ will notify you. You must take all necessary actions to ensure that future discharges do not cause or contribute to in-stream exceedence of a water quality standard and must document these actions in the SWMP. If an exceedence remains or recurs, the coverage under this general permit may be terminated by the DEQ and the DEQ may require an application for coverage under an alternative general permit or an individual permit.
4. Compliance with this requirement does not preclude any enforcement activity as provided by the Clean Water Act for the underlying violation.

PART 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 waste load 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



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

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.

2. If a TMDL or watershed plan in lieu of a TMDL is approved for any waterbody into which a MS4 discharges after the date that the MS4 submits a NOI, the MS4 must incorporate any limitations, conditions, and requirements applicable to the discharges into its SWMP to ensure that the requirements of the implementation plan associated with the WLA, LA, and/or the TMDL will be met 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, 2002¹ and November 26, 2014². If the TMDL or watershed plan specifies additional requirements, the MS4 must also meet these additional requirements.

PART IV. STORM WATER MANAGEMENT PROGRAM

PART IV.A REQUIREMENT

You must develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from your MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The SWMP should include BMPs; control techniques and system, design, and engineering methods; and enforcement component and such other provisions as the Director determines appropriate for the control of such pollutants.

1. **Small MS4s Newly designated after the Date of Permit Issuance:** You must develop a written SWMP according to this part, and you must comply with the following:

1 Robert H. Wayland, III, Director, Office of Wetlands, Oceans and Watersheds and James A. Hanlon, Director, Office of Wastewater Management, 'Establishing Total Maximum Daily Load (TMDL) Waste load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs,' November 22, 2002.

2 Andrew D. Sawyers, Director, Office of Wastewater Management and Benita Best-Wong, Director, Office of Wetlands, Oceans and Watersheds, 'Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Waste load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs,"' November 26, 2014.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- a. Include all six (6) minimum control measure requirements (MCMs);
- b. Define and list the BMPs that you or another entity will implement for each of the MCMs listed in Part IV.C;
- c. Provide program development, implementation, and enforcement schedules for full implementation of the complete SWMP as soon as practicable, but no later than five (5) years from the effective date of this Permit or according to the schedule that the Director specifies in the DEQ notification; and
- d. Make credible interim progress in developing and implementing SWMP elements over the term of this Permit.

2. Measurable Goals for BMP

You must list and define the BMPs that you or another entity are or will be implementing for each of the storm water MCMs listed in Part IV.C. For each BMP, you must:

- a. Include measurable goals;
- b. Include the months and years in which you will undertake required actions, including interim milestones and the frequencies of the actions; and
- c. Identify who will be responsible for implementing or coordinating the BMPs for your SWMP.

You may use EPA's "*Measurable Goals Guidance for Phase II Small MS4s*" to develop new measurable goals or revise current ones. The guidance can be downloaded from EPA's website at <http://www.epa.gov/npdes/pubs/measurablegoals.pdf>. You must provide a rationale for how and why you selected each of the BMPs and measurable goals for your SWMP. The information required for such a rationale is given in Part IV.C for each minimum measure.

3. Sharing Responsibility

Implementation of one or more of your storm water MCMs may be shared with another government entity or may be fully implemented by another government entity. You may rely on another government entity only if:

- a. The other government entity implements the control measure;
- b. The particular control measure, or component of that measure, is at least as stringent as the corresponding permit requirement;
- c. The other government entity agrees to implement the control measure on your behalf. Written acceptance of this obligation is required. This obligation must be maintained as part of the description of your storm water management program. If the other government entity agrees to report on the minimum measure, you must supply the other government entity with the reporting requirements contained in PART V.C. If the other government entity fails to implement the control measure on your behalf, then you remain responsible for compliance with permit obligations. You must modify your SWMP within one (1) year and comply with permit requirements.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

PART IV.B REQUIRED SWMP UPDATES

DEQ may notify you that changes to your SWMP are necessary to:

1. Address adverse impacts on receiving water quality that discharges from your MS4 are or may have the reasonable potential to cause or contribute to;
2. Include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements;
3. Include other conditions deemed necessary by the Director to comply with the goals and requirements of the Clean Water Act, including TMDL requirements; or
4. Include any permit requirements that the director determines that your SWMP does not meet.

Changes requested by the Director must be made in writing, set forth the time schedule for you to develop the changes, and offer you the opportunity to propose alternative program changes to meet the objective of the requested modification. Within the time schedule provided, you must submit a copy of the revisions made to the SWMP.

PART IV.C MINIMUM CONTROL MEASURES

The six (6) Minimum Control Measures (MCMs) that must be included in your SWMP are listed below. A seventh optional Control Measure is described in Part VIII. Each MCM must comply with the items included in the “Permit Requirements” section. You are encouraged to consider the information included in “Recommendations” and incorporate them as appropriate, but “Recommendations” are not permit requirements. You must continue to implement your SWMP and revise it according to Part IV.D. If you are a newly regulated small MS4 or MS4 newly designated after the date of this Permit issuance, you are required to develop and implement and enforce a SWMP that specifically addresses each of the six (6) MCMs, as soon as practicable, but no later than five (5) years from the effective date of this Permit, or utilize the schedule that DEQ provides to you.

1. Public Education and Outreach Program

a. 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 storm water 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



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- (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.
- b. Recommendations
 - (1) Use storm water educational materials locally developed or provided by the EPA, States, MS4s and other organizations;
 - (2) Contact the Blue Thumb Program for assistance with your public education and outreach program, including storm drain marking, assistance with newsletters and brochures, planning of civic events, and borrowing Blue Thumb educational tools for local events. Their contact info is:

Oklahoma Conservation Commission, Statewide Blue Thumb Program,
128 East 3rd Ave.
Bristow, OK 74010

Telephone: (918) 398-1804 or E-mail:

Cheryl.Cheadle@conservation.ok.gov

The details of the Blue Thumb Program can be found at:
http://www.ok.gov/conservation/Agency_Divisions/Water_Quality_Division/Blue_Thumb/index.html

- (3) Distribute storm water messages to the public by using locally available methods, such as brochures/factsheets, pamphlets, booklets, educational displays, bill inserts, promotional giveaways, workshops, and local cable access channels in TV;
- (4) Provide information to homeowners on storm water pollution prevention, topics such as trash and recycling, landscaping and lawn care, pest control, pet waste management, disposal of household hazardous wastes, residential car washing and water conservation;
- (5) Provide information to businesses on storm water pollution prevention topics such as automobile maintenance, chemical storage and disposal, illicit discharges, and erosion/sediment controls, as well as promoting *Low Impact Development* (LID); and
- (6) Evaluate the effectiveness of the education program by using methods tied to the identified measureable goals of the program and the overall objective of changes in behavior and knowledge. One method of evaluation of the education program may be an evaluation of audience knowledge prior to commencement of the educational message followed by an evaluation after delivery of the message, such as a survey.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

2. **Public Participation and Involvement**

The public can provide valuable input and assistance to a regulated small MS4's SWMP, so the public should be given opportunities to play an active role in both the development and implementation of the SWMP. An active and involved community is crucial to the success of a SWMP.

a. **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.

b. **Recommendations:** In the first minimum control measure, *Public Education and Outreach*, the goal of that element of your SWMP was to inform your community about reducing pollutants in stormwater runoff. The public, in that measure, is passively receiving information. But in the *Public Participation and Involvement* element of your SWMP, the goal is to get members of your community participating in activities that reduce pollutants in stormwater runoff. Community members are actively involved in working toward this goal. There are a variety of practices that could be incorporated into a public participation and involvement program. For example, you can:

- (1) Establish a citizen advisory group or utilize existing citizen organizations to participate in the development, implementation, and revision of your SWMP. Make an effort to reach out and engage all economic and ethnic groups by involving them with public activities in your SWMP;
- (2) Conduct public meetings/citizen panels to allow citizens to discuss various viewpoints and provide input concerning appropriate storm water management policies and BMPs;
- (3) Create opportunities for the public to participate in the implementation of storm water controls. Examples of ways to include the public include:



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- (a) Encourage individuals or groups to conduct storm drain marking and/or participate in community programs such as “Adopt-A-Storm Drain”. In this program, citizens keep storm drains free of debris and monitor what is entering local waterways through storm drains. These are important and simple activities that concerned citizens, especially students, can do;
 - (b) Organize community clean-ups along local waterbodies;
 - (c) Train citizen watch groups to aid local enforcement authorities in the identification of polluters; and
 - (d) Develop a volunteer monitoring program. Volunteer water quality monitoring gives citizens first-hand knowledge of the quality of local waterbodies and provides a cost-effective means of collecting water quality data. Contact Blue Thumb for assistance with your volunteer monitoring program.
- (4) Evaluate the effectiveness of the public participation and involvement program by using methods tied to the identified measurable goals of the program and the overall objective of changes in behavior and knowledge.

3. Illicit Discharge Detection and Elimination

a. 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-storm water 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



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018 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-storm water 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-storm water 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-storm water 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 storm water 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.

b. Recommendations

- (1) Develop and implement a written spill response and prevention plan to ensure the appropriate actions that will take place when a spill occurs within your small MS4.
- (2) Expand your plan to detect and address illicit discharges to your system, including illegal dumping control, sanitary sewer overflows, on-site sewage



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

disposal, a used oil recycling program, trash, and debris management. You may use EPA's illicit discharge detection and elimination manual to develop or revise your plan. You can download the document from EPA's website at <http://cfpub.epa.gov/npdes/stormwater/idde.cfm>.

- (3) Identify priority areas which includes areas with higher likelihood of illicit connections (e.g., areas with older sanitary sewer lines or with a history of sewer overflows or cross-connections; areas with older infrastructure that are more likely to have illicit connections; areas of industrial, commercial, or mixed use; areas with a history of past illicit discharges; areas with a history of illegal dumping; areas with onsite sewage disposal systems, and areas of *Aquatic Resources of Concern*). Update this priority area list to reflect changing priorities annually.
- (4) Educate and train the general public, employees, and businesses about the hazards associated with illegal discharges and improper disposal of waste. Set up a hotline for citizens to report violations. Coordinate the program with your public education MCM and your pollution prevention/good housekeeping MCM programs.
- (5) Educate employees that have been working in the field, such as maintenance workers, building inspectors etc., to identify and report stormwater illicit discharges.

4. Construction Site Stormwater Runoff Control

a. Permit Requirements

You must review and revise your existing construction site storm water 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 storm water runoff to your MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water 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 storm water 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



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

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).
- b. Recommendations
- (1) Use sanctions and enforcement mechanisms, including non-monetary penalties (such as stop work orders), fines, bonding requirements, legal action, and/or permit denials for non-compliance.
 - (2) Implement an outreach program for the local development community. Coordinate with your public education MCM and your pollution prevention and good housekeeping MCM programs.
 - (3) Conduct a staff training to address requirements for inspection and enforcement of erosion and sediment control measures once construction begins.
 - (4) Offer incentives for “green developers”, such as expedited permit review, reduced application fees, and public recognition.
 - (5) Expand your procedures for site plan review, site inspection and enforcement to smaller sites.

5. Post-Construction Management in New Development and Redevelopment



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

a. 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 storm water 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 storm water runoff from the small MS4 (as required by Part V.C of this Permit).

b. Recommendations

- (1) Promote non-structural/structural BMPs which are appropriate for the local community, minimize water quality impacts and attempt to maintain pre-development runoff conditions in your new development and redevelopment



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

post-construction management program. These BMPs include post-construction plan review, green roofs, green parking, narrower residential streets, open space design, protection of natural features, riparian/forested buffer, street design and patterns, grassed swales, infiltration basin/trench, porous pavement, bioretention/rain gardens, catch basin inserts, vegetated filters, and storm water wetland/wet ponds.

- (2) Consider requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition). Provide buffers along sensitive waterbodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation. Encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure. Consider adopting and implementing low impact development (LID) practices through an ordinance or other regulatory mechanism.
- (3) Assess current street design and parking lot guidelines and requirements that affect the creation of impervious cover. Determine if changes in standards for streets and parking lots can be modified to support LID design options.
- (4) Complete an inventory of impervious areas (such as conventional pavements, sidewalks, driveways, roadways, parking lots and rooftops), and directly connected impervious areas (portion of impervious area with a direct hydraulic connection to the receiving waters via continuous paved surfaces, gutters, pipes, and other impervious features). Based on the results of the inventory, determine the areas that may have the potential to be retrofitted with BMPs (such as LID) designed to reduce the frequency, volume, and peak intensity of storm water runoff to and from your MS4.
- (5) Use measures such as minimization of the percentage of impervious area after development, minimization of directly connected impervious areas, and source control measures often thought of as good housekeeping, preventive maintenance, and spill prevention.
- (6) Use structural BMPs, including, as appropriate:
 - (a) Storage practices such as wet ponds and extended-detention outlet structures.
 - (b) Filtration practices such as grassed swales, bioretention cells, sand filters and filter strips.
 - (c) Infiltration practices such as infiltration basins and infiltration trenches.
- (7) Within your required long-term operation and maintenance (O&M) program, consider including the following: pre-construction review of BMP designs, inspection during construction to verify BMPs are built as designed, and penalty provisions for noncompliance. Options to help ensure that future O&M responsibilities are clearly identified include an agreement between you and another party such as the post-development landowners or regional authorities.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- (8) Use incentives to encourage interest in LID, such as increased densities, reduced review time/expedited review, tax incentive, reduced application fees, public recognition, dedicated review team, flexibility in design restrictions, adjustments to the required parking, lower storm water fees, new fee structure, reduced conventional storm water requirements.

6. Pollution Prevention/Good Housekeeping for MS4 Operations

a. 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 storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance;
- (2) Implement a municipal employee training and education program that you will use to prevent and reduce storm water 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 storm water 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;



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- (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).

b. Recommendations

- (1) Develop an inventory of all your MS4 operations that are impacted by this program. Review this inventory annually and update as necessary.
- (2) Establish procedures for proper use, storage, and disposal of both petroleum and non-petroleum products at schools, town offices, police and fire stations, pools, parking garages and other permittee-owned or operated buildings or utilities. Develop or continue to implement a Spill Response and Prevention Plan to ensure that appropriate actions will take place when a spill occurs within your small MS4.
- (3) Establish procedures for the proper storage of permittee-owned vehicles and equipment, including fueling areas. Ensure that vehicle wash waters are not discharged to the small MS4. (4) Establish procedures for catch basin inspections, cleaning and repairs, and sweeping streets, sidewalks, and permittee-owned parking lots within your small MS4.

PART IV.D REVIEWING AND UPDATING THE SWMP

1. SWMP Review

You must conduct an annual review of your Storm Water Management Program in conjunction with preparation of the annual report required under PART V.C.

2. SWMP Update

Your SWMP shall be modified as needed during the life of this Permit in accordance with the following procedures:

- a. Changes to comply with new requirements of this Permit.
- b. Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP may be made at any time upon written notification to the Director.
- c. Changes replacing an ineffective or infeasible BMP specifically identified in the SWMP with one or more alternate BMP(s) may be requested at any time. Unless



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

denied by the Director, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If your request is denied, the Director will send you a written response giving a reason for the decision. Your modification requests must include the following:

- (1) An analysis of why the BMP is ineffective or infeasible (including cost prohibitive);
 - (2) Expectations on the effectiveness of the replacement BMP; and
 - (3) An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
- d. Change requests or notifications must be made in writing and signed in accordance with Part VI.H.

PART V. MONITORING, RECORD KEEPING, AND REPORTING

PART V.A MONITORING

1. Designing Your Monitoring Program

You must evaluate program compliance, the appropriateness of identified BMPs, and progress toward achieving identified measurable goals. If you discharge to a water of the state for which a TMDL has been approved, you may have additional monitoring requirements under PART III of this permit.

2. Conducting Monitoring

If you plan to conduct monitoring, you are required to comply with the following:

a. Representative monitoring

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. Laboratory Methods

If laboratory analysis is conducted it must be conducted according to test procedures approved under 40 CFR part 136.

3. Records of Monitoring information

Monitoring records must include:

- a. The date, exact place, and time of sampling or measurements;
- b. The name(s) of the individual(s) who performed the sampling or measurements;
- c. The date(s) analysis were performed;
- d. The names of the individuals who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results or observations of such analyses.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

5. Discharge Monitoring Report

The reporting of monitoring results may be required, by the Executive Director, to be submitted on a Discharge Monitoring Report.

PART V.B RECORD KEEPING

1. Retain Records of All Monitoring Information

Include all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of Discharge Monitoring Reports (DMRs), a copy of the OPDES permit, and records of all data used to complete the NOI for this permit, for a period of at least three years from the date of the sample, measurement, report, or application, or for the term of this permit, whichever is longer. This period may be extended by request of the Director at any time.

2. Submit Your Records

Mail your completed DMR reports, if required, to the DEQ along with your annual report. You must retain a description of the Storm Water Management Program required by this permit (including a copy of the permit language) at a location accessible to the Director. You must make your records, including the NOI and the description of the storm water management program, available to the public.

PART V.C ANNUAL REPORTS

You must submit an annual report for each permit year to the Director of DEQ. If you implement your SWMP on a calendar year basis (from January 1st through December 31st), you must submit your annual report to ODEQ by March 1st of the calendar year, beginning in 2016 for existing permittees or 2017 for new permittees. If you implement your SWMP on a fiscal year basis (from July 1st through June 30th), you must submit your annual report by September 1st of the fiscal year, beginning in 2016 for existing permittees or 2017 for new permittees. Mail your report to the address specified in PART II.C or e-mail to DEQ electronically. Each report must contain information regarding activities of the previous permit year. Each report must include:

- a. The status of your compliance with permit conditions, an assessment of the appropriateness of the identified best management practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP), and progress toward achieving the measurable goals for each of the MCMs;
- b. Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the SWMP at reducing the discharge of pollutants to the MEP;
- c. A summary of the stormwater activities you plan to undertake during the next reporting cycle (including an implementation schedule);
- d. Proposed changes to your SWMP, including changes to any BMPs or any identified measurable goals that apply to the SWMP elements;
- e. Description and schedule for implementation of any additional BMPs or monitoring that may be necessary to reduce/eliminate the discharges of the pollutant of concern into impaired waters on the 303(d) list;



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- f. Description and schedule for implementation of any additional BMPs or monitoring that may be necessary to ensure compliance with any applicable TMDL or watershed plan in lieu of a TMDL; and
 - g. Notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable) and a copy of the written agreement with that entity.
2. If the optional permit requirement for construction activities is elected you must also include in your Annual Report a progress report concerning the elected optional permit requirements. At a minimum, this must include:
- a. The number of your active construction sites that are currently covered under the elected optional permit requirement;
 - b. The number of construction projects that were started during the reporting period;
 - c. The number of construction projects that were completed during the reporting period; and
 - d. The number of construction sites that were covered under the elected optional permit requirement that have reached final stabilization.

PART VIII. OPTIONAL PERMIT REQUIREMENTS FOR MUNICIPAL CONSTRUCTION ACTIVITIES

PART VIII.A OPTIONAL FOR SMALL MS4s SEEKING COVERAGE FOR MUNICIPAL CONSTRUCTION ACTIVITIES UNDER THIS PERMIT

The development of this optional provision for municipal construction activities is an alternative for the small MS4 operator seeking coverage under this Permit. This provision does not apply to Oklahoma Turnpike Authority (OTA) or Oklahoma Department of Transportation (ODOT), who are small MS4 operators. Additionally, contractors working for the small MS4 operator are not required to obtain separate authorization as long as the contractor does not meet the definition of “construction site operator”, but does remain compliant with the conditions of this Permit. Small MS4s that choose to develop this option will be authorized by this Permit to discharge storm water and certain non-storm water from construction activities where the small MS4s are the “construction site operators”. For small MS4s that choose to develop this measure, it shall be part of the SWMP submitted with the initial NOI. You must comply with the requirements in Part VIII.B.

If you choose not to develop this optional measure, then you must submit a NOI and seek coverage under the DEQ general permit (OKR10) for storm water discharges from construction activities.

If this optional provision requirement is elected, you must include the following in your SWMP:



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

1. Description of how construction activities will generally be conducted by the small MS4. Local conditions and other site-specific considerations must be included in the description;
2. Description of how the small MS4 will implement the technology-based requirements to comply with Effluent Limitation Guidelines and Standards for the Construction and Development Point Source Category (ELGs) under Part 450 of 40 C.F.R., Effective February 1, 2010, in Part VIII.B.3 of this Permit;
3. Description of how the small MS4 will ensure that the SWP3 requirements are properly implemented and maintained at the construction site; or how the small MS4 will ensure that the contractors obtain a separate authorization for stormwater discharges from DEQ for each project; and
4. General Stormwater Pollution Prevention Plan (SWP3) conditions and a procedure to include site specific BMPs to account for local considerations.

APPENDIX B: SUMMARY OF BEST MANAGEMENT PRACTICES The City of Harrah

BEST MANAGEMENT PRACTICES	PUB. ED.	PUB. PAR.	IL. DSCH.	CNST.	POST CNST.	GOOD HSKP.	PERSON RESPONSIBLE FOR BMP IF DIFFERENT THAN DESIGNATEE
Education Materials							
Water quality impacts from urban storm water	X	X	X				
Household chemical disposal options	X	X	X				
Proper on-site sewage disposal system maintenance							
Chemical storage and disposal at businesses							
Construction / erosion control BMPs				X	X		
Post-construction / erosion control BMPs					X		
City good house-keeping options						X	
How to become involved in storm water program	X						
Recycling and re-use benefits	X						
Chemical storage and disposal at City facilities						X	
Training Topics for City Staff							
Storage and disposal of chemicals at City facilities							
Water quality impacts and regulations	X					X	
Data quality and data management			X				



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

How to conduct inspections effectively			X	X	X	X	
Stormwater and City activities						X	
MS4 Mapping							
Develop MS4 map with outfalls and streams			X				
Collect map data and set priority areas			X				

The City of Harrah has designated ~~Earl Burson~~, Clayton Lucas, City Manager, as the primary staff person responsible for making supervisory decisions over implementing all Phase II stormwater BMPs and activities.

In the event the primary official is not available, alternates are hereby designated:

~~Art Sipes~~ Athena Martin, Building Inspector

~~Joe Morgan~~ Jerry Chipman Public Works Director

TABLE 1 - BMPs and Minimum Control Measures (Continued):

BEST MANAGEMENT PRACTICES	PUB. ED.	PUB. PAR.	IL. DSCH	CNST.	POST CNST.	GOOD HSKP.	PERSON RESPONSIBLE FOR BMP IF DIFFERENT THAN DESIGNATEE
Administrative							
Adopt illicit discharge ordinance			X				
Adopt construction ordinance				X			
Adopt post-construction ordinance					X		
Comply with state and local public notification	X	X					
Program to receive information from the public	X	X	X				
Site Plan review to include water quality				X	X		
Support regional agency-sponsored seminars	X	X	X	X	X	X	
Discuss Phase II in City council meetings	X	X	X	X	X		
Collect local and regional pollution data			X				
Develop stormwater web site	X	X	X	X	X	X	
Community Involvement							
Create signs for community education	X						
Create signs for City work areas						X	
Blue Thumb school presentations							
Blue Thumb volunteer stream monitoring							
Blue Thumb storm drain marking							
Blue Thumb stream cleanup events							
Promote household pollutant collection event and HHW disposal services	X	X	X				
Promote recycling	X	X	X				
Distribute items with water quality logos	X						
Inspections							
Complaint investigations for MS4 system			X			X	
Source tracking of pollutants in MS4 system			X			X	
Inspection of construction sites and activities			X	X	X		
Good housekeeping inspections of City property			X			X	

APPENDIX C: SCHEDULE OF BMP IMPLEMENTATION AND MEASURABLE GOALS



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

Town/County: City of Harrah/Oklahoma		Permit #:	OKR040046	Year: 2018	
BMP ACTIVITY		SCHEDULE	MEASURABLE GOAL	GOALS MET	DID IT WORK
First Year of Program (2018)					
1	Develop printed <u>education materials</u> ; begin distribution at City hall, City maintenance areas, local businesses, local festival.	March 2019 begin printing and distribution, continue next year.	50 of each brochure type distributed.	Yes	Yes Distributed At local festival
2	Attend <u>training seminars</u> of appropriate City staff and public works crews, 20% attendance goal first year.	March 2019 training modules.	20% of eligible staff and crew attend.	Yes	Yes. Public Works Department in attendance.
3	Begin initial <u>map</u> of system, receiving streams and outfalls.	Draft map in progress through first year.	Draft map in progress.	Yes	Engineer Is working on a map.
4	Prepare <u>ordinances</u> for illicit discharge, construction, and post-construction.	March 2019 complete adoption of ordinances	Ordinances adopted	No	Ordinance is waiting to be adopted.
5	Develop program to <u>receive information from the public</u> on MS4 and storm water, including forms and City communication.	March 2019 have rough draft of process outlined and draft forms in progress.	Draft strategy and draft forms in progress.	No	Researching.
6	Develop strategy for implementing water quality consideration in <u>site plan reviews</u> .	March 2019 have strategy in draft concept.	Draft strategy in progress.	No	Researching. Need to talk to Building Inspector and develop form.
7	Promote and attend a <u>regional seminar</u> or conference on phase II storm water or urban water quality issues.	No action.	No activity.	Yes	Yes. Paul Weigert attended Stormwater Quality Technical Workshop at Rose State College.
8	Discuss Phase II storm water and storm water quality topics in <u>public meetings</u> .	March 2019 present information to the public in a public meeting.	Staff report to City council.	No	Talking with City Manager on how to proceed with this.
9	Develop storm water <u>website</u> .	March 2019 initial development of	Basic information for public posted.	No	Waiting to talk to website



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

		website.			designer.
10	Household <u>Pollutant Collection Event</u> ; promote and fund the City event. Provide household Bulk Trash collection service.	March 2019 promote and fund event.	2 times a year.	Yes	Yes. We have a contract with Midwest City and Harrah Disposal.
11	Conduct <u>MS4 inspections</u> based upon incident reports and observations made by city crews.	March 2019 prepare inspection forms and procedure.	Draft forms and procedures.	No	Need to do more research.
12	Conduct <u>construction site inspections</u> based upon incident reports and observation made by city crews.	March 2019 prepare inspection forms and procedures.	Draft forms and procedures.	No	Have done a few inspections but have not prepared any forms.
13	Conduct <u>inspections of City facilities and maintenance yards</u> for control chemical.	March 2019 prepare inspection forms and procedures.	Draft forms and procedures.	No	Need to make an inspection sheet.
14	Dry weather field screening.	March 2019	Start survey.	no	2018 was to wet.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

Town/County:		City of Harrah/Oklahoma	Permit #:	OKR040046	Year: 2019	Date:
BMP ACTIVITY		SCHEDULE	MEASURABLE GOAL	GOALS MET	DID IT WORK	
Second Year of Program (2019)						
1	Continue distribution of <u>education materials</u>	Throughout second year.	50 of each brochure type distributed.	Yes	Distributed at local festival and City Hall.	
2	Continue <u>training</u> , another 20% of staff	<u>MARCH 2020</u> attend 2 training seminars.	20% of eligible staff and crew attend.	Yes	Public Works Department and Building Inspector.	
3	Complete first draft of system <u>map</u>	<u>March 2020</u> complete first draft.	Completed first draft of map.	No	Working with Supervisor on how to proceed.	
4	City council adoption of <u>ordinances</u>	<u>March 2020</u>	Ordinances adopted.	No	Editing for final submission to City Council.	
5	Implement process for including water quality consideration in <u>site plan reviews</u>	<u>March 2020</u> begin implementation.	Strategy in place.	No	Need to visit more with Building Inspector on this.	
6	Continue <u>seminar</u> or conference on phase II storm water or urban water quality	Attend seminar.	At least 2 city crew/staff attend.	Yes	Attended 2019 Stormwater Quality Technical Workshop in Norman on July 17.	
7	Discuss Phase II storm water and storm water quality topics in <u>public meetings</u>	<u>March 2020</u> present information to the public in a public meeting.	Agency report to City council.	No	Waiting to finalize Ordinance to be able to answer certain questions that will be asked by City Council.	
8	Develop Storm water website.	<u>March 2020</u> modify and update, as needed.	Updates.	No	Need to visit with website designer and prepare information that would be presented on the website.	



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah STORMWATER MANAGEMENT Program – March 2018

9	Dry weather field screening program to identify non-storm water flow.	March 2020 Conduct field survey to indent sources of non-storm water flow.	Complete survey and record result.	No	Researching where and how to take samples.
10	Post <u>signs</u> at city buildings about water quality and proper handling and disposal of chemicals	March 2020 place signs on City buildings.	3 City building signs.	No	Need to design and get printed.
13	Household <u>Pollutant Collection Event</u> : promote and help fund City portion of event. Provide household bulk trash collection service.	March 2020 promote and fund local event	2 local events held.	Yes	City provides cleanup through local trash service.
14	Conduct <u>MS4 inspections</u> based upon incident reports and observations made by City crews.	Daily or as needed, conduct inspections and correct sources.	Compile first year's number of incidents	Continually working	Have noticed some areas that need improvement but still working procedures of how to handle them.
15	Conduct <u>construction site inspections</u> based upon incident reports and observations made by City crews.	Daily or as needed, conduct inspections and correct sources.	Daily or as needed, conduct inspections and correct sources.	No	Have started visual inspecting but still working on Inspection report.
16	Conduct <u>inspections of City facilities</u> and maintenance yards for control of chemicals.	Semi-annually conduct inspections and correct problems	Compile first year's corrections.	Yes	Have conducted inspection of Public Works facility and working on how to control and where to store chemicals.
17		March 2020			

Town/County:	City of Harrah/Oklahoma	Permit #:	OKR040046	Year: 2020	Date:
BMP ACTIVITY	SCHEDULE	MEASURABLE GOAL	GOALS MET	DID IT WORK	
Third Year of Program (2020)					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

1	Continue distribution of <u>education materials</u>	Throughout third year.	50 of each brochure type distributed.		
2	Continue attending regional <u>training</u> , another 20% of staff	By March 2021 attend 2 training seminars.	20% of eligible staff and crew attend.		
3	Review and update draft of system <u>map</u>	March 2021 update first draft.	Amendments to map, if needed.		
4	Review usefulness of <u>ordinances</u> and make changes as needed	March 2021 have council adopt amendments, if needed.	Review and update ordinances.		
5	Review usefulness of <u>public information process</u> and update, if needed	March 2021 implement changes to process.	Amend process, if needed.		
6	Review and amend process for including water quality consideration in <u>site plan reviews</u>	March 2021 amend process, if needed.	Amendments, if needed.		
7	Promote and attend a <u>regional seminar</u> or conference on phase II storm water or urban water quality issues	No action.	No activity.		
8	Discuss Phase II storm water and storm water quality topics in <u>public meetings</u>	March 2021 present information to the public in a public meeting.	Staff report to City council.		
9	<u>Storm drain marking</u> program using citizens and local organizations.	Yearly - coordinates storm drain marking activities.	Storm drains marked.		
10	Develop storm water website	March 2021 modify and update website, as needed.	Update if needed.		
12	Post <u>signs</u> at City buildings about water quality and proper handling and disposal of chemicals	MARCH 2021 place signs on City buildings.	3 city building sign.		
13	<u>Stream clean-up event</u> : sponsor City crews participate in local stream or roadside clean-up event.	March 2021 host / participate in local clean-up event.	Once a year.		
14	Household <u>Pollutant Collection Event</u> : promote and fund City event. Provide household bulk trash collection service.	March 2021 promote and fund local event	2 local events held each year.		



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

15	Conduct <u>MS4 inspections</u> based upon incident reports and observations made by City crews.	<u>Daily</u> or as needed, conduct inspections and correct sources.	Reduced number of incidents		
16	Conduct <u>construction site inspections</u> based upon incident reports and observations made by City crews	<u>Daily</u> or as needed, conduct inspections and correct sources.	Reduced number of incidents		
17	Conduct <u>inspections of City facilities</u> and maintenance yards for control of chemicals.	<u>Semi-annually</u> conduct inspections and correct problems.	Reduced number of problems.		
18	Dry weather field screening program to identify non-storm water flow.	March 2021 Conduct field survey to indent sources of non-storm water flow.	Update if needed		

Town/County: City of Harrah/Oklahoma		Permit #:	OKR040046	Year: 2021	Date:
BMP ACTIVITY		SCHEDULE	MEASURABLE GOAL	GOALS MET	DID IT WORK
Fourth Year of Program (2021)					
1	Continue distribution of <u>education materials</u>	Throughout fourth year.	50 of each brochure type distributed.		



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

2	Continue attending <u>training</u> , another 20% of staff	<u>March 2022</u> attend 2 training seminars.	20% of eligible staff and crew attend.		
3	Review and update revised system <u>map</u>	<u>March 2022</u> update map.	Amendments to map, if needed.		
4	Review usefulness of <u>ordinances</u> and make changes as needed	<u>March 2022</u> have council adopt amendments, if needed.	Review and update ordinances.		
5	Review usefulness of <u>public information process</u> and update, if needed	<u>March 2022</u> implement changes to process.	Amend process, if needed.		
6	Review and amend process for including water quality consideration in <u>site plan reviews</u>	<u>March 2022</u> amend process, if needed.	Amendments, if needed.		
7	Promote and attend a <u>regional seminar</u> or conference on phase II storm water or urban water quality issues	<u>March 2022</u> attend regional seminar.	At least 4 City crew/staff attend.		
8	Discuss Phase II storm water and storm water quality topics in <u>public meetings</u>	<u>March 2022</u> present information to the public in a public meeting.	Staff report to City council.		
9	Maintain storm water website	<u>Oct-2020</u> modify and update website, as needed.	Updates completed.		
10	Dry weather field screening program to identify non-storm water flow.	<u>March 2022</u> Conduct field survey to indent sources of non-storm water flow.	Update if needed		
11	Post <u>signs</u> for watersheds and City buildings about water quality and proper handling and disposal of chemicals	<u>Dec-2020</u> place signs at key watersheds and post on City buildings.	2 watershed signs, 3 City building signs.		
12	<u>Storm drain marking</u> program using citizens and local organizations.	<u>Monthly</u> - storm drain marking activities.	30 storm drains marked.		
13	<u>Stream clean-up event</u> : sponsor, City crews participate in local stream or roadside clean-up event.	<u>March 2022</u> promote benefits of local clean-up event.	Public education material.		
14	<i>Household Pollutant Collection Event: promote and help fund city portion of event. Provide household bulk trash collection service.</i>	<u>Apr-2020</u> <i>promote and fund local event</i>	<i>2 local events held.</i>		



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

15	Conduct <u>MS4 inspections</u> based upon incident reports and observations made by city crews.	<u>Daily</u> or as needed, conduct inspections and correct sources.	Reduced number of incidents		
16	Conduct <u>construction site inspections</u> based upon incident reports and observations made by City crews.	<u>Daily</u> or as needed, conduct inspections and correct sources.	Reduced number of incidents		
17	Conduct <u>inspections of City facilities</u> and maintenance yards for control of chemicals.	<u>Semi-annually</u> conduct inspections and correct problems.	Reduced number of problems		

Town/County: City of Harrah/Oklahoma		Permit #: OKR040046	Year: 2022	Date:	
BMP ACTIVITY		SCHEDULE	MEASURABLE GOAL	GOALS MET	DID IT WORK
Fifth Year of Program (2022)					
1	Continue distribution of <u>education materials</u>	Throughout fifth year.	50 of each brochure type distributed.		



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

2	Continue attending regional <u>training</u> , another 20% of staff	<u>March 2023</u> attend 2 training seminars.	20% of eligible staff and crew attend.		
3	Review and update revised system <u>map</u>	<u>March 2023</u> update map.	Amendments to map, if needed.		
4	Review usefulness of <u>ordinances</u> and make changes as needed	<u>March 2023</u> have council adopt amendments, if needed.	Review and update ordinances.		
5	Review usefulness of <u>public information process</u> and update, if needed	<u>March 2023</u> implement changes to process.	Amend process, if needed.		
6	Review and amend process for including water quality consideration in <u>site plan reviews</u>	<u>March 2023</u> amend process, if needed.	Amendments, if needed.		
8	Discuss Phase II storm water and storm water quality topics in <u>public meetings</u>	<u>March 2023</u> present information to the public in a public meeting.	Outside agency report to City council.		
9	Maintain website.	<u>March 2023</u> modify and update website, as needed.	Updates if needed.		
10	Post <u>signs</u> on City buildings about water quality and proper handling and disposal of chemicals	<u>Dec-2021</u> update / replace signs, as needed.	Sign maintenance performed.		
11	Storm drain marking program using citizens and local organizations.	Monthly coordinates storm drain marking activities.	Storm drains marked.		
12	<u>Stream clean-up</u> event: sponsor, City crews participate in local stream or roadside clean-up event.	<u>March 2023</u> host / participate in local clean-up event.	Event held.		
13	Household <u>Pollutant Collection Event</u> : promote and help fund City. Provide household bulk trash collection service.	<u>March 2023</u> promote and fund regional events	Two regional events held.		
14	<u>Recycling</u> : funding and promotion of local curbside recycling in City.	Continue current program	Monthly curbside collection of recyclables		
15	Conduct <u>MS4 inspections</u> based upon incident reports and observations made by city crews.	<u>Daily</u> or as needed, conduct inspections and correct sources.	Reduced number of incidents		



City of Harrah

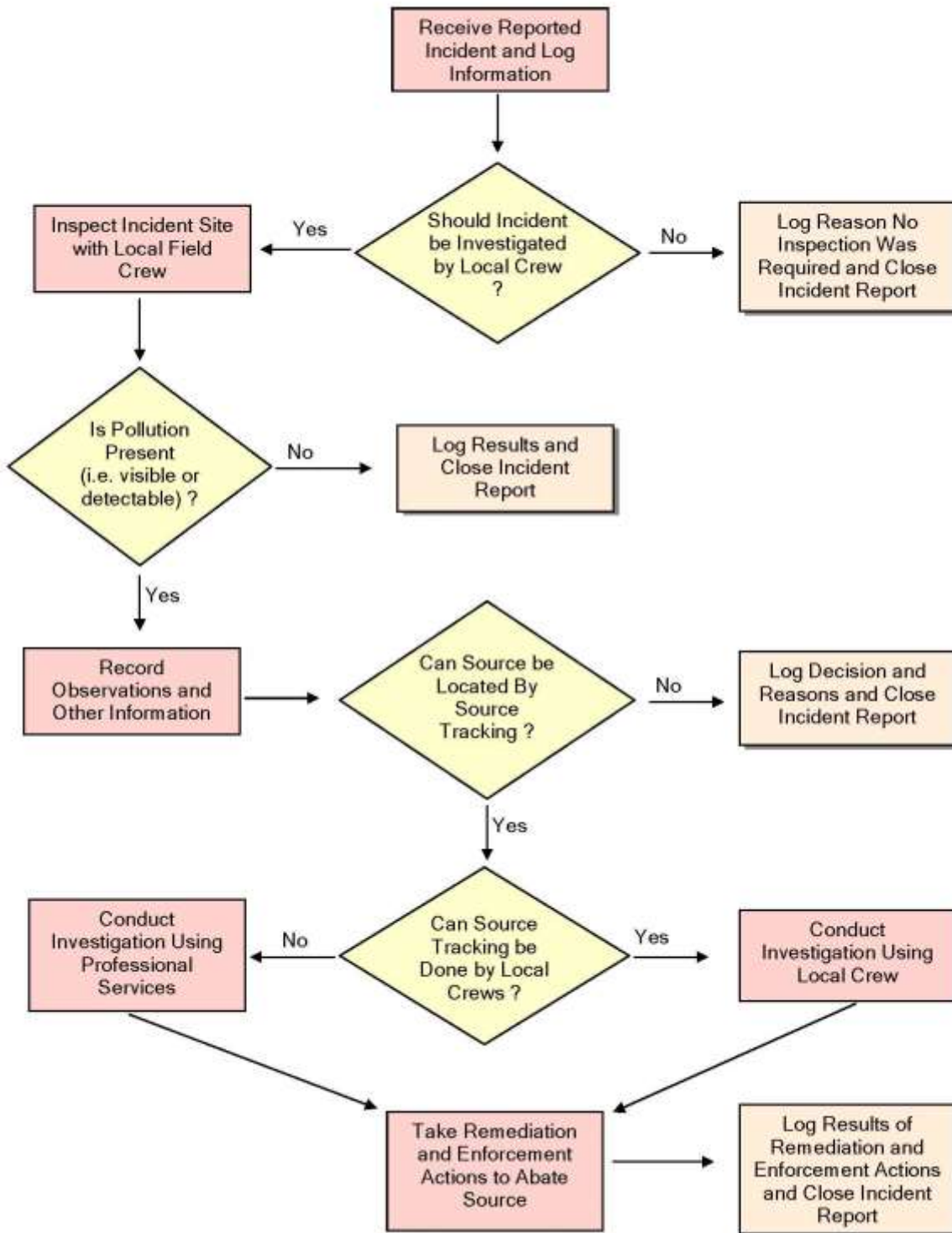
PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

16	Conduct <u>construction site inspections</u> based upon incident reports and observations made by City crews.	<u>Daily</u> or as needed, conduct inspections and correct sources.	Reduced number of incidents		
17	Dry weather field screening program to identify non-storm water flow.	March 2023 Conduct field survey to indent sources of non-storm water flow.	Update if needed		
18	Conduct <u>inspections of City facilities</u> and maintenance yards for control of chemicals.	<u>Semi-annually</u> conduct inspections and correct problems.	Reduced number of problems		

**APPENDIX D
FLOW CHART FOR INVESTIGATIONS OF STORMWATER POLLUTION INCIDENTS**





City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah
STORMWATER MANAGEMENT Program – March 2018

APPENDIX E

One Page Summaries of each BMP

BMP Title:	Brochures / Flyers					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
	X	X	X	X	X	X
BMP Description:	Develop or obtain brochures or flyers for the following and distribute: Water quality impacts from urban storm water, household chemical disposal options, proper on-site sewage disposal system maintenance, proper use of fertilizers and pesticides, recycling and re-use benefits, how to become involved in the storm water program, benefits of trees, motor oil pollution prevention, responsible pet ownership, chemical storage and disposal at businesses, construction / erosion / sediment control BMPs, post-construction storm water management BMPs, chemical storage and disposal at City facilities, City good housekeeping options, and various other program-related topics. Details: Will be distributed continuously at City building Will be distributed to City schools once per permit year Every permit year one selected brochure / flyer will be mailed as a utility bill stuffer “Construction / erosion / sediment control BMPs” also will be distributed with building permit issuance “Chemical storage and disposal at City facilities” and “City good housekeeping options” also will be distributed at City staff training events offered various times during the permit cycle.					
Target Audience:	General public – adults, schools (5 th - 12 th), business owners, contractors, developers, builders, consulting engineers, City staff					
Measurable Goals:	2019: Develop, print, and begin distribution by end of year, 50 each. 2020: Minimum 50 of each type. 2021: Minimum 50 of each type. 2022: Minimum 50 of each type. 2023: Minimum 50 of each type.					
Implementation Schedule:	2019: Develop, print, and begin distribution by end of year. 2020: Modify and update, distribute during year. 2021: Modify and update, distribute during year. 2022: Modify and update, distribute during year. 2023: Modify and update, distribute during year.					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Training Modules					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:			X	X	X	X
Suitable For:	City staff and field crew					
Measurable Goals:	Number of training modules developed or obtained per permit year Five training modules developed or obtained by the end of the second permit year Number of times each training module was offered each permit year to City staff Number of City staff receiving training in each module each permit year Data quality and data management training offered once during the permit cycle Training with the remaining modules offered twice during the permit cycle Number of contacts made by training attendees resulting from receiving training module per permit year					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

Implementation Schedule*: <i>* Permit Year</i>	Year 2 - Develop / obtain all five training modules; begin offering training Year 3, 4 & 5 - Offer training
--	--

BMP Title:	MS4 Mapping					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
			X	X	X	
BMP Description:	<p>The City of Harrah will develop a GIS-based storm sewer system map that shows the location of all outfalls and the names and locations of all waters of the United States that receive discharges from those outfalls. Priority areas for the above-referenced MCMs will be determined utilizing this GIS database.</p> <p>Details: This map will be created by utilizing existing records at the City, public-domain GIS data, contract-acquired GIS data such as aerial photographs and radar-generated topography, USGS 7.5 Minute Quadrangles, and FEMA Flood Insurance Rate Maps (used as a reference for labeling USGS unnamed tributaries), and spot field verifications using Global Positioning System (GPS)</p> <p>MS4 storm sewer map will be revised once every permit year to incorporate all corrections and updates from compiled data</p>					
Suitable For:	City staff					
Measurable Goals:	<p>Revised map with corrections and updates from compiled data once every permit year</p> <p>Priority areas for MCM #4 located within the first year of the permit</p> <p>Priority areas for MCM #3 located within the first two years of the permit</p> <p>Priority areas for MCM #5 located within the first four years of the permit</p>					
Implementation Schedule*: <i>* Permit Year</i>	<p>Year 1 - Compile corrections and updates; revise map; locate priority areas for MCM #4</p> <p>Year 2 - Compile corrections and updates; revise map; locate priority areas for MCM #3</p> <p>Year 3 - Compile corrections and updates; revise map</p> <p>Year 4 - Compile corrections and updates; revise map; locate priority areas for MCM #5</p> <p>Year 5 - Compile corrections and updates; revise map</p>					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Public Meetings					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
	X	X				
BMP Description:	Discuss the Phase II Program once every permit year at the City Council Meeting and twice every permit year. Details: These are public meetings that comply with State and local public notice requirements					
Suitable For:	General public					
Measurable Goals:	Number of times Phase II Program was discussed at City Council Meeting per permit year Number of contacts made by the public due to the public meetings per permit year.					
Implementation Schedule*: <i>* Permit Year</i>	None					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Ordinance					
	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
Minimum Control Measure Addressed:			X	X	X	
BMP Description:	<p>The City of Harrah has already adopted ordinances for illicit discharges, and construction and post-construction sedimentation and erosion control and will review and modify existing ordinances for the above-referenced MCMs</p> <p>Details: Ordinance effectiveness will be periodically reviewed and changes made as appropriate</p>					
Suitable For:	City staff and administration					
Measurable Goals:	<p>Existing ordinances for MCM #4 reviewed and modified within the first year of the permit</p> <p>Existing ordinances for MCM #3 reviewed and modified within the first two years of the permit</p> <p>Existing ordinances for MCM #5 reviewed and modified within the first four years of the permit</p> <p>Effectiveness of the above ordinances evaluated during the fifth year of the permit; administrative process to make any needed modifications begun</p>					
Implementation Schedule*: <i>* Permit Year</i>	<p>Year 1 - Review and modify existing ordinances for MCM #4</p> <p>Year 2 - Review and modify existing ordinances for MCM #3</p> <p>Year 4 - Review and modify existing ordinances for MCM #5</p> <p>Year 5 - Evaluate effectiveness of the above ordinances; begin administrative process to make any needed modifications</p>					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Policies and Procedures Program					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
			X	X		
BMP Description:	<p>Due to the complicated natures of the two above-referenced MCMs, the City will develop policies and procedures to ensure these MCMs' effective administration.</p> <p>Details: Programs will set out policies and procedures for City staff to follow to avoid confusion and to ensure proper data collection and enforcement Programs will be evaluated and modified if needed</p>					
Suitable For:	City staff					
Measurable Goals:	<p>Program for MCM #4 developed within the first year of the permit Program for MCM #3 developed within the first two years of the permit Effectiveness of the above programs evaluated during the fifth year of the permit and modified if needed</p>					
Implementation Schedule*:	<p>Year 1 - Develop program for MCM #4 Year 2 - Develop program for MCM #3 Year 5 - Evaluate effectiveness of the above programs; make needed modifications</p>					
<i>* Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Site Plan Review					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
				X	X	
BMP Description:	<p>Modification of the current pre-construction site plan review process to incorporate the review of erosion and sediment control BMPs and post-construction BMPs that address water quality</p> <p>Details: Current site plan review process will be reviewed Modifications to the process will be implemented to ensure required elements pertaining to the above MCMs are present on the plans and/or addressed in some other manner</p>					
Suitable For:	City staff					
Measurable Goals:	<p>Site plan review process reviewed and modified to address MCM # 4 within the first year of the permit</p> <p>Site plan review process reviewed and modified to address MCM #5 within the first four years of the permit</p> <p>Number of site plans reviewed per permit year</p> <p>Number and type of BMPs for MCM #4 and #5 shown on the final approved plans and/or addressed in some other manner per permit year</p> <p>Effectiveness of the site plan review process evaluated during the fifth year of the permit and modified if needed</p>					
Implementation Schedule*: <i>* Permit Year</i>	<p>Year 1 - Review and modification of site plan review process for MCM #4</p> <p>Year 4 - Review and modification of site plan review process for MCM #5</p> <p>Year 5 - Evaluate effectiveness of the site plan review process; make needed modifications</p>					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Public Information Receipt					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
	X	X	X	X	X	X
BMP Description:	<p>Development and implementation of procedures in the first year of the permit to receive, record, and consider information / input from the public.</p> <p>Details:</p> <p>Procedures needed due to the anticipated volume of public contact Staff will be educated on how to document public input from email, letters, faxes, phone calls, and personal contacts. Response actions tied to each request will be documented Response actions will be evaluated as to whether they were successful or not Follow-up action on unresolved problems will be ensured. Success of these procedures will be evaluated and the procedures modified as needed</p>					
Suitable For:	City staff					
Measurable Goals:	<p>Development of procedures and their implementation in the first permit year.</p> <p>Total number of contacts made by the public, method of contact, and associated data such as MCM every permit year.</p>					
Implementation Schedule*:	<p>Year 1 - Develop and implement procedures Year 2, 3, 4 & 5 - Continue program</p>					
* <i>Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Enforcement					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	Conduct enforcement specific to appropriate MCM Detail: The Policies and Procedures Program BMP developed for MCMs #3 and #4 will state enforcement steps to be taken in various situations. Increasingly more strict enforcement actions will be used with continued noncompliance at a site, including referral to the ODEQ and EPA in situations where the City's series of enforcement actions have failed to abate the pollutant source.					
Suitable For:	City-wide, all sources					
Measurable Goals:	Total number of sites requiring enforcement action every permit year and per MCM every permit year Total number of enforcement actions and type every permit year and per MCM every year Total number of sites requiring enforcement action beyond the first contact every permit year and per MCM every permit year Total number of sites referred to the ODEQ / EPA due to noncompliance every permit year and per MCM every permit year Number of pollution sources abated due to enforcement action every permit year and per MCM every permit year					
Implementation Schedule*:	Year 1, 2, 3, 4 & 5 - Conduct enforcement as necessary; record data					

* Permit Year



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Stormwater Website					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
	X	X	X			
BMP Description:	<p>Establish and maintain a storm water website by the end of the second permit year. Details: ACOG is proposing to establish and maintain this website; if that does not happen, the City will establish its own For MCM #2, information about programs and events will be available For MCM #3, information about the hazards associated with illegal discharges and improper waste disposal will be available</p>					
Suitable For:	General public					
Measurable Goals:	<p>Establish a storm water website by the end of the second permit year Number of times the website was updated every permit year Number of contacts made by the public due to accessing the website every permit year</p>					
Implementation Schedule*:	<p>Year 2 - Establish website Year 3, 4 & 5 – Update</p>					
<i>* Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	TV Public Service Announcement					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	<p>Create a TV public service announcement on water quality impacts from urban storm water by the end of the second permit year.</p> <p>Details: ACOG is proposing to create this; if that does not happen, the City will create its own The public service announcement will be run on local cable at least once every permit year</p>					
Suitable For:	General public					
Measurable Goals:	<p>Create TV public service announcement by the end of the second permit year</p> <p>Number of times or length of time announcement ran on local cable per permit year</p> <p>Number of contacts made by the public due to viewing announcement per permit year</p>					
Implementation Schedule*:	<p>Year 2 - Create announcement</p> <p>Year 3, 4 & 5- Run on cable</p>					
* <i>Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Newsletter (Utility Bill)					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
	X					
BMP Description:	Place one article about stormwater quality and/or public participation events in this publication once every permit year. Details: This is a City-generated newsletter sent at least annually to all utility customers in The City of Harrah					
Suitable For:	General public					
Measurable Goals:	Place one article about stormwater quality and/or public participation events once every permit year in this publication Number of contacts made by the public due to reading this article every permit year					
Implementation Schedule*:	Year 1 - Create article and place in newsletter Year 2, 3, 4 & 5 - Repeat					
* <i>Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Trash Collection Program					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
						X
BMP Description:	<p>Utilize lidded trash carts and City-volume waste tags. Details: Program already in place Additional carts available on a short-term or long-term basis at a reasonable cost City-volume waste tags required for trash in excess of 4 curbside bags; available at a nominal cost Reduces the amount of windblown floatable trash in the MS4 and waterways Lidded cart and plastic bags prevent precipitation from coming in contact with discarded materials and becoming contaminated Reasonable cost encourages utilization of the program and helps deter illegal dumping of lawn clippings, leaves, etc. in waterways</p>					
Suitable For:	General public, City staff					
Measurable Goals:	<p>Number of carts in use every permit year Number of carts in excess of one cart per site in use every permit year Number of sites using more than one cart every permit year Number City-coded trash bags distributed to local merchants every permit year</p>					
Implementation Schedule*:	None					
<i>* Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Bulk Trash Pick-Up and Drop-Off Program					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
						X
BMP Description:	<p>Offer bulk trash pick-up service and a local drop-off site for large items to help deter illegal dumping</p> <p>Details:</p> <p>Program already in place</p> <p>Bulk trash pick-up can be scheduled through the City's Sanitation Provider for a reasonable cost</p> <p>Reasonable cost encourages utilization of the program and helps deter illegal dumping of bulk items in waterways</p>					
Suitable For:	General public, City staff					
Measurable Goals:	Number of bulk trash pick-ups every permit year					
Implementation Schedule*:	None					
<i>* Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Posters					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
	X					X
BMP Description:	Develop or obtain posters for public awareness about storm water. Details: It will be continuously posted at City buildings					
Suitable For:	General public, City staff					
Measurable Goals:	Number of posters posted at City buildings per permit year Number of contacts made by the public attributable to viewing the poster per permit year					
Implementation Schedule*:	Year 1 - Develop / obtain poster and post at City buildings Year 2, 3, 4 &5 - Repeat					
<i>* Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	School Program					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	<p>Obtain / provide a storm water education program for the schools. Details: Blue Thumb has an excellent school education program, but the cost of it to the City has yet to be decided upon by Blue Thumb. If the cost is prohibitive, the City will create its own program and make the information and props available to schoolteachers to teach in their classrooms.</p>					
Suitable For:	Schools (3 rd – 9 th graders)					
Measurable Goals:	<p>Develop / obtain storm water education program the second permit year of permit Number of children every permit year receiving this instruction</p>					
Implementation Schedule*:	<p>Year 2 - Develop / obtain storm water education program Year 3, 4 & 5 - Continuously available</p>					
<i>* Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Clean-Up Events / Programs					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
	X	X	X			X
BMP Description:	Sponsor Adopt a Street program events every year. Details: This is an ongoing program currently sponsored by the City. “Adopt-a-Street” Program is continuously available; “Adopt-a-Street” Program requires clean-ups at least annually					
Suitable For:	General public, City staff					
Measurable Goals:	Miles of streets under adoption every permit year Number of clean-up events every permit year Number of participants in each event Miles of streets cleaned every permit year by these events Number of bags of trash collected or other quantifiable data on what was collected to demonstrate the success of the event					
Implementation Schedule*:	None					
* Permit Year						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Household Pollutant Collection Event					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	<p>Sponsor a household pollutant collection event once a permit year. and provide a Household Hazardous Waste Collection facility by contracts with Oklahoma Town and COMEA,</p> <p>Details: This may be held with the cooperation of COMEA’s Household Hazardous Waste Mobile Disposal Unit.</p>					
Suitable For:	General public, City staff					
Measurable Goals:	<p>Hold one household pollution collection event every permit year and provide permanent disposal sites.</p> <p>Types of pollutants collected and associated quantifiable data such as pounds, containers, gallons, etc. to demonstrate the success of the event.</p>					
Implementation Schedule*:	None					
<i>* Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Recycling Opportunities					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	Offer recycling opportunities. Details: These are opportunities currently offered by the City Curbside recycling - available in conjunction with the weekly trash collection; no separate fee to participate Glass and metal recycling drop-off center provided M-F 8-5.					
Suitable For:	General public, City staff					
Measurable Goals:	Number or percentage of households participating in curbside recycling every permit year					
Implementation Schedule*: <i>* Permit Year</i>	None					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Volunteer Stream Monitoring					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	<p>Encourage participation in Blue Thumb educational training events and volunteer stream monitoring.</p> <p>Details: Blue Thumb has an excellent program. Volunteers receive training on watersheds, water quality impacts, ecosystem health, and the mechanics of stream monitoring including visual inspections and field test kit procedures and chemical analyses. Volunteers are provided with test kits and assigned a stream site to monitor monthly. Continual refresher training is required.</p> <p>The training sessions are offered periodically throughout Oklahoma. Announcements of upcoming metro training events will be posted in City buildings and distributed to City high schools and non-profits to encourage volunteers.</p>					
Suitable For:	General public – adults, schools (10 th – 12 th graders)					
Measurable Goals:	<p>Number of announcements posted in City buildings per permit year</p> <p>Number of announcements distributed to City high schools and non-profits per permit year</p> <p>Number of people from The City attending a Blue Thumb training event per permit year</p> <p>Number of stream sites being monitored in The City by Blue Thumb volunteers per permit year</p> <p>Number of times streams in The City were monitored by Blue Thumb volunteers per permit year</p>					
Implementation Schedule*: <i>* Permit Year</i>	<p>Year 1 - Notify Blue Thumb of this BMP; distribute announcements when received</p> <p>Year 2, 3, 4 & 5 - Distribute announcements</p>					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Storm drain Marking					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	<p>Storm drain marking kits will be obtained / created the first permit year and offered continuously thereafter.</p> <p>Details: Blue Thumb has an excellent storm drain marking program, but the cost of it to the city has yet to be decided upon by Blue Thumb. If the cost is prohibitive, the cit will create its own kits.</p>					
Suitable For:	General public, schools, non-profits					
Measurable Goals:	<p>Obtain / create storm drain marking kits the first year of permit</p> <p>Number of storm drains marked every permit year</p>					
Implementation Schedule*:	<p>Year 1 - Obtain / create storm drain marking kits</p> <p>Year 2, 3, 4 & 5 - Continuously available</p>					
<i>* Permit Year</i>						



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Free Promotional Items					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	Purchase and distribute items with water quality message to promote the storm water program. Details: To be distributed free at public events when brochures are distributed					
Suitable For:	General public, schools, non-profits					
Measurable Goals:	Select one item type and purchase by the end of the second permit year Number of items distributed every permit year Number of contacts made by the public due to item every permit year					
Implementation Schedule*: * <i>Permit Year</i>	Year 2 - Select item type and acquire Year 3, 4 & 5 – Distribute					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Inspections					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
BMP Description:	Conduct inspections specific to appropriate MCM Detail: Investigations under MCMs #3 and #6 of the MS4 and waterways primarily will be complaint-driven Investigations under #4 and #5 will be both regularly scheduled as well as complaint-driven Good Housekeeping investigations under #6 of the City-owned facilities will be regularly scheduled Trigger mechanism, pertinent data, and applicable MCM for every investigation will be recorded Inspection training will be provided to City staff (refer to Training Module BMP)					
Suitable For:	City-wide					
Measurable Goals:	Total number of sites inspected every permit year and per MCM every permit year Total number of investigations conducted every permit year and per MCM every permit year Routine inspections for MCM #4 begun by the end of the first permit year Good Housekeeping inspections for MCM #6 begun by the end of the third permit year Number of investigations conducted for pollutant source tracking every permit year with breakdown of number by City staff and number by contract professionals Total number of inspections requiring follow-up action(s) and type(s) of follow-up action(s) every permit year and per MCM every permit year Total number of pollution sources abated due to an inspection every permit year and per MCM every permit year					
Implementation Schedule*: <i>* Permit Year</i>	Year 1, 2, 3, 4 & 5 – Conduct inspections; record data					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Brochure for Erosion Control for Construction Industry					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
				X	X	
BMP Description:	Develop guidance brochure for construction industry that addresses proper use, storage and disposal of on-site chemicals and proper erosion and sediment control measures. This is completed.					
Suitable For:	All construction activities within the City-wide MS4 system. Coordinate data attributes for regional consistency.					
Supplies, Equipment, Personnel Needed:	Brochures and/or pamphlets.					
ACOG Regional Storm Water Program Involvement:	Design/purchase brochures, store, inventory, distribute, evaluate, modify, re-order, keep records, assess measurable goals, report status to City, assist with Annual Report.					
Source for More Information:	Contact Person, Chris Richards City of Harrah Address 19625 NE 23 rd Str., Harrah, OK 73045 Phone # 405-454-2760 Email chris.richards@cityofharrah.com					
Suggested Measurable Goals*: <i>* by Fiscal Year</i>	2019 - Develop artwork and text, purchase quantity 2020 - Distribute brochures to all active construction sites 2021 - Distribute brochures to all active construction sites 2022 - Distribute brochures to all active construction sites 2023 - Distribute brochures to all active construction sites					
Implementation Schedule*: <i>* by Fiscal Year</i>	2019 - Select artwork and purchase initial set of brochures 2020 - Distribute to construction sites and during building permitting 2021 - Distribute to construction sites and during building permitting 2022 - Evaluate effectiveness and modify brochures if necessary 2023 - Continue to distribute brochures and expand distribution					
Estimated Annual Operational Cost*: <i>* by Fiscal Year - does not include City staff or crew time</i>	2019 - \$ 500 2020 - \$ 500 2021 - \$ 500 2022 - \$ 500 2023 - \$ 500					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Training Module for Chemical Storage and Disposal					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
						X
BMP Description:	Develop written material, brochures, videos and /or CD-ROMs that address proper use, storage, and disposal of on-site chemicals at City facilities. Conduct training sessions with City crews.					
Suitable For:	City public works crews and supervisors. Coordinate program elements for regional consistency.					
Supplies, Equipment, Personnel Needed:	Create / purchase brochures, videos, CD-ROM disks, forms, PowerPoint presentations and written handouts.					
Source for More Information:	Contact Person Chris Richards, City of Harrah 19625 NE 23 rd St, Harrah, OK 73045 Phone # 405-454-2760 Email chris.richards@cityofharrah.com					
Suggested Measurable Goals*: <i>* by Fiscal Year</i>	2019 - Develop all training supplies, purchase quantity 2020 - Conduct annual training for 50% of target City staff. 2021 - Conduct annual City training for 50% of target City staff. 2022 - Conduct annual City training for 50% of target City staff. 2023 - Conduct annual City training for 50% of target City staff.					
Implementation Schedule*: <i>* by Fiscal Year</i>	2019 - Select artwork and purchase initial sets of training supplies. 2020 - Conduct annual City training. 2021 - Conduct annual City training; evaluate effectiveness. 2022 - Conduct annual City training; modify program as necessary. 2023 - Conduct annual City training.					
Estimated Annual Operational Cost*: <i>* by Fiscal Year - does not include City staff or crew time</i>	2019 - \$ 500 2020 - \$ 500 2021 - \$ 500 2022 - \$ 500 2023 - \$ 500					



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

BMP Title:	Develop Regional MS4 and Outfall Maps					
Minimum Control Measure Addressed:	Public Ed.	Public Part.	Illicit Det.	Constr.	Post Const.	Housekeep.
			X			
BMP Description:	Map MS4 outfalls and streams channels, delineate watersheds, map main portions of the MS4 system, and locate high priority areas. Obtain data and map information through ACOG Regional Storm Water Program for all Phase II MS4s to use.					
Suitable For:	Entire City-wide MS4 system. Coordinate data attributes for regional consistency.					
Supplies, Equipment, Personnel Needed:	GIS software, regional GIS data, computers, Global Positioning System, City crews and ACOG staff.					
INCOG Regional Stormwater Program Involvement:	Obtain GIS and other regional map data; assist City crews with using GPS and performing visual inspections to locate outfalls and potential sources; compile regional map data and create regional GIS-based maps of combined MS4s; update as needed.					
Source for More Information:	Contact Person					
Suggested Measurable Goals*: <i>* by Fiscal Year</i>	2019	Obtain GIS data, computers, GPS, and other resources.				
	2020	Final maps completed.				
	2021	Revise maps from new data.				
	2022	Revise maps from new data.				
	2023	Revise maps from new data.				
Implementation Schedule*: <i>* by Fiscal Year</i>	2019	Obtain GIS data, computers, and GPS. Begin data collection.				
	2020	Complete final regional maps and locating priority areas.				
	2021	Update map data and resources.				
	2022	Update map data and resources.				
	2023	Update map data and resources.				
Estimated Annual Operational Cost*: <i>* by Fiscal Year - does not include City staff or crew time</i>	2019	\$ 3,000				
	2020	\$ 2,000				
	2021	\$ 2,000				
	2022	\$ 1,000				
	2023	\$ 1,000				



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

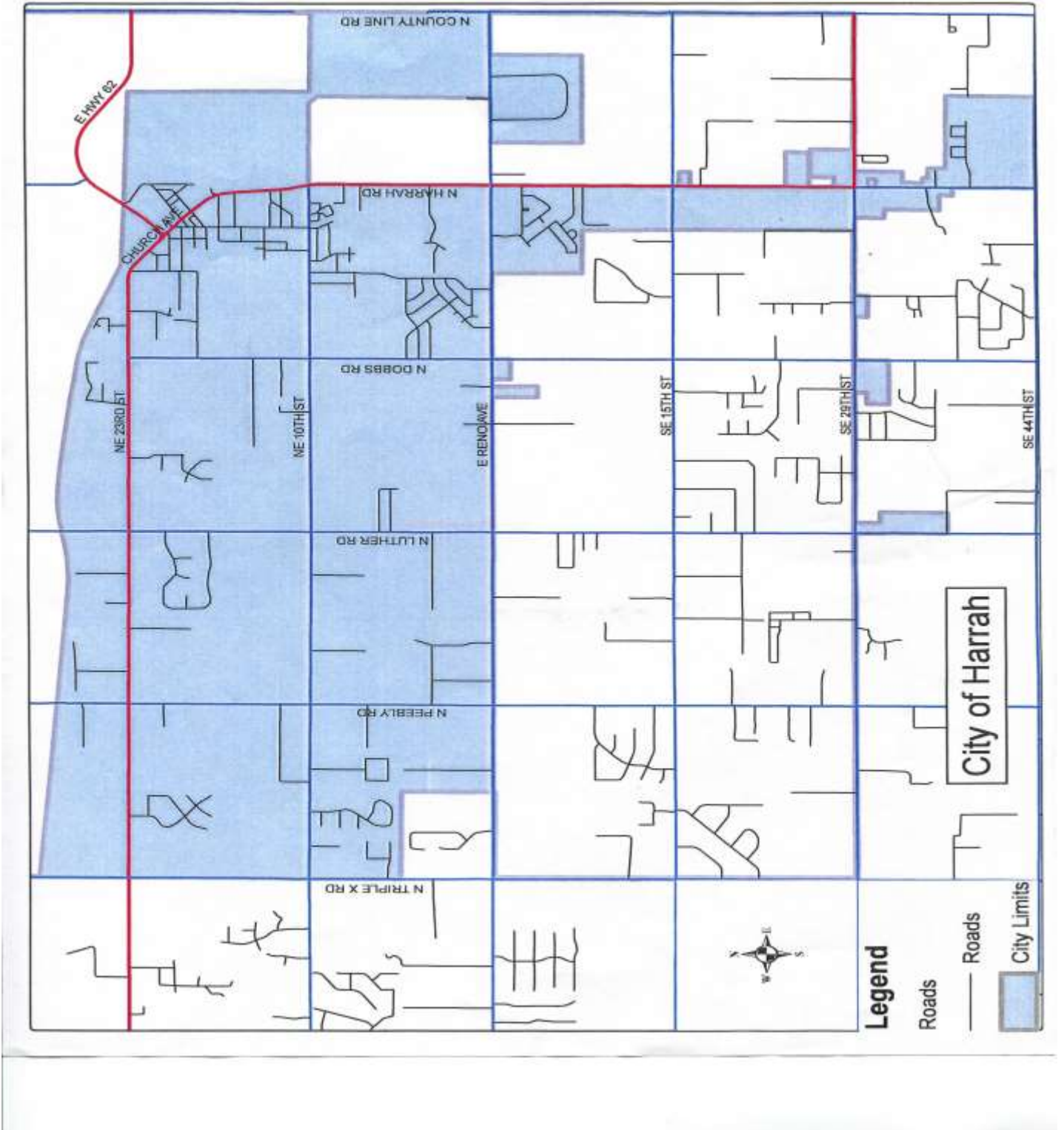
APPENDIX F

303(d) LIST REASONABLE POTENTIAL CERTIFICATION EVALUATION FORM

The following water bodies in The Harrah area are on the State’s latest (2002) EPA approved Category 5 list (“303(d) List”) of impaired water bodies in the *State of Oklahoma 2002 Water Quality Assessment Integrated Report* (IR). Use this form to determine if discharges from your MS4 “have the reasonable potential to cause or contribute to a violation of a water quality standard” in any of the 303(d) listed water bodies regarding the “pollutants of concern” for which the water body is listed as impaired.

Water body Name	WBID	Question #1	Question #2	Question #3	Question #4	RESULT (1):
		Does MS4 discharge to the listed segment?	Is the segment still most probably impaired (i.e. in 2014 IR)?	Does MS4 have potential sources of pollutants of concern?	Does pollutant of concern have a significant potential to enter segment?	Does MS4 have the reasonable potential to be considered a contributor of one or more pollutants of concern to the 303(d) segment (all 4 questions must be “yes”)
OK520510000110-20 North Canadian River		Yes	Yes	Yes	Yes	Yes
<p>The City’s SWMP and implementation of BMPs will attempt to minimize the chance that pollutants will discharge to the impaired water body.</p> <p>In addition, the City is currently working with Oklahoma Town to identify sources of groundwater infiltration into the City’s sewerage system to prevent sewerage by-pass situations that have on occasion resulted in the discharge of pollutants to the impaired water body. As sources of infiltration are located, the City will develop and implement plans to make the necessary improvements.</p>						

**Appendix G:
Map of City Limits of the City of Harrah**





City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

Appendix H:

Stormwater Pollution Prevention Plan (SWP3) Template

The City of Harrah will have potentially several types of construction activities in the future: 1) new buildings 2) cleared and/or paved areas such as parking lots or park ball fields, and 3) utility line entrenchment. The City of Harrah will either hire a contractor to perform the work or use City crews and equipment. Standard construction practices will be used on all projects. Local conditions include construction in accessible areas with sufficient easement and/or City ownership of property. Appendix G shows a map of The City of Harrah boundaries within which this option applies.

The City of Harrah's Project Manager will ensure that the project-specific SWP3 is developed and a copy kept at the construction site for review. When the City hires a contractor to perform the work, the City will require the contractor to prepare and maintain access to the SWP3, and this will be verified by the City construction inspector or other City official. The City will inspect the project site as with any other construction project within the City's jurisdiction. Part of this inspection process will be to ensure that all SWP3 requirements are being met.

a. Stormwater Team

Small MS4 must assemble a "storm water team," which is responsible for overseeing the development of the SWP3, any later modifications to it, and for compliance with the requirements in this Permit. The SWP3 must identify the personnel (by name or position) that are part of the storm water team, as well as their individual responsibilities. Each member of the storm water team must have ready access to an electronic or paper copy of applicable portions of this Permit, the most updated copy of your SWP3, and other relevant documents or information that must be kept with the SWP3.

b. Nature of Construction Activities

The SWP3 must describe the nature of the construction activity, including the size of the property (in acres), the total area expected to be disturbed by the construction activities (in acres), construction support activity covered by this Permit, and the maximum area expected to be disturbed at any one time.

c. Sequence and Estimated Dates of Construction Activities

The SWP3 must include a description of the intended sequence of major construction activities, including a schedule of the estimated start dates and the duration of the activity, for the following activities:

- (1) Installation of storm water control measures, and when they will be made operational, including an explanation of how the sequence and schedule for installation of storm water control measures complies with Part VIII.B.3.a and of any departures from manufacturer specifications.
- (2) Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- (3) Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site.
- (4) Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject in Parts VIII.B.3.b and VIII.B.4.b and
- (5) Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.

d. Site Map

The SWP3 must contain a legible site map or series of maps showing the following features of the project:

- (1) Boundaries of the property and of the locations where construction activities will occur, including:
 - (a). Locations where earth-disturbing activities will occur, noting any phasing of construction activities.
 - (b). Approximate slopes before and after major grading activities. Note areas of steep slopes (i.e., greater than 40%).
 - (c). Locations where sediment, soil, or other construction materials will be stockpiled.
 - (d). Locations of any crossings of surface waters.
 - (e). Designated points on the site where vehicles will exit onto paved roads.
 - (f). Locations of structures and other impervious surfaces upon completion of construction.
 - (g). Locations of construction support activity areas covered by this Permit.
- (2) Locations of all waters of the State within one mile of the site, including wetlands that exist within or in the immediate vicinity of your site. Indicate which waterbodies are listed as impaired for sediment, and which are identified by the State as ARC or ORW.
- (3) The boundary lines of any natural buffers (i.e., either the 100 foot or 50-foot buffer or other buffer areas retained on site) consistent with Parts VIII.B.3.a.(1), and VIII.B.4.b.
- (4) Topography of the site, existing vegetative cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of storm water and authorized non-storm water flow onto, over, and from the site property before and after major grading activities.
- (5) Storm water and allowable non-storm water discharge locations, including:
 - (a). Locations of any storm drain inlets on the site and in the immediate vicinity of the site.
 - (b). Locations where storm water or allowable non-storm water will be discharged to waters of the State on or near the site.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- (6) Locations of all potential pollutant-generating activities identified in Part VIII.B.7.e.(1) below.
 - (7) Locations of storm water control measures.
- e. **Construction Site Pollutants**
The SWP3 must identify all pollutants that you expect to be found at your site and that could be discharge from the site. The SWP3 must also list and describe the activities that are expected to generate these pollutants (or "pollutant-generating activities"). You must provide the following documentation in order to demonstrate your compliance with the permit requirements:
- (1) **Pollutant-generating activities at the site**

The SWP3 must include a list and description of all the pollutant-generating activities on your site. Examples of pollutant-generating activities include, but are not limited to: paving operations; concrete; paint; stucco washout & waste disposal; solid waste storage & disposal; and dewatering operations.
 - (2) **Pollutants**

For each pollutant-generating activity, an inventory of pollutants or pollutant constituents (e.g., sediment, paints, solvents, fuels) associated with that activity, which could be exposed to rainfall, snowmelt, and could be discharged from your construction site. You must consider where potential spills and leaks could occur that contribute pollutants to storm water discharges. You must also document any departures from the manufacturer's specifications for applying fertilizers containing nitrogen and phosphorus as required in Part VIII.B.3.c.(4).
- f. **A copy of this Permit must be included in your SWP3**
You may keep this Permit copy electronically and do not submit it to DEQ if you are required to submit your SWP3 for DEQ review.
- g. **Documentation of Measures to Protect Endangered or Threatened Species**
The SWP3 must include information on whether listed endangered or threatened species, or critical habitat, are found in proximity to the construction activity and whether such species may be affected by the small MS4 storm water discharges or storm water discharge-related construction activities. You must describe and implement the measures necessary to protect these endangered species and threatened habitat in the SWP3, including any equivalent sediment controls specified in Exhibit 4 Buffer Guidance or others.
- h. **Documentation of Federal, State or Local Historic Preservation Laws**
The SWP3 must include information on whether storm water discharges or storm water discharge-related activities would influence a property that is protected by Federal, State or local historic preservation laws along with any written agreements reached with the State services to mitigate those effects in Part I.D.
- i. **Documentation of Water Quality Impaired Waters**
The SWP3 must include information on whether storm water discharges or storm water



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

discharge-related activities would influence water quality impaired receiving waters. The permittee must describe how the BMPs and other controls selected for the site will reduce and avoid the discharges of pollutants of concern into any 303(d) impaired waters, including requirements of Part VIII.B.4.a. The permittee must describe and implement any measures necessary to meet the requirements of an approved TMDL or watershed plan and/or associated implementation schedule established in the TMDL or watershed plan. Monitoring and reporting of discharge quality may also be required if necessary to ensure compliance with an approved TMDL or watershed plan.

j. Stormwater Control Measures

Each SWP3 shall include a description of appropriate control measures (i.e., BMPs) that will be implemented as part of the construction activity to control pollutants in storm water discharges. The SWP3 must clearly describe for each major activity identified in Part VIII.B.6 appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

(1) Control Measures to be used during construction activity

You may utilize a national BMP menu to select appropriate control measures for your site. The national menu of Stormwater Best Management Practices can be found on EPA's website at: <http://water.epa.gov/polwaste/npdes/swbmp/index.cfm>

- (a). The construction-phase erosion and sediment controls should be designed to retain sediment on site to the extent practicable.
- (b). All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the small MS4 must replace or modify the control for site situations.
- (c). If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impact (e.g., fugitive sediment in street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).
- (d). Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.
- (e). Litter, construction debris, and construction chemicals exposed to storm water shall be prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, picked up daily).
- (f). Offsite material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWP3.
- (g). Many applications of straw and hay bales for erosion and sediment control are proving ineffective, maintenance-intensive, and expensive. Therefore, straw or hay bales as BMP controls within the State are not allowed. Alternatives to straw or hay



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

bales can be found on EPA's website at:
<http://water.epa.gov/polwaste/npdes/swbmp/Straw-or-Hay-Bales.cfm>

(2) Stabilization Practice

The SWP3 must describe the specific vegetative and/or non-vegetative stabilization practices that will be used to achieve temporary and final stabilization on the exposed portions of your site as required in Part VIII.B.3.b.

(3) Structural Practices

The SWP3 must include a description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices may include but are not limited to: silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Placement of structural practices in floodplains should be avoided to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

- (a). For common drainage locations that serve an area with ten (10) or more acres disturbed at one-time (or 5 acres if required by Part VIII.B.4.b), a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. When computing the number of acres draining into a common location it is not necessary to include flows from offsite areas and flows from onsite areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin.

In determining whether installing a sediment basin is attainable, the small MS4s may consider factors such as site soils, slope, available area on site, etc. In any event, the small MS4s must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls shall be used where site limitations would preclude a safe design. For drainage locations that serve ten (10) or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not attainable, smaller sediment basins and/or sediment traps should be used. Where neither the sediment basin nor equivalent controls are attainable due to site limitations, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area and for those side slope boundaries deemed appropriate as dictated by individual site conditions. DEQ encourages the use of a combination of sediment and erosion control measures to achieve maximum pollutant removal.

- (b). For drainage locations serving less than 10 acres, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided. DEQ encourages the use of a combination of sediment and erosion control measures to achieve maximum pollutant removal.

- (c). Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel when necessary to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. no significant changes in the hydrological regime of the receiving water).

k. Pollution Prevention

(1) Spill Prevention and Response

The SWP3 must describe procedures that you will follow to prevent and respond to spills and leaks, including:

- (a). Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for the detection and response to spills or leaks.
- (b). Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 3.2 and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.

You may also reference the existence of Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the CWA, or spill control programs otherwise required by an OPDES permit for the construction activity, provided that you keep a copy of that other plan onsite.

(2) Waste Management

The SWP3 must describe procedures for how you will handle and dispose of all wastes generated at your site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction, and domestic waste, hazardous or toxic waste, and sanitary waste.

l. Maintenance

All erosion and sediment control measures and other protective measures identified in the SWP3 must be maintained in effective operating condition. If site inspections required by Part VIII.B.7.m identify BMPs that are not operating effectively, maintenance shall be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

m. Inspections



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

(1) Person(s) responsible for Inspecting Site

The person(s) inspecting your site may be a person on your staff or a third party you hire to conduct such inspections. You are responsible for ensuring that the person who conducts inspections is a "qualified person"³. An inspection form shall be developed and included in your SWP3.

(2) Frequency of Inspections

At a minimum, you must conduct a site inspection once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater and within 24 hours of a discharge generated by snowmelt, unless you are subject to Parts VIII.B.4.a or b. If a storm event of 0.5 inches or greater, or snowmelt, causes your site to discharge, within 24 hours of the end of the storm event or the beginning of the snowmelt discharge you must conduct a site inspection when the discharge is occurring and comply with the requirements of Part VIII.B.7.m.(4).

(3) Reductions in Inspection frequency

You may reduce the frequency of inspections to once per month in areas of your site where you have initiated vegetative stabilization that meets the criteria in Part VIII.B.3.b, once you have completed the initial seeding or planting, and provided protection with non-vegetative cover pursuant to Part VIII.B.3.b.(2).(b), or you have installed temporary, non-vegetative stabilization that meet the criteria in Part VIII.B.3.b.(2).(d). If construction activity resumes at a later date, the inspection frequency shall immediately increase to that is required in Part VIII.B.7.m.(2).

(4) Requirements for Inspections

(a). Areas that need to be inspected

During your site inspection, you must at a minimum inspect the following areas of your site:

- i. All areas that have been cleared, graded, or excavated and that have not yet completed stabilization consistent with Part VIII.B.3.b.
- ii. All storm water controls installed at the site to comply with this provision.
- iii. Material/waste/borrow/equipment storage and maintenance areas that are covered by this Permit.
- iv. All areas where storm water typically flows within the site, including drainage ways designed to divert/convey/treat storm water.
- v. All points of discharge from the site.

³ A "qualified person" is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this Permit.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

vi. All locations where stabilization measures have been implemented.

(b). Inspection requirements

During your site inspection, you must:

- i. Check whether all erosion and sediment controls and pollution prevention controls are installed, appear to be operational, and are working as intended to minimize pollutants discharges. Determine if any controls need to be replaced, repaired, or maintained in accordance with Part VIII.B.7.n.
- ii. Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site.
- iii. Identify any locations where new or modified storm water controls are necessary to meet the requirements of Part VIII.B.3.
- iv. At point of discharge and, if applicable, the banks of any surface waters flowing within your property boundaries or immediately adjacent to your property, check for signs of visible erosion and sedimentation (i.e., sediment deposits) that have occurred and are attributable to your discharge. If not accessible, nearby downstream locations must be inspected to the extent practicable.
- v. Identify any incidents of noncompliance observed.
- vi. If a discharge is occurring during your inspection, you are required to identify all points of the property from which there is a discharge, and observe and document the visual quality of the discharge, and take note of the characteristics of the storm water discharge, including color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of storm water pollutants.

Also, you are required to document whether your storm water controls are operating effectively, and describe any such controls that are clearly not operating as intended or need maintenance.

- vii. Based on the results of your inspection, you must initiate corrective action under Part VIII.B.7.n.

(5) Inspection Report

- (a). You must complete an inspection report within 24-hours of completing any site inspection. Each inspection report must include the following:
 - i. The inspection date.
 - ii. Names and titles of personnel making the inspection.
 - iii. A summary of your inspection finding, covering at a minimum the observations you made in accordance with Part VIII.B.7.m.(4).



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

- iv. If you are inspecting your site at the frequency specified in Parts VIII.B.7.m.(2) and VIII.B.4.a.(2) and conducted an inspection because of rainfall measuring 0.5 inches or greater, you must include the applicable rain gauge or weather station readings that triggered the inspection.
- v. If you have determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations that this condition applied to.
- (b). Signature Requirements: Each inspection record must be signed in accordance with Part VI.H.
- (c). Recordkeeping Requirements: You are required to keep a current, copy of all inspection reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by DEQ.
- n. Corrective Actions⁴
 - (1) Requirements for Taking Corrective Action

You must complete the following corrective actions in accordance with the deadlines specified in this part. In all circumstances, you must immediately take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

 - (a). For any of the following conditions on your site, you must install a new or modified control and make it operational, or complete the repair, by no later than seven (7) calendar days from the time of discovery. If it is infeasible to complete the installation or repair within seven (7) calendar days, you must document in your records why it is infeasible to complete the installation or repair within the seven (7) calendar day timeframe and document your schedule for installing the storm water controls and making it operational as soon as practicable after the 7-day timeframe.
 - i. A required storm water control was never installed, was installed incorrectly or not in accordance with the requirements in Parts VIII.B.3 and/or VIII.B.6; or
 - ii. You become aware that the storm water controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part VIII.B.4; and
 - iii. One of the prohibited discharges in Parts I.C and VIII.B.3.c is occurring or has occurred.
 - (b). Where your corrective actions result in changes to any of the storm water controls or procedures documented in your SWP3, you must modify your SWP3 accordingly within seven (7) calendar days of completing corrective action work.

⁴ Corrective actions are actions you take in compliance with this Part to (1) repair, modify, or replace any stormwater control used at the site; (2) clean up and dispose of spills, releases, or other deposits; or (3) remedy a permit violation.



City of Harrah

PO BOX 636 * 19625 NE 23 * Harrah, OK 73045 * (405) 454-2951 * fax (405) 454-2130

City of Harrah

STORMWATER MANAGEMENT Program – March 2018

(2) Corrective Action Records

For each corrective action taken in accordance with this Part, you must complete a corrective action report, which includes the applicable information in this part.

- (a). Within 24 hours of discovering the occurrence of one of the triggering conditions in Part VIII.B.7.n.(1). (a) at your site, you must provide a record of the following:
 - i. Which condition was identified at your site?
 - ii. The nature of the condition identified.
 - iii. The date and time of the condition identified and how it was identified.
- (b). Within seven (7) days of discovering the occurrence of one of the triggering conditions in Part VIII.B.7.n.(1). (a) at your site, you must complete a record of the following:
 - i. Any follow-up actions taken to review the design, installation, and maintenance of storm water controls, including the dates such actions occurred.
 - ii. A summary of storm water control modifications taken or to be taken, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed.
 - iii. Notice of whether SWP3 modifications are required as a result of the condition identified or corrective action.

(3) Recordkeeping Requirements

You are required to keep a current copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by DEQ.

o. Non-Stormwater Discharges

Sources of non-storm water listed in Parts I.B.2 and VIII.B.2 of this Permit that are combined with storm water discharges associated with construction activity must be identified in the SWP3. The SWP3 shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.