DEQ FORM 605-R04
November 1, 2015

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Oklahoma Department of Environmental Quality

Notice of Intent (NOI) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Under OPDES General Permit OKR04

Please print or type: All items should be completed as accurately as possible and in their entirety. Please refer to Part 4 of the permit OKR04 for information about the required items. An original signature of the applicant is required according to PART VI.H in the permit OKR04. Use additional pages to fully describe your responses.

Note: Municipality is defined as a federal, state, city, town, county, district, association, or other public body (created by or pursuant to Oklahoma or Federal law), including special districts under State law such as a storm sewer district, flood control or drainage district, or similar entity, or a designated and approved management agency under Section 208 of the CWA.

1. **Name and address of the permit applicant and local contact:**

Name of the Small MS4: City of Claremore

Address: 104 South Muskogee

City: Claremore

County: Rogers State: Oklahoma

Telephone Number: (918) 341-3629 E-mail Address: clawrence@claremore

Name and Title of Stormwater Management Program Manager: Charlene Lawrence Stormwater Manager

Circle the appropriate letter to indicate the legal status of the operator of the facility: **F** = Federal; **S** = State; **M** = Municipal (public other than Federal or State, i.e. as city, county); **P** = Private

F ○ **S** ○ **M** ⊙ **P** ○

ZIP Code: 74017-1234

2. **Co-permittee:** Are you co-permitting with another entity? Yes ☐ No ☑ **If yes,** complete the following:

Name of the Co-permittee

Name and Title of Stormwater Management Program Manager

Mailing Address City ZIP Code

Telephone Number: E-mail Address:

Circle the letter for type of facility: Federal, State, Municipal, Private **F** ○ **S** ○ **M** ○ **P** ○

Certification by the co-permittee is required in Section 9.

Latitude: Longitude:

3. **Facility/Site Location:** Attach a map showing your MS4 boundaries. Your MS4 jurisdiction shall cover the entire area within the corporate boundary of the municipality if your city is not located entirely within an Urbanized Area.

Name of the Small MS4: City of Claremore County: Rogers

Street Address: 104 South Muskogee City: Claremore

Latitude: 36 Deg 18' 45" Longitude: 95 Deg 36' 57" Approximate area of the MS4: 14.29 square miles

Latitude/Longitude: If you do not have this information, go to the DEQ Flexviewer at http://gis.deq.ok.gov/flexviewer/.

4. **Will another entity provide services to perform some portion or all of the Best Management Practices (BMPs) for the six minimum control measures** (PART IV.C) **or TMDL supplemental conditions** (PART III.B)?

Yes ☑ No ☐ If yes, attach a statement listing their name and the service they will be providing.

5. **Receiving waters for discharges of stormwater from your MS4:** Use additional pages if needed.

Name of Waterbodies	Impaired?	Impairment	Source of Impairment
Cat Creek	Yes ☑ No ☐	303(d)	DO
Dog Creek	Yes ☑ No ☐	303(d)	Enterococcus,E.Coli,DO
Claremore Lake	Yes ☑ No ☐	303(d)	Chlorophyll A

Do you discharge into waterbodies on the Oklahoma 303(d) list of impaired waters? Yes ☑ No ☐

If yes, you must ensure that impairment caused by identified pollutants in your receiving waters will, in future discharges, not cause, have the reasonable potential to cause, or contribute to an in-stream exceedance of WQ standards and comply with PART III.A.1

Do you discharge into receiving waterbodies with an established TMDL or watershed plan? Yes ☑ No ☐

If yes, you must adopt any Wasteload Allocation (WLA) assigned to your discharges specified in the TMDL as measurable goals and include any limitations, conditions, monitoring, and other requirements associated with a TMDL implementation plan within specified timeframes.

Do you discharge into an Outstanding Resource Water (ORW)? Yes ☐ No ☑

If yes, you must document in your SWMP how you will comply with WQ standard prohibitions (PART III.C).

6. **Outline of Measurable Goals and BMPs**

Attach an updated description of your Stormwater Management Program (SWMP). You shall include details of BMPs that will be implemented and the measurable goals for each of the six stormwater minimum control measures, the month and year in which the MS4 operator will start and fully implement each of the control measures or the frequency of the action, and the name of the person(s) responsible for implementing or coordinating the SWMP.

7. **Endangered Species**

Based on the requirements of Part I. E and Exhibit 1, does your municipality discharge into an Aquatic Resource of Concern?

Yes ☐ No ☑ If yes, which criterion listed in Part I.E is your municipality using to meet eligibility requirements?

Criterion _____

Certification of this NOI will constitute your certification of compliance with the endangered species requirements of this Permit.

8. **Construction by the Permitted Municipality**

You have the option to develop permit requirements (PART VIII) that allow the municipality to cover all municipalities owned and operated construction sites under this Permit rather than filing a separate OKR10 NOI with the DEQ for each such project.

Will the municipality include the optional permit requirements into your SWMP and permit? Yes ☑ No ☐

9. **Certification of Permittee**

"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."

Signature of Applicant	Date Signed: 01/28/16
Name (print): Jim Thomas	Title: Claremore City Manager

Certification of Co-Permittee (if applicable)

Signature of Co-Permittee	Date Signed
Name (print)	Title

January 28, 2016

Ms. Karen Milford
Water Quality Division
Stormwater Permitting
P. O. Box 1677
Oklahoma City, Oklahoma 73101-1677

Re: OPDES Permit No. OKR040028 City of Claremore Phase II MS4 Stormwater Notice of Intent (NOI), Application and Summary Status Report (SSR) for the years 2005 through 2015

Dear Karen:

Attached you will find the OKR04 NOI Application for the City of Claremore and the SSR for Permit Number OKR040028 for the previous Permit Cycle of 2005 through 2015 with the OKR04 Application Checklist.

Included within is a map showing Claremore's MS4 boundaries, a map of Claremore Outfalls with names of the waterbodies and a map of the Claremore Storm Sewer System. A chart listing the 303(d) and TMDL listed water bodies.

Dog Creek has an established TMDL for Enterococcus, E.Coli, DO. Lake Claremore has an established TMDL for Chlorophyll a and Cat Creek has an established TMDL for DO.

"The City of Claremore herein declares our commitment to ensure the implementation of all requirements in our Stormwater Management Program (SWMP) document regarding protection of water quality in the 303(d) impaired waterbodies within our MS4 (SWMP Section II.K), and to implement all TMDL requirements specified in each TMDL document in

which our MS4 has been included (SWMP Section II.L). The City of Tahlequah has additional requirements to protect Outstanding Resource Waters (ORW) as specified in SWMP Section II.M and SWMP attachments. These three areas of special water quality protection in the SWMP address all requirements of OKR04's Part III Special Conditions."

OFFICE OF THE PRETREATMENT & STORMWATER – CHARLENE LAWRENCE
720 RAMM ROAD CLAREMORE, OKLAHOMA 74017 (918) 341-3629 FAX (918) 341-3421

The City of Claremore has opted for MCM#7 Construction Activities. Attached is an outline of the City of Claremore's Stormwater Pollution Prevention Plan (SWP3) for Claremore construction activities.

The City of Claremore is a member of the Metropolitan Environmental Trust (MET). The Claremore Recycle Center is operated by the MET and Rogers County Work Training Center personnel. Attached is the Letter of Agreement from the MET.

Claremore is also a member of Green Country Stormwater Alliance (GSA) an INCOG Sponsored program. Attached is the Agreement and Scope of Work from INCOG.

The Application fee of $100.00 is not attached with this NOI. After receipt of the Invoice from ODEQ, Claremore will issue the check for the Permit Fee.

Attached is the Summary Status Report (SSR) for the previous Permit Cycle from 2005 to 2015 with the description of the Stormwater Management Plan (SWMP) with the BMP Tables. The BMP Tables lists BMPs for all seven (7) MCMs with schedules for each BMP.

If you have any questions or concerns, please contact me at the number below.

Thank you,

CITY OF CLAREMORE, OKLAHOMA

Charlene Lawrence
Pretreatment & Stormwater Manager
918-341-3629
clawrence@claremorecity.com

INCOG SERVICES TO GREEN COUNTRY STORMWATER ALLIANCE (GCSA) MEMBERS

The following is a summary of services performed by INCOG annually on behalf of its GCSA membership. INCOG does not implement Minimum Control Measures as defined in the ODEQ stormwater permit (OKR04). The table identifies which activities are for technical research / assistance and which can be considered Best Management Practices to be claimed by GCSA members (employee training on OKR04-required topics and hosting the regional GCSA website at www.stormwaterok.net). OKR04's Part V.C.1.g requires a written agreement with *"another government entity"* if the permittee is relying on them *"to satisfy some of your permit obligations"*. This document satisfies OKR04 Part V.C.1.g requirements.

INCOG Activity	BMP or Support	Notes
Co-host water quality and stormwater conferences	Support	Works with other agencies as co-host. Frequent speaker or line up other speakers for variety of topics.
Employee training workshops	BMP	Organize and hold workshops on OKR04-required topics.
Education materials	Support	Develop, acquire and make available to GCSA members. Post downloadable files on GCSA website.
Research legal and technical issues	Support	Research via document reviews, emails, meetings on all technical and legal issues important to GCSA members.
Maintain GCSA website	BMP	Annual refresh of website materials, updated as needed.
Prepare documents, templates	Support	Variety of technical documents for member support.
News Bulletins, Fact Sheets	Support	Prepares monthly GCSA bulletins and fact sheets on important stormwater topics for GCSA members.
LID education support	Support	Speaks at conferences, prepares documents on LID and co-hosts events on LID issues. Summarizes annually.
Mapping	Support	Prepares regional and MS4 maps for members, provides map data and GIS layers upon request.
Screening inspections	Support	Develops field forms; trains on equipment, procedures and safety; assists in field upon request.
GCSA member meetings	Support	Hosts 2-3 member meeting annually on numerous topics.

OKR04-Required Certification Statement:

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

INCOG Executive Director

1/19/16
Date

GreenCountryStormwaterAlliance
GiveCleanWateraHelpingHand

INCOG

The Met
The Metropolitan Environmental Trust

Williams Tower I - 1 W. 3rd Street - Suite 110 - Tulsa - OK -74103

January 26, 2016

Ms. Charlene Lawrence
City of Claremore, Oklahoma 74012

Dear Charlene,

The Metropolitan Environmental Trust, The M.e.t., would like to partner with the City of Claremore to assist with your Stormwater Management Program (SWMP). I understand that you are in the process of submitting your Notice of Intent (NOI) to The Oklahoma Department of Environmental Quality (ODEQ) for renewed coverage of the Phase II Small Municipal Separate Storm Sewer System Discharge permit (OKR04).

The M.e.t. is prepared to assist with your SWMP and regulatory compliance efforts in the following areas:
1. Host the M.e.t. regional website.
2. Produce educational material and provide public resources and educational outreaches.
3. Manage regional specialty HHP pollutant collection events.

Specific Best Management Practices, BMPs, to support are:
Public Education and Public Participation:
a. The public can obtain recycling, composting, and hazardous waste education, volunteer and disposal information through The M.e.t. website and social media.
b. Primary education grades can learn about recycling through M.e.t. educational materials and outreaches, the Bin Loan & Event Program, and the Solid Waste Education Trunk.
c. The M.e.t. will host, manage and promote special HHP collection events regionally.

The Metropolitan Environmental Trust will manage its website, social media, educational outreaches, and special pollutant collection events and the City of Claremore will provide funds for The M.e.t. to provide services to its member governments.

Sincerely,

D. Graham Brannin
The M.e.t. Executive Director

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Bill Burns
INCOG Executive Director

1/19/16
Date

Green Country Stormwater Alliance
Give Clean Water a Helping Hand

INCOG

Cat Creek Storm water Outfalls

May 11, 2006

1. **Cat Creek crossing Lowry Road entering city limits (Outfall)**
2. **Drainage ditch from North Lowry (Outfall)**
3. **Drainage ditch West of Burgess Norton (Outfall)**
4. **Drainage ditch along John Burrows (Outfall)**
5. **Pryer Machine detention pond outfall**
6. **Chambers and 17th (Drainage access/Outfall)**
7. **Chambers Trail between Williams and School (Box)**
8. **Pecan Park, Northwest corner, drains neighborhood (Outfall)**
9. **Blue Starr and Cat Creek (Outfall under bridge)**
10. **Behind Reasors from West access Chambers Trail and Westwind**
11. **North of Reasors, behind 1007 N. A. Street (access road behind Reasors)**
12. **Will Rogers and Cat Creek Southwest (Outfall)**
13. **Will Rogers and Cat Creek Northeast (Outfall)**
14. **East of Trailer Park on Chambers & Strain, behind Nemar (outfall)**
15. **Drainage Ditch on Archer & Moretz RR Tracks(outfall)**
16. **Quik Trip outfall**
17. **Drainage ditch underneath JM Davis South of Cat Creek. Comes from south and south of Quik Trip. Right behind Claremore sign (outfall)**
18. **Family Dollar Center – Radio Shack (outfall)**
19. **Pecan Grove Mobil Home Park behind Atwoods**
20. **Ramm Road between Streets and Public Works Bldg.**
21. **Park at Jordan & Cherokee, south outfall**
22. **Park at Jordan & Cherokee, north outfall**
23. **Muskogee Bridge**
24. **14th and Reavis Road**
25. **Kelly Ct., east of Choctaw, just north of WWTP**
26. **Chickasaw between Jordan and Inola**
27. **Chickasaw between Inola and Payne**

Dog Creek Outfalls
(5/11/06)

D1. **Behind Woody's – Box underneath dead tree (outfall)**

D2 **Behind Come and Go on Highway 20**

D3 **Creek at end of Faulkner**

D4 **12th Street between Miller & Douglas (big box south of 12th)**

D5 **East of Dorothy between 8 & 9th (behind trailer park)**

D6 **Florence and Highway 88, big box along highway**

D7 **Dog Creek and Flint Road (leaving City)**

SUMMARY STATUS REPORT

For the City of Claremore, Oklahoma

The following report has been prepared by the City of Claremore, a Renewal (Existing) Permittee, in accordance with OKR04 Part II.A.1.a. OKR04 requires each Renewal Permittee to submit, along with the Notice of Intent (NOI) Form at time of application, a Summary Status [Report], (SSR) that includes the following information required by Part II.A.1.a:

"You must include a list of current measurable goals for all Seven (7) Minimum Control Measures (MCMs) and summary of all Best Management Practices (BMP) activities actually accomplished in the summary status of your current SWMP. Also, you must include the changes to any BMPs or any measurable goals that apply to your current SWMP."

Additional MS4 program information is provided in the City of Claremore's "Description of your SWMP" also required to be submitted with each applicant's NOI Form and in the City of Claremore's SWMP document itself. Completion of the following information satisfies the SSR requirements in OKR04 Part II.A.1.a. All other application materials will be provided separately from this document.

I. Permittee Information:

Name of Permittee: City of Claremore
Permit Number: OKR040028
Name of Program Manager: Charlene Lawrence, Pretreatment & Stormwater Manager
Contact Information:

P.O. Box: 249
City, OK: Claremore, Oklahoma 74018-249
Phone: 918-341-3629
Email: clawrence@claremorecity.com

II. Background:

1. The City of Claremore received an Authorization to Discharge from ODEQ on October 31, 2005.

2. Brief summary of how the City of Claremore implemented the SWMP over the past 10 years:

   The City of Claremore Notice of Intent (NOI) for coverage under the ODEQ General Permit for Phase II Municipal Separate Storm Sewer Systems (MS4) Discharges for Small Cities

within the State of Oklahoma, was received by ODEQ on May 02, 2005. ODEQ issued Permit No OKR040028 with an effective date of October 31, 2005.
As required by OKR04, the City of Claremore evaluated the implementation of the Best Management Practices (BMPs) for each Minimum Control Measure (MCM) and assessed the overall compliance with the MCMs. The evaluation is thaqt the City of Claremore is in compliance with the Stormwater Management Plan (SWMP) for all BMP implementation.

The implementation of the City of Claremore Stormwater Program included the adoption of an Illicit Discharge Ordinance to address requirements of the OKR04 Stormwater Permit and the BMP requirements. The Illicit Discharge Ordinance includes illicit discharge prohibitions, watercourse protection, construction activities, erosion and sediment control requirements, post construction requirements, penalties and administrative enforcement remedies. In 2013, the City of Claremore adopted an Ordinance for Stormwater Drainage System Service Charge. In 2015, Claremore updated the Stormwater Illicit Discharge Ordinance with additional Construction and Post Construction requirements.

The City of Claremore has a Stormwater page on the Claremore Website addressing Stormwater runoff, Raingardens, complaints, hazardous waste, what is a watershed, Recycling and a copy of the Stormwater Ordinances.

The City of Claremore has developed applications, forms, templates and Standard Operating Procedures (SOPs) to cover aspects of the Program.

Since the development of the Stormwater Program, the City of Claremore has significantly updated interdepartmental communication. Claremore has Site Plan Reviews with Pre-TAC and TAC meetings. (Technical Advisory Committee)

The City of Claremore has an effective and successful method for Claremore residents to report pollution, system maintenance, flooding issues, complaints and to make work order requests. The City of Claremore uses Civic Plus for website work order requests and GOVQA for phone and work order requests and also utilizes Social Media. All systems have proven to be successful for tracking work orders and verifying completion.

The City of Claremore utilized Green Country Stormwater Alliance (GCSA) and Rogers County Conservation District (RCCD) and The MET to help implement the Public Education and Public Participation MCMs. Public Education and participation was performed through brochures, handouts, display boards, curb marking programs, creek cleanup events, stream monitoring by RCCD and Claremore High School Students, signage, utility bill mailers, Enviroscape Models through RCCD, school education programs, urban pollution prevention commercials that previews every movie at the Claremore Cinema 8 Movie Theatre and Newspaper articles.

RCCD with Claremore High School volunteers performed stream monitoring and clean up twice per year around April and October on Walnut Creek for some years in the previous Permit Cycle.

The City of Claremore initiated a public education program targeting grass clippings and yard debris in storm sewers and streets through an article in the Claremore Daily Progress, movie commercials and utility bill inserts. When the City receives a complaint about grass or yard debris in the street or storm sewer system, the Inspector drives to the location and speaks with the citizen if they are present. If not, a Door Hanger is placed on the door informing the citizen of the violation with suggestions to correct the violation. This initiation was a good example of the effectiveness of Public Education and Public Participation MCMs working to decrease illicit discharges.

The City of Claremore has an ongoing program of cleaning catch basins and the debris is hauled to the Claremore landfill. The City also sweeps the streets of Claremore and the debris is hauled to the Claremore landfill. Since the inception of the program, the City of Claremore has tracked pollutant and debris removal related to these activities.

In 2015, the City of Claremore dedicated three (3) employees to Stream and Creek maintenance. The employees mow and maintain the creeks and streams to prevent water from backing up and flooding.

As a results of these activities, the decrease in stormwater and flood related complaints have decrease significantly.

The City of Claremore has placed Doggie Bag stations along the trails around the Claremore Lake for citizen's use when they are walking their dogs.

The City of Claremore hired Meshek and Associates to create a Claremore Master Drainage Plan (The Plan). The storm sewer system was surveyed as part of the Plan. All inlets, outfalls, manholes and storm sewer pipes were labeled and mapped.

The City of Claremore is a member of The Metropolitan Environmental Trust (MET). We have a Recycle Depot located at 810 Ramm Road, Claremore, Oklahoma 74017 that is operated by Rogers County Work Training Center (RCWTC) personnel and is open seven (7) days per week. The Depot receives glass, plastics, cardboard, paper, used motor oil and used cooking oil. The City of Claremore has a Drug Take Back Program. There is a drop box in the lobby at the Police Department for citizens to place unused drugs and medications in. Oklahoma Bureau of Narcotics (OBN) picks up the drugs and disposes of them according to their protocol. Claremore has also participated in the Household Hazardous Pollution Events (H2P2) held twice per year in April and November at the Fair Grounds in Tulsa, Oklahoma. Claremore also provides the citizens of Claremore with an annual H2P2 Event in Claremore held in the Spring. The Claremore event receives hazardous wastes, tires,

electronic equipment, pesticides and herbicides, oil based paint and used motor oil and antifreeze.

In addition to the H2P2 Event in the Spring, Claremore also hosts a Trash Off Day where the citizens can drop off large items at different locations within Claremore or drive to BFI/Waste Management landfill to drop off their items sponsored by the City of Claremore.

All stormwater outfalls were identified and Dry Weather Field Screening (DWFS) was performed on all outfalls once during the last permit cycle. SOPs and forms were developed and implemented for the DWFS Program. Data from the first round of DWFS will be utilized to prioritize future DWFS activities. All DWFS outfalls have the latitude and longitude added.

The City of Claremore has adopted a Post Construction Ordinance to address post construction maintenance. The City of Claremore has also included in the Engineering Design Criteria that no post construction facilities will be adopted or maintained by the City unless it is deemed a Regional Detention Facility and all proper easements are in place. Post construction inspections are performed by the City as part of the DWFS Program.

The City of Claremore has added a Stormwater Inspector and has implemented a Construction Inspection Program. All construction sites are routinely inspected on a drive by basis. On site inspections are performed for sites that have stormwater related issues or are too large for successful inspection by vehicle. All construction site complaints are inspected and addressed. Notice of Violations are issued to repeat offenders.

The City issues Erosion Control Permits for construction activities within the City of Claremore. The 2015 revision of the Stormwater Illicit Discharge Ordinance has a requirement for construction activities with a disturbed surface of less than one acre as well as one acre or larger. The review process of this permit serves as a checkpoint to ensure that no construction begins within the City of Claremore on large scale construction sites before a NOI has been submitted and an OKR10 Authorization to Discharge from ODEQ has been issued. No permit is issued without proper documentation obtained and developed first.

3. List of other entities that provided assistance:

INCOG. INCOG assisted the City of Claremore through the Green Country Stormwater Alliance (GCSA) membership. GCSA assisted the City of Claremore with employee training, public education and outreach, mapping, SWMP Template development and local and regional stormwater conferences, LID education support and GCSA maintains a Stormwater website.

The MET. Hosts a MET Regional website, produces educational material and provides public resources and educational outreaches, managed regional specialty H2P2 twice per year in April and November, newspaper articles, public education on recycling, composting and hazardous waste. Manages the Recycling Depot within the City of Claremore.

III. Current Measurable Goals and BMPs Accomplished:

Attachment 1 lists the current Measurable Goals and BMPs that have been accomplished by the City of Claremore. The Attachment 1 table also provides for including any relevant/available data on BMP compliance not previously reported to DEQ in any past Annual Reports submitted to ODEQ. Item IV of this SSR lists the SWMP changes that are planned for future BMP implementation upon re-authorization to discharge in 2016. Item VI of this SSR summarizes any problems encountered by the City of Claremore in implementing BMPs under the OKR04 stormwater program including the corrective actions taken.

IV. CHANGES TO BMPs AND MEASURABLE GOALS FOR THE NEW SWMP:

Attachment 2 lists the major changes to BMPs and their Measurable Goals that are planned to be made by the City of Claremore in the forthcoming SWMP and OKR04 program upon reauthorization in 2016. Consult the City of Claremore's SWMP document for additional details about all program BMPs as well as their Measurable Goals and implementation schedules.

V. 2014 303(d) AND TMDL WATERBODIES WITHIN MS4:

The City of Claremore has reviewed the latest lists of waterbodies from ODEQ within its MS4 boundaries pertaining to 303(d) impairment and completed Total Maximum Daily Load (TMDL) studies. The following are found within the MS4:

2014 303(d) Listed:

Stream	WBID	Parameters
Dog Creek	OK121500040010_00	Fish, Bioassessment, DO, pH
Dog Creek	OK121500020360_00	Benthic Macroinvertebrates, Enterococcus, E. Coli, DO
Lake Claremore	OK121500040020_00	Chlorophyll A
Cat Creek	OL121500020390_00	DO

Completed TMDLs through 2014:

Stream	WBID	Parameters	TMDL Type (1)
Dog Creek	OK121500020360_00	Enterococcus, E. Coli	Notification
Lake Claremore	OK121500040020_00	Chlorophyll A	Notification
Cat Creek	Ok121500020390_00	DO	Notification

(1) "Notification" TMDL or EPA-Approved TMDL.

Consult the City of Claremore's SWMP for information about how each of these 303(d) and TMDL waterbodies will be addressed in the City of Claremore's stormwater permit program. All of the TMDLs listed in the table above have been completed and approved by ODEQ and EPA. Oklahoma TMDLs completed prior to late 2013 require that ODEQ notify the MS4 to begin initiating any compliance actions specified in the TMDL document. However, the latest TMDLs must begin implementation "upon approval by EPA". The City of Claremore's SWMP and each TMDL document describes the actions to be taken by the City of Claremore either upon notification by ODEQ or in accordance with the implementation schedule in each EPA-Approved TMDL document.

VI. SWMP IMPLEMENTATION PROBLEMS AND SOLUTIONS:

The following is a brief summary of the major problems encountered by the City of Claremore over the past 10 years while implementing the SWMP followed by a description of the steps taken to correct the problems. At this time, all of the City of Claremore's current SWMP requirements have been successfully implemented.

VII. FUNDING OF SWMP PROGRAM:

The following is a brief summary of the present and anticipated future funding sources that will be used to achieve full implementation of all program activities and BMPs for the City of Claremore:

The City of Claremore adopted an Impervious Space Stormwater Utility Fees Ordinance in 2013. The Stormwater Utility Fee will fund both current and future Stormwater Program requirements.

VIII. STATUS OF ADDRESSING ODEQ AUDIT FINDINGS:

The City of Claremore's MS4 program was evaluated by ODEQ on April 23 through 24, 2009. ODEQ issued a written report outlining the Findings and Recommendations from this evaluation and required a written response within thirty (30) days of the receipt of the report outlining the

steps taken to address the field evaluation findings only. Evaluation Findings were to be addressed by the City of Claremore prior to the new permit cycle. Evaluation Recommendations were to be considered as the City of Claremore's MS4 program evolved. In order to more fully evaluate the City of Claremore's MS4 program, ODEQ is requesting that the City of Claremore address the Findings of the evaluation in this SSR.

The following table summarizes the City of Claremore's actions taken to address the Findings as specified in the written summary letter received from ODEQ a few months after the program evaluation.

ODEQ Program Evaluation Conducted: April 23 – 24, 2009.

Finding from ODEQ Letter	Location of Issue	Corrective Actions Taken	Comments
Sanitation trucks leaking fluid at Public Works Building. The spilled fluid should be removed and the leaks in vehicles should be repaired as soon as possible.	Applies to all MS4 owned facilities.	Spills are cleaned as quickly as possible with absorbent and shoveled and disposed of. A 130+ preventive maintenance inspection is performed on trucks every 90 days unless there is a problem then maintenance immediately.138+ maintenance 1 per year.	
Trash in the drainage channel between the Public Works and Public Infrastructure buildings	Public Infrastructure and Public Works buildings.	Debris in the drainage channels on both sides of the properties is removed and maintained on an as needed basis. The trash is collected and placed in trash bags and put into the dumpsters in the back of the building.	
Public Infrastructure building waste bins were missing covers. Staff should repair these waste bins as soon as possible.	Applies to all MS4-owned facilities.	City repaired casters and replaced lids on waste bins.	Claremore has written a BMP for dumpster areas within the city.

ATTACHMENT 1:
Table of All BMPs Presently Being Implemented By Permittee

The following BMP information is compiled from the City of Claremore's most recent version of its present SWMP document. Consult the SWMP for additional program and BMP implementation information. The Implementation Details column should include any relevant available data on compliance not previously reported to DEQ in an Annual Report. This will provide ODEQ with any information relevant to the BMP that has not yet been reported in previous Annual Reports, and it is an important information request needed by ODEQ.

BMP Description	Measurable Goal	Implementation Status (1)	Implementation Details
Develop and distribute education materials	50 of each brochure distributed	**100%**	**Printed education materials included brochures, pocket notebooks, door hangers and utility bill mailers.**
Regional training sessions for city employees	25% of eligible employees attend	**100%**	**Regional training attended by Stormwater Manager and available city Personnel.**
MS4 Mapping	updates 100% complete	**100%**	**The City of Claremore continually updates the Stormwater maps.**
Street Sweeping	970.36 miles/year	**100%**	**The Claremore sweeps every week day unless the truck is in need of repair or being maintained.**
Trash Pickup	250 bags/year	**100%**	**When mowing crews pick up trash. In the spring Claremore hosts a Trash Off Day for all Claremore citizens.**
Cleaning catch basins	200 catch basins cleaned	**100%**	**City crews clean catch basins continuously and after rain events and when complaints are received.**
Citizen Stream Clean up and Maintenance	Newspaper article and letters sent to residents.	**100%**	**Claremore personnel and Rogers County Conservation District and Claremore High School students cleaned and monitored Walnut Creek twice per year in Spring and Fall until 2010.**
Dry weather field screening	20 % of outfalls per year	**100%**	**Every Outfall was screened in the first Permit Cycle.**

Ordinances for Illicit Discharge, Construction, and Post Construction	Review and update 100% complete	**100%**	**The Illicit Discharge and Construction and Post Construction Ordinance was updated in 2015.**
Water quality considerations in site plan review	75% of plans reviewed	**100%**	**Every Commercial build and one or more acre is Pre/TAC and TAC meeting with various City Departments.**
Regional water quality seminars or conferences	1 city employees attend	**100%**	**Stormwater Manager with available personnel attends at minimum one Seminar per year and Quarterly INCOG GCSA meetings.**
Present Stormwater topics in public meetings	CE/PWD quarterly report	**100%**	**Stormwater has been addressed at Council Meetings and Builders meetings and school meetings.**
Help develop/participate in regional website	10 website hits	**100%**	**The City of Claremore is a member of GCSA and its regional stormwater website. The City of Claremore has a Stormwater webpage that addresses stormwater and recycling.**
Display board, signs, giveaway items	1 public event	**100%**	**The regional display board was used at city wide public events and the County Fair.**
Rogers Cnty. Conservation Dist. School Education Program	2 school education programs	**100%**	**The City of Claremore and RCCD hosted an annual Billy B Concert that reached over 1,000 area 4th grade students. Walnut Creek monitoring and Clean up program with High School Students. Water Cycle maps and education books and tools distributed to area schools and RCCD facility.**
Blue Thumb storm drain marking	Check for missed or vandalized storm drains	**100%**	**Rogers State University students and Claremore personnel marked every unmarked storm drain in Claremore.**
Recycling Center	Continue to support	**100%**	**Claremore is a member of the MET. The MET sponsors our Recycle Depot with Rogers County Work Training Center.**
Household Hazardous Pollutant Event	Two Events	**100%**	**Claremore citizens attended two H2P2 events per year at the Tulsa Fair Grounds in April and November**

			and Claremore hosted 1 event per year in the Spring locally.
Investigate stormwater related complaints	75% investigated within 72 hours	**100%**	**Ongoing investigations when received.**
Construction Site Inspections	75% of sites inspected	**100%**	**All construction sites within Claremore are inspected. NOVs are issued to repeat offenders.**
Inspections of City facilities	2 facilities inspected	**100%**	**Claremore Regional Airport and Wastewater Treatment Facility are inspected quarterly. All other facilities to be inspected annually.**
Program to receive public comments	100% complete	**100%**	**Claremore utilizes Civic Plus and GOV QA and Social Media to answer complaints. All complaints are addressed.**
Care More for Claremore Day	2 Events	**100%**	**The City of Claremore hosted two events until 2010.**

(1) List status as percent complete, in 0% to 100%.

ATTACHMENT 2:
BMPs Changes That Will Be Implemented By Permittee

This table summarizes changes that will be made to existing BMPs once OKR04 permit coverage is renewed in 2016. Consult the City of Claremore's SWMP document for additional details about the stormwater program and BMPs planned for implementation in the future.

BMP To Be Changed	Change To Be Made	Reason For Change
Care More for Claremore Events (2)	Replaced with Claremore Annual Trash Off Day every Spring	Loss of interest from Public

IX. INSTRUCTIONS FOR COMPLETING THE SSR TEMPLATE:

Step 1: Do a word "replace all", replacing "City of Claremore" with your local MS4 name, e.g., "City of Bixby", or "Tulsa County", etc.

Step 2: All red text is text that needs to be deleted or changed as appropriate. It is generic examples that need local specific information substituted, or deleted altogether if it does not apply.

Step 3: All blue underline _____ spaces are for filling in your local information, such as contact info, descriptions of funding, etc. These are the places to insert narrative descriptions. Be brief and concise.

Step 4: **Attachment 1** Table: Fill in the data using your present SWMP tables of BMPs and Measurable Goals. Attachment 1 is information for ODEQ about your existing program's BMPs, so take the data from your most current SWMP's table of BMPs – be sure it is current and accurate. Attachment 1 table is ODEQ's best way of knowing the details of how you implemented each BMP, especially if you have not submitted all Annual Reports since 2010. Be brief, concise and accurate. The Implementation Details column may take some research of files in addition to your SWMP.

Step 5: **Attachment 2** Table: List each existing BMP that is to be changed (modified or replaced). No need to list any BMPs that are not being changed. ODEQ is allowing existing permittees to make BMP replacements at this time of filing the NOI in 2016 without having to justify the changes per OKR04 Part IV.D. However, all changes must be implemented within one year from November 1, 2015, the OKR04 permit effective date.

APPENDIX A, TABLE 2: MEASURABLE GOALS AND IMPLEMENTATION SCHEDULES FOR EACH BMP IN TABLE 1

BMP MEASURABLE GOALS AND IMPLEMEN TATION SCHEDULES	Annual Measurable Goal	2016	2017	2018	2019	2020
IV.C.1. PUBLIC EDUCATION AND OUTREACH						
a. Distribute Brochure to general public: **Water quality Impacts from Urban Stormwater**	Distribute 25 at local events and public buildings	All year	All year	All year	All year	All year
b. Distribute Brochure to general public: **Household chemical disposal options**	Distribute 25 at local events and public buildings	All year	All year	All year	All year	All year
c. Distribute brochure to business owners: **Chemical storage and disposal at businesses**	Distribute at least 25 at local events and public buildings; mail	All year	All year	All year	All year	All year
d. Distribute brochure to Homeowners with on-site sewage disposal systems: **Proper on-site Sewage disposal system maintenance.**	Distribute 25 at local events and public buildings, mail to residents with septic systems	All year	All year	All year	All year	All year
e. Post an OSSF maintenance information page on the city website.	Obtain maintenance information form to include on city website.	Research	Place on website	Continue update as needed	Continue update as needed	Continue update as needed
f. Distribute pet waste brochures to general public	Obtain brochure, Distribute 25 at local events and public buildings	Obtain brochure	Distribute	Distribute	Distribute	Distribute
g. Place information on city website about bacteria discharge types and amounts from residential properties either as direct discharge or in runoff.	Research, Place on website, update as needed	Research	Place on website	Update as needed	Update as needed	Update as needed
h. Place information on city website about bacteria contamination from sewer overflows caused by fats, oils and grease disposal to sewer lines.	Research, Place on website, update as needed	Research	Place on website	Update as needed	Update as needed	Update as needed
i. Distribute brochure to general public-adults, and schools (5th-12th): **How to become involved in stormwater program**	Distribute 50 at local events and public buildings; schools	All year	All year	All year	All year	All year
j. Distribute brochure to general public, adults, and schools (5th-12th): **Recycling and re-use benefits**	Distribute at least 50 at local events and public buildings; schools	All year	All year	All year	All year	All year
k. Distribute brochure on grease trap/interceptors cleaning and	Obtain brochure, 10	Obtain	All year	All year	All Year	All year

BMP MEASURABLE GOALS AND IMPLEMEN TATION SCHEDULES	Annual Measurable Goal	2016	2017	2018	2019	2020
maintenance.	per year	Brochure				
l. Training of city staff and crews: **Water quality and regulations**	Annual in conjunction with MCM #6 requirement	Annually	Annually	Annually	Annually	Annually
m. Support regional agency-hosted seminar to be attended by municipal, public works staff, and the public	At least once during permit cycle	Help Host one event during permit cycle				
n. Discuss Phase II program in public city council meeting in conjunction with ODEQ's Annual Report	Present yearly with ODEQ Annual report	Annually	Annually	Annually	Annually	Annually
o. Support regional Stormwater website	Support INCOG's GCSA website	Annually	Annually	Annually	Annually	Annually
p. Sponsor and participate in clean-up Events	Once every year	Annually	Annually	Annually	Annually	Annually
q. Create and set up display board at local events	Minimum once every year. Display board	Annually	Annually	Annually	Annually	Annually
r. Post public awareness signs appropriately throughout the city.	Design, order and post 10 signs	Annually	Annually	Annually	Annually	Annually
s. School Programs: Coordinate city organized school programs with assistance from volunteer groups	1 per year	Annually	Annually	Annually	Annually	Annually
t. City to coordinate Volunteer Stream Monitoring Program with volunteers' performance to be reviewed annually.	Review performance Annually	Annually	Annually	Annually	Annually	Annually
u. Storm drain marking: All newly installed Catch basin storm drain hoods will be stamped with placards to inform public not to pollute stormwater.	Review inventory and placement of new annually	Annually	Annually	Annually	Annually	Annually
v. City sponsored volunteer stream and/or roadside cleanup events.	At least 1 event per year	Annually	Annually	Annually	Annually	Annually
w. Promote and support household pollutant collection events	One event per year	Annually	Annually	Annually	Annually	Annually
x. Promote use of and support Local Recycling Center	Report the types and amounts of recyclables collected	Annually	Annually	Annually	Annually	Annually
y. Free Logo Items: purchase and distribute free items with water quality messages and logos to the general public, schools, and non-profit groups.	List contacts made and track number of items distributed every permit year.	Annually	Annually	Annually	Annually	Annually
IV.C.2. PUBLIC PARTICIPATION AND INVOLVEMENT						
z. Public Meetings: comply with state and local public notice requirements	All Public Meetings or as needed	As needed	As needed	As needed	As needed	As needed
aa. Distribute brochure to general public-adults: **water quality impacts from urban Stormwater.**	Distribute at least 25 at local events and public buildings	All year	All year	All year	All year	All year

BMP MEASURABLE GOALS AND IMPLEMEN TATION SCHEDULES	Annual Measurable Goal	2016	2017	2018	2019	2020
bb. Distribute brochure to general public-adults: **Household chemical disposal options**	Distribute at least 25 at local events and public buildings	All year	All year	All year	All year	All year
cc. Distribute brochure to general Public-adults: **how to become involved in stormwater program**	Distribute at least 25 at local events and public buildings	All year	All year	All year	All year	All year
dd. Distribute brochure to general public, adults, and schools (5th-12th): **Recycling and re-use benefits**	Distribute at least 25 at local events and public buildings; schools	All year	All year	All year	All year	All year
f. Support regional agency-hosted seminar to be attended by municipal, public works staff, and the public	At least once during permit cycle	Help Host one event during permit cycle				
g. Discuss Phase II program in public city council meeting in conjunction with ODEQ's Annual Report	Present yearly with ODEQ Annual report	Annually	Annually	Annually	Annually	Annually
h. Support regional Stormwater website	Support INCOG's GCSA website	Annually	Annually	Annually	Annually	Annually
i. Sponsor and participate in clean-up Events	Once every year	Annually	Annually	Annually	Annually	Annually
j. School Programs: Coordinate city organized school programs with assistance from volunteer groups	1 per year	Annually	Annually	Annually	Annually	Annually
k. City to coordinate Volunteer stream Monitoring Program with volunteers' performance to be reviewed annually.	Review performance Annually	Annually	Annually	Annually	Annually	Annually
l. City sponsored volunteer stream and/or roadside cleanup events.	At least 1 event per year	Annually	Annually	Annually	Annually	Annually
Distribute brochure to general public-adults: **Household chemical disposal options**	Distribute at least 25 at local events and public buildings	All year	All year	All year	All year	All year
a. Distribute brochure to business owners: **Chemical storage and disposal at businesses**	Distribute at least 5 at local events and public buildings; mail	All year	All year	All year	All year	All year
a. Distribute brochure to general public, adults, and schools (5th-12th): **Recycling and re-use benefits**	Distribute at least 25 at local events and public buildings; schools	All year	All year	All year	All year	All year
b. Distribute brochure to Homeowners with on-site sewage disposal systems**: Proper on-site Sewage disposal system maintenance.**	Distribute at least 25 at local events and public buildings, Mail to residents with septic systems	All year	All year	All year	All year	All year
c. Distribute pet waste brochures to general public	Quarterly mailer Distribute 25 at local	Obtain brochure	Distribute	Distribute	Distribute	Distribute

BMP MEASURABLE GOALS AND IMPLEMEN TATION SCHEDULES	Annual Measurable Goal	2016	2017	2018	2019	2020
	events and public buildings.					
d. Install and maintain "pooper-scooper" stations and signs in parks located near 303d impaired stream areas and Claremore Lake.	Research, Procure, Install	Research	Procure	Install	Install	install
e. Place information on city website about bacteria discharge types and amounts from residential properties either as direct discharge or in runoff.	Research, Place on website, update as needed	Research	Place on website	Update as needed	Update as needed	Update as needed
f. Place information on city website about bacteria contamination from sewer overflows caused by fats, oils and grease disposal to sewer lines.	Research, Place on website, update as needed	Research	Place on website	Update as needed	Update as needed	Update as needed
g. Annual training of Sewer Dept. staff on timely reporting of sewer bypasses and upsets.	Hold Annual Training	Annually	Annually	Annually	Annually	Annually
h. Training for City staff and crews: **data quality and data management.** INCOG/GCSA sponsored	Annual Training.	Annually	Annually	Annually	Annually	Annually
i. Training for city staff and crews: **how to conduct inspections and monitor effectively INCOG/GCSA**	Annual Training	Annually	Annually	Annually	Annually	Annually
j. Mapping: regional and local MS4 system maps	Continuously Updating	continuous	continuous	continuous	continuous	continuous
k. Mapping: regional and local data/designate priority areas	Continuously updating	continuous	continuous	continuous	continuous	continuous
l. Continue to update ordinance prohibiting illicit discharges	As needed	As needed	As needed	As needed	As needed	As needed
m. Support regional agency-hosted seminar to be attended by municipal, public works staff, and the public	At least once during permit cycle	Help Host one event during permit cycle				
n. Discuss Phase II program in public city council meeting in conjunction with ODEQ's Annual Report	Present yearly with ODEQ Annual report	1st	1st	1st	1st	1st
o. Support regional Stormwater website	Support INCOG's GCSA website	Annually	Annually	Annually	Annually	Annually
p. Existing Data: collect local and regional pollution data/discharger data	Continuous, regional data coordinated by INCOG/GCSA. Local data collected during inspections and complaints	Continuous	Continuous	Continuous	Continuous	Continuous
q. Inspections: conduct MS4 inspections based on reported complaints	As needed	As needed	As needed	As needed	As needed	As needed
r. Inspections: Conduct MS4 inspections to trace sources	As needed	As needed	As needed	As needed	As needed	As needed
s. Enforcement: take appropriate action to abate source	As needed	As needed	As needed	As needed	As needed	As needed
t. Clean up events: sponsor/participate in city wide event	At least one Annual	Annually	Annually	Annually	Annually	Annually

BMP MEASURABLE GOALS AND IMPLEMEN TATION SCHEDULES	Annual Measurable Goal	2016	2017	2018	2019	2020
	event					
u. City to coordinate Regional stream Monitoring Program with volunteers' performance to be reviewed annually.	Review performance Annually	Annually	Annually	Annually	Annually	Annually
v. Strom drain Marking: Catch basin storm drain hoods stamped with placards to inform public to "Dump no waste, Drains to River"	Review inventory and placement of new annually	Annually	Annually	Annually	Annually	Annually
w. Pollutant Collection: Promote use and support Local household pollutant collection events	1 Event per year	Annually	Annually	Annually	Annually	Annually
x. Recycling: Promote use of and support Local MET recycling centers	Report the types and amounts of recyclables collected	Annually	Annually	Annually	Annually	Annually
y. City sponsored stream and/or roadside cleanup events.	At least 1 event per year	Annually	Annually	Annually	Annually	Annually
z. Dry Weather Field Screening inspections for illicit discharges	Research, implement and schedule	Research, implement	As Scheduled	As Scheduled	As Scheduled	As Scheduled
aa. Camera inspection of sewer lines.	Inspection 500 lineal feet per year of lines 8" or greater in diameter.	Annually	Annually	Annually	Annually	Annually
bb. Address lift Station inadequacies	Asses the structure, function and capacity of sewer main lift stations	Annually	Annually	Annually	Annually	Annually
cc. Spill response training in relation to Sanitary Sewer Systems	Annual training of spill response employees.	Annually	Annually	Annually	Annually	Annually
dd. Make improvements to sanitary sewers	Repair and replace breaks in sewer lines and appurtenances. Report number repaired per year	Annually	Annually	Annually	Annually	Annually
ee. Inspect grease traps/interceptors at local businesses.	Annually	As scheduled	As scheduled	As Scheduled	As Scheduled	As Scheduled
ff. Distribute brochure on grease trap/interceptors cleaning and maintenance.	Obtain brochure, 10 per year	Obtain Brochure	All year	All year	All Year	All year
IV.C.4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL						
a. Distribute Brochure to Contractors, city/public work crews- **Construction/erosion control BMPs**	Distribute to contractors	As needed	As needed	As needed	As needed	As needed
b. Inspections: City inspection of active construction sites	At least once during construction	As needed	As needed	As needed	As needed	As needed

BMP MEASURABLE GOALS AND IMPLEMEN TATION SCHEDULES	Annual Measurable Goal	2016	2017	2018	2019	2020
c. Ordinance: Continue to implement and update ordinance requiring construction BMPs	Update as needed	As needed	As needed	As needed	As needed	As needed
d. Support regional agency-hosted seminar to be attended by municipal, public works staff, contractors and builders	At least once during permit cycle	At least once during permit cycle				
e. Site Plan Review: incorporate water quality into pre-construction review of site plans	All site plans will be reviewed if disturbance is over 1 acre	As needed	As needed	As needed	As needed	As needed
f. Public information receipt: create a program to receive and consider information from the public	Citizen in action online reporting program	continuous	continuous	continuous	continuous	continuous
IV.C.5. POST-CONSTRUCTION IN NEW AND RE-DEVELOPMENT						
a. Distribute brochure to Contractors, City/public work crews: **Construction/erosion control BMPs**	Distribute to contractors	As needed	As needed	As needed	As needed	As needed
b. Distribute brochure to contractors, city/public work crews: **Post construction/erosion control BMPs**	Distribute to contractors	As needed	As needed	As needed	As needed	As needed
c. Inspections: City inspection of construction sites after completion	At least once after construction is completed	As needed	As needed	As needed	As needed	As needed
d. Review local codes; **identify barriers to LID**; remove them and justify those not removed.	Strategy, code changes	Develop	Develop	Develop	Update	Update
e. Ordinance: continue to implement and update ordinance requiring post-construction BMPs as needed	Update as needed	As needed	As needed	As needed	As needed	As needed
f. Support regional agency-hosted seminar to be attended by municipal, public works staff, contractors and builders	At least once during permit cycle	At least once during permit cycle				
IV.C.6. GOOD HOUSEKEEPING FOR MS4 OPERATIONS						
a. Distribute Brochure to City public works crews, city staff: **Chemical storage and disposal at city operations**	Distribute at local training for city crews and staff and to new employees during orientation	Annually/as needed	Annually/as needed	Annually/as needed	Annually/as needed	Annually/as needed
b. Distribute Brochure to city public works crews, city staff: **City good housekeeping options**	Distribute at local training for city crews and staff	Annually	Annually	Annually	Annually	Annually
c. Training for City staff and crews: **Storage and disposal of chemicals at municipal operations**	Annually	Annually	Annually	Annually	Annually	Annually
d. Training for City staff and crews: **Water quality impacts and regulations**	Annually	Annually	Annually	Annually	Annually	Annually

BMP MEASURABLE GOALS AND IMPLEMEN TATION SCHEDULES	Annual Measurable Goal	2016	2017	2018	2019	2020
e. Training for city staff and crews: **stormwater and city activities**	Annually	Annually	Annually	Annually	Annually	Annually
f. Inspections: Conduct MS4 inspections to track chronic sources	As needed	As needed	As needed	As needed	As needed	As needed
g. Inspections: Good housekeeping inspections of city facilities	Annually	Annually	Annually	Annually	Annually	Annually
h. Enforcement: Take appropriate action to abate source	As necessary	As necessary	As necessary	As necessary	As necessary	As necessary
i. MS4 O&M Program: Street Sweeping	Annually	Continuous	Continuous	Continuous	Continuous	Continuous
j. MS4 O&M Program: Catch basin cleaning and Repair	Repair and or replace	Continuous	Continuous	Continuous	Continuous	Continuous
k. MS4 O&M Program: Program to promote and schedule litter control: litter crew, public litter clean up events	Record Number of bags of litter cleaned up, Record number of events per year, number of participates and amount of litter removed.	continuous	continuous	continuous	continuous	continuous
l. MS4 O&M Program: Program to maintain drainage channels and ditches-Barrow ditch Maintenance, Drainage channel maintenance.	Barrow ditch-Complaint driven by citizens. Document Work done per permit year	continuous	continuous	continuous	continuous	continuous
m. MS4 O&M Maintenance program: maintenance of city Detention / Retention Ponds.	Visual inspections; maintenance as needed. (1)	As needed	As needed	As needed	As needed	As needed
n. Clean up events: sponsor/participate	At least one Annual event	Annually	Annually	Annually	Annually	Annually
o. Create signs for city work areas	Create and post signs or posters	Create signs	Post signs	Update as needed	Update as needed	Update as needed
p. Develop procedures to **assess impacts** on water quality from **new flood management projects**.	Strategy, guidance	Develop	All year	All year	All year	All year
q. Assess **existing flood management projects** to see if additional protection is needed (per OKR04 Part III).	Strategy, guidance	Develop	All year	All year	All year	All year

APPENDIX A: BEST MANAGEMENT PRACTICES FOR THE SIX MCMs

TABLE 1: BEST MANAGEMENT PRACTICES

City / County:	Claremore/Rogers

BEST MANAGEMENT PRACTICES	PUB. ED.	PUB. PAR.	IL. DSCH.	CNST.	POST CNST.	GOOD HSKP.
Education Materials						
Water quality impacts from urban stormwater	X	X	X			
Household chemical disposal options	X	X	X			
Chemical storage and disposal at businesses	X		X			
Proper onsite sewage disposal system maintenance						
Construction / erosion control BMPs				X	X	
Post-construction / erosion control BMPs					X	
City good house-keeping options						X
How to become involved in stormwater program	X	X				
Recycling and re-use benefits	X	X	X			
Chemical storage and disposal at city facilities						X
Pet waste brochure	X		X			
Brochure: grease trap/interceptors cleaning and maintenance.	X		X			
Place information on city website about bacteria discharge types and amounts from residential properties either as direct discharge or in runoff.	X		X			
Place information on city website about bacterial contamination from sewer overflows caused by fats, oils and grease disposal to sewer lines.	X		X			
Post an OSSF maintenance information page on the city website.	X		X			
Training Topics for City Staff (see Note 5)						
Storage and disposal of chemicals at city facilities			X			X
Water quality impacts and regulations *	X					X
Data quality and data management*			X			
How to conduct inspections effectively*			X	X	X	X
Stormwater and city activities						X
Annual training of Sewer Dept. staff on timely reporting of sewer bypasses and upsets.			X			
Annual Spill response training of Sewer Dept. staff			X			X

MS4 Mapping						
Mapping: regional and local MS4 system maps			X			
Mapping: regional and local data/designate priority areas			X			

BEST MANAGEMENT PRACTICES	PUB. ED.	PUB. PAR.	IL. DSCH	CNST.	POST CNST.	GOOD HSKP.
Administrative						
Continue to update ordinance prohibiting illicit discharges			X			
Continue to implement and update ordinance requiring construction BMPs				X		
continue to implement and update ordinance requiring post-construction BMPs as needed					X	
Review local codes; **identify barriers to LID**; remove them and justify those not removed.				X		
Install and maintain "pooper-scooper" stations and signs in parks located near 303d impaired stream areas and Claremore Lake			X			
Comply with state and local public notification	X	X				
Public information receipt: create a program to receive and consider information from the public	X	X	X			
Site Plan Review: incorporate water quality into pre-construction and post-construction review of site plans				X	X	
Support regional agency-sponsored seminars to be attended by municipal, public works staff, Contractors/builders and the public	X	X	X	X	X	X
Discuss Phase II in city council meetings in conjunction with ODEQ's Annual Report	X	X	X	X	X	
Collect local and regional pollution data/discharger data			X			
Support regional Stormwater website	X	X	X	X	X	X
Assess **existing flood management projects** to see if additional protection is needed (per OKR04 Part III).						X
Create display board for public meetings	X					
Post public awareness signs appropriately throughout the city.	X					
Create signs for city work areas						X
School Programs: Coordinate city organized school programs with assistance from volunteer groups	X	X				
volunteer stream monitoring	X	X	X			
storm drain marking City/volunteer	X	X	X			X

Volunteer Stream and or roadside cleanup events	X	X	X			
Promote household pollutant collection event	X	X	X			
Promote use of recycling centers	X	X	X			
Distribute items with water quality logos	X					
Sponsor, Promote participate in city wide Clean-Up Events	X	X	X			X
Inspections *(See Note 3)						
Complaint investigations for MS4 system *			X			
Source tracking of pollutants in MS4 system *			X			
MS4 inspections to track chronic sources *						X
Inspection of construction sites and activities *				X	X	
Good housekeeping inspections of city properties *						X
Enforcement Take appropriate action to abate source			X			X
Dry weather Field Screening inspections for illicit discharges *			X			
Inspect grease traps/interceptors at local businesses. *			X			
BEST MANAGEMENT PRACTICES	PUB. ED.	PUB. PAR.	IL. DSCH	CNST.	POST CNST.	GOOD HSKP.
Maintenance						
Street Sweeping			X			X
Program to promote and schedule litter control	X	X	X			X
Program to maintain drainage channels and ditches			X			X
Program to maintain catch basins			X			X
Maintenance of city Detention / Retention Ponds.						X
Camera inspection of sanitary sewer and storm sewer lines.			X			
Address lift Station inadequacies			X			
Make improvements to sanitary sewers			X			

*** INCOG/GCSA** = INCOG providing assistance to permittee as a GCSA member.

Note 1: Brochures include, pamphlets, flyers, fact sheets, and booklets. See **Table A** for present list of materials used by City of Claremore.

Note 2: Give-Away Items with Claremore stormwater logo and contact information presently include: cup koozies, pens, bags, water bottles.

Note 3: Types of inspections and monitoring for all MCMs are listed in **Table B**.

Note 4: Pollution controls include a combination of public education, employee training, MS4 inspections and enforcement.

Note 5: GCSA Employee Training workshop topics are presented in **Table C**.

TABLE A: List of Brochures, Fact Sheets and Education Materials

Education Materials Used By the City of Claremore *
General Public and Community:
EPA: A Homeowner's Guide to Septic Systems
EPA: Household Hazardous Waste: Steps to Safe Management
GCSA: Origins and Fate of PPCPs In the Environment Fact Sheet
GCSA: Community Car Wash Events Fact Sheet
GCSA: A Homeowner's Guide to Protecting Our Water
GCSA: A Homeowner's Guide to Recycling and Reuse
GCSA: A Pet Owner's Guide to Protecting Our Water
Municipal Employee and City Officials:
GCSA: Phase II Stormwater: Information for City and County Officials
GCSA: Handling and Disposal of Chemicals at Municipal Sites
GCSA: Green Country Stormwater Alliance
GCSA: Municipal Best Management Practices that Protect Our Water
Local Retailers and Businesses:
GCSA: A Retailers Guide to Pesticide Basics
GCSA: A Food Service Guide to Waste Disposal
Construction Industry:
GCSA: Final Stabilization at Construction Sites: OKR10 Requirements
GCSA: A Homebuilder's Guide to Erosion Control
OSU: Using Vegetation for Erosion Control on Construction Sites

**** New materials for additional topics will be produced periodically.***

TABLE B: OKR04-Required Types of Inspections and Monitoring

Types of Inspections and Monitoring Performed by the City of Claremore
Dry Weather Field Screening (DWFS) inspection program
Complaint-response inspection program of the MS4 system
Source tracking inspection program of pollutants in MS4 system
Construction site inspection program

Good housekeeping inspection program of city properties
Inspection/maintenance program for catch basins, drainage, retention basins etc.

TABLE C: GCSA Employee and Community Training Topics

GCSA Training Topics Given for the City of Claremore Employees & Officials
Urban water quality, pollution and stormwater permit requirements
Data quality and data management
Conducting inspections and monitoring; field safety
Hazardous Waste Operations and Emergency Response (HAZWOPER)
Test kits and environmental chemistry basics
Municipal Stormwater Pollution Prevention BMPs
BMPs, Post Construction
TMDLs and 303(d) impaired waterbodies
Construction permit requirements and changes to OKR10
OSHA required training on MSDS forms and container labels and Confined Space
Municipal parks and open space maintenance pollution control
Storage and disposal of chemicals at city facilities
Pollution control at municipal fleet maintenance
Pollution control for municipal land disturbance activities
Pollution control for MS4 maintenance (streets and drainage)
Looking for and reporting local pollution episodes by city crew and staff

TABLE D: Types of Pollution Signs Used at City Work Areas

Pollution Prevention Sign Topics Used by the City of Claremore

303(d) and TMDL Listed Waterbodies and ARC Areas within City Limits:

City/County	Waterbody Name	WBID	303(d) Impairment (2014)	TMDL Parameters (2014)	ARC
Claremore	Dog Creek	OK121500040010_00	Fish Bioassessment, DO, pH,	None	No
	Dog Creek	OK121500020360_00	Benthic Macroinvertebrates, Enterococcus, E. coli, DO	Enterococcus, E. coli, DO	No
	Lake Claremore	OK121500040020_00	Chlorophyll a	Chlorophyll a	No
	Cat Creek	OK121500020390_00	DO	DO	No

STORMWATER POLLUTION PREVENTION PLAN

CITY OF CLAREMORE, OKLAHOMA PROJECT

January 26, 2016

City of Claremore
720 Ramm Road
Claremore, Oklahoma 74017

CITY OF CLAREMORE
STORMWATER POLLUTION PREVENTION PLAN (SWP3)
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City of Claremore
Stormwater Pollution Prevention Plan (SWP3)
Generic Template for OKR04 Municipal Projects

STORMWATER POLLUTION PREVENTION TEAM **(Part 4.5.1; Part VIII.B.7.a)**

Claremore's Stormwater Pollution Prevention Team is responsible for assisting the City of Claremore in developing, implementing, maintaining and revising the facility's SWP3. The Team is:

Pretreatment & Stormwater Manager, Team Director: The Team Director has the primary responsibility for the development amendment of the SWP3, documenting changes to the SWP3, providing staff training, ensuring that the project is compliant with the city, state and federal requirements, and corrective action report preparation. The Team Director serves as a secondary emergency point of contact.

Pollution Prevention Team *(Identify the staff individuals by name or position)*

Name:	Development & amendment of SWP3
Name:	Installation of different types structural BMPs/Controls
Name:	Supervision Housekeeping Program
Name:	SWP3 Changes Documentation & Communication
Name:	Staff Training
Name:	Inspections

II. Nature of Construction Activities (Part 4.5.2; VIII.B.7.b)

Description of the Project- Insert a general description of the project and any pertinent stormwater/environmental related site-specific information here.

The entire site consists of approximately acres.

The total disturbed area will be approximately acres.

The total disturbed area for the compensatory storage detention basin will be approximately acres.

The total site disturbance area is expected to be approximately acres.

The project includes

The site has an area of approximately acres .
The site is located in the Watershed.

Identify all the possible *Construction Support Activities* (such as staging area, equipment & construction material holding area, and soil/sediment stock pile). Include a note that Construction Support Activities require additional pollution control measures. Locate all the construction support activities on the site map.
Maximum area expected to be disturbed at one time: acres

III. **Other Site Operators**

Site operators shall be contracted and information submitted here, if necessary.

IV. **Sequence and Estimated Dates of Construction Activities (Part 4.5.4;VIII.B.7.c)**

Major construction activities must include a schedule of estimated *start dates* and the *duration* of individual intended activities. For each phase of construction, include the following information: Installation of stormwater controls, and when they will be made operational; 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; Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site; Final or temporary stabilization of areas of exposed soil; and Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.

A. Construction Phase I

1. Mobilization/ installation of dedicated construction entrance. (Est. Start Date- Duration)
2. Install silt fences and erosion controls. (Est. Start Date- Duration)
3. Commencement of earth disturbing operations (Est. Start Date- Duration)
    a. Clearing and Grubbing (Est. Start Date- Duration)
    b. Install Detention Facility/Sediment Basin (Est. Start Date- Duration)
    c. Site Preparation (excavating, cutting and filling) (Est. Start Date- Duration)
    d. Stockpiling (Est. Start Date- Duration))
4. Construct facility (Est. Start Date- Duration)
5. Install utilities (Est. Start Date- Duration)
6. Construct parking lot (Est. Start Date- Duration)
7. Cessation of construction activities on the site (Est. Start Date- Duration)
8. Place permanent and temporary cover over unpaved, disturbed areas of the site. (Est. Start Date- Duration)
9. Removal of temporary stormwater conveyances/channels and other stormwater control measures (Est. Start Date- Duration)
10. Demobilization and cessation of any pollutant generating activities (Est. Start Date- Duration)

B. Construction Phase II

1. Mobilization/ installation of dedicated construction entrance. (Est. Start Date- Duration)
2. Install silt fences and erosion controls. (Est. Start Date- Duration)
3. Commencement of earth disturbing operations (Est. Start Date- Duration)
    a. Clearing and Grubbing (Est. Start Date- Duration)
    b. Install Detention Facility (Est. Start Date- Duration)
    c. Site Preparation (excavating, cutting and filling) (Est. Start Date- Duration)
    d. Stockpiling (Est. Start Date- Duration)
4. Construct facility (Est. Start Date- Duration)
5. Install utilities (Est. Start Date- Duration)
6. Construct parking lot (Est. Start Date- Duration)
7. Cessation of construction activities on the site (Est. Start Date- Duration)
8. Place permanent and temporary cover over unpaved, disturbed areas of the site. (Est. Start Date- Duration)
9. Removal of temporary stormwater conveyances/channels and other stormwater control measures (Est. Start Date- Duration)
10. Demobilization and cessation of any pollutant generating activities (Est. Start Date- Duration)

V. Site Map (Part 4.5.5; VIII.B.7.d)

(Show the following features of your project on the map, and attach map at end of SWP3)

a. a topographic map of the site locating the project boundary and planned disturbed area. Include a site map/topographic map locating the project boundary and planned disturbed area along with existing vegetative cover (e.g., forest, pasture, pavement, structures)**,** and drainage pattern(s) of stormwater indicating the flow path across your construction site and authorized non-stormwater flow onto, over, and from the site property before and after major grading activities, locations of all waters of the state within one mile of the site including wetlands that exist within or in the immediate vicinity.

b. a legible site map or series of maps showing the following features of your project: (1) Boundaries of the property and of the locations where construction activities will occur, including: locations where earth-disturbing activities will occur, noting any phasing of construction activities; showing the approximate slopes before and after major grading activities. Note areas of steep slopes (i.e., greater than 40%); (2) The boundary lines of any natural buffers (i.e., either the 100 foot or other buffer areas retained on site) consistent with Parts 1.3.2.E, 3.3.1.A.and

3.5.2.A; (4) Locate stormwater and allowable non-stormwater discharge locations, including locations where stormwater or allowable non-stormwater will be discharged to waters of the state on or near the site, and locations of all stormwater control measures.

1. Boundaries of the property and of the locations where construction activities will occur:
    a. Locations of where earth-disturbing activities will occur.
    b. Steep slope (i.e., greater than 40%) areas before/after major grading activities.
    c. Location 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.
    g. Locations of construction support activity areas.
    h. Location of buffer areas retained on site.

2. Locations of all waters of the state within one mile of the site:
    a. Wetlands that exist within or in the immediate vicinity of your site.
    b. Water bodies are listed as impaired for sediment.
    c. Aquatic Resources of Concern or Outstanding Resource Water.

3. Topography of the site:
    a. Existing vegetative cover (e.g., forest, pasture, pavement, structures).
    b. Drainage pattern(s) of Stormwater.

4. Locations of Stormwater control measures.

5. Sampling locations for asphalt batch plant (Part 3.4.1), including "substantially identical outfalls".

VI. CONSTRUCTION SITE POLLUTANTS

a) Pollutant Generating Activities:

- Paving Operations
- Concrete, Paint and Stucco Washout (All washing and back flushing of concrete mixer trucks will be done in an area established by the Project Superintendent. The area shall be fully contained by the use of silt fence or earth dikes. The debris left from back flushing of concrete mixer trucks shall be loaded in a dump truck and removed from
- Dewatering Activities
- Solid Waste Storage and Disposal

b) Pollutants:

- Sediment
- Fuel
- Paint
- Solvents

Pollutant-Generating Activity	**Pollutants or Pollutant Constituents** (that could be discharged if exposed to stormwater)	**Location on Site** (or reference SWP3 site map where this is shown)

VII. COPY OF THE OKR10 PERMIT REQUIREMENTS

A copy of ODEQ's Publication OKR10 is included as an appendix of this plan.

VIII. DOCUMENTATION OF MEASURES TO PROTECT ENDANGERED OR THREATENED SPECIES

The City of Claremore does not contain a watershed that is defined as a critical habitat for an endangered or threatened species. No endangered or threatened species or critical habitats are known to exist in close proximity to this construction site. Should any of the contractors at the site observe any such species, they shall stop work and contact the US Fish & Wildlife Department immediately at 918.581.7458. No endangered or threatened species are expected to be affected by Stormwater discharged from this site.

If threatened or endangered species' critical habitats are found to be in close proximity, insert description and implementation necessary to

protect these endangered species here. Include information on 100 foot buffer requirements.

1. Description and implementation of the measures necessary to protect these endangered species:

    a. Buffer requirements: 100 or 50 foot buffer. If the construction site makes an appropriate buffer impossible, operator must provide equivalent controls showing the locations of available buffer along with alternative additional control measures on the site plan. DEQ encourages the use of a combination of sediment and erosion controls in order to achieve maximum pollutant removal and reduction of stormwater volume to waters of the State. *Revise appropriate places in the SWP3 in accordance with the requirements of OKR10.*
    b. Sediment basin that serves 5 acres or more at one time.
    c. Velocity dissipation devices (Part 4.5.11.A.c).
    d. Screened outfalls (Part 11.2.Step 2.D).
    e. Inspection every 7 days and within 24 hours of the end of 0.5 inch storm event.
    f. Stabilization completed within 7 days after temporary or permanent cessation of construction.

IX. Documentation of Federal, State, or Local Historic Preservation Laws (Part 4.5.9; VIII.B.7.h)

(Include information on whether stormwater discharges or stormwater discharge-related activities would have an effect on a property that is protected by Federal, State or local historic preservation laws)

X. Documentation of Water Quality Impaired Waters (Part 4.5.10; VIII.B.7.i)

The name of the receiving water for this site is the OKXXXXXXXXXXX (Insert HUC Number). This creek (is) (is not) on the Oklahoma Department of Environmental Quality's (ODEQ) 303(d) list and, according to this list, siltation or causes related to construction activities (are) (are not) causes of pollution for this reach of the creek.

If sedimentation and construction activities would have an effect on an impaired waterbody, insert information regarding how chosen BMPs will reduce and avoid pollutants of concern from entering the waterbody. Must describe and implement any measures necessary to meet the requirements of an approved TMDL Plan.

1. Information of how Stormwater discharges will affect water quality impaired receiving waters.

2. Description of how the selected BMPs and other control measures will reduce and avoid the discharges of pollutants of concern into 303(d) impaired waters.

a. Description of performing inspections every 7 days and within 24 hours of the end of 0.5 inch storm event.

b. Description of site stabilization to be completed within 7 day after temporary or permanent cessation of construction.

3. List the TMDL implementation measure requirements of an approved TMDL or watershed plan.

    a. List the TMDL monitoring and reporting procedures of Stormwater discharges to be used.

XI. Stormwater controls measures (Part 4.5.11.A; VIII.B.7.j)

1. Describe the stormwater controls measures and implementation schedules to be used during construction activities (see EPA's national BMP menu for examples):
    a. Controls to be designed to retain sediment on site to the extent practicable.

    b. Controls to be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices.

    c. Dewatering practices.

    Note: Straw and hay bales for erosion and sediment control are NOT allowed.

Erosion and Sediment Controls

Short and Long Term Goals

The primary short term goal for the selected erosion and sediment controls is to prevent sediment from leaving the site during the construction phase by utilizing temporary controls and practices during construction. The long term goal is to prevent Stormwater pollution after the construction phase through the use of permanent structures and practices designed to protect pervious areas by promoting vegetative cover and preventing erosive conditions.

Erosion and Sediment Controls to be Used During Construction Activity

The EPA's national BMP menu shall be used to select appropriate control measures for the site. Straw and hay bales will NOT be used for sediment and erosion controls.

1. The construction-phase erosion and sediment controls shall be designed to retain sediment on site to the extent practicable.
2. All control measures will 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 City of Claremore will replace or modify the control for site situations.
3. If sediment escapes the construction site, off-site accumulations of sediment shall 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).
4. Sediment shall be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.
5. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
6. 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.
7. Buffer requirements: 100 or 50 foot buffer. If the construction site makes an appropriate buffer impossible, operator must provide equivalent controls showing the locations of available buffer along with alternative additional control measures on the site plan. DEQ encourages the use of a combination of sediment and erosion controls in order to achieve maximum pollutant removal and reduction of stormwater volume to waters of the State. *Revise appropriate places in the SWP3 in accordance with the requirements of OKR10.*
    a. Sediment basin that serves 5 acres or more at one time.
    b. Velocity dissipation devices (Part 4.5.11.A.c).
    c. Screened outfalls (Part 11.2.Step 2.D).
    d. Inspection every 7 days and within 24 hours of the end of 0.5 inch storm event.
    e. Stabilization completed within 7 days after temporary or permanent cessation of construction.

Stabilization Practices

During the clearing and grubbing phase of construction, the existing topsoil shall be stockpiled for use during final stabilization.

Temporary Cover

Disturbed portions of the site where construction activity temporarily ceases for at least fourteen (14) days (seven 7 calendar days if located in ARC) will be stabilized with temporary seed and an erosion control blanket or equivalent no later than fourteen (14) days from the last construction activity in that area. Some temporary

seeding options are defined below. Hydro-mulch may be an acceptable alternative after mix approval by the owner's representative.

Plant Name	Per Acre	Per 100 sq. ft.	Planting Dates	Depth
Annual Rye	40 lb.	0.9 lb.	9/5-11/30 & 2/15-4/1	1/4"
Elbon Rye	2 Bu	3.0 lb.	8/15-11/30	2"
Wheat	2 Bu	3.0 lb.	8/15-11/30	2"
Oats	3 Bu	2.5 lb.	8/15-11/30	2"
Sorghums	60 lb.	1.4 lb.	3/1-9/15	2"
Sweetclover	15 lb.	0.3 lb.	9/1-10/15	1/2"
Sudan Grass	40 lb.	0.9 lb.	4/1-9/15	2"
Millet	40 lb.	0.9 lb.	4/1-9/15	1/2"
Cowpeas	60 lb.	1.4 lb.	45/1-6/30	2"

Permanent Cover

Prior to implementation of permanent cover on sediment producing areas, the following practices must be implemented to insure successful establishment of vegetative cover.

1. Planting bed shall be loosened evenly to a depth of 2-3 inches and 10-20-10 fertilizer shall be mixed with the loosened soil at a rate of 10 pounds per 1000 square feet. Soil and fertilizer shall be mixed by disking or other suitable means.
2. Soils known to be highly acidic shall be treated with agricultural lime and placed as recommended by the supplier.
3. Seeds shall be drilled uniformly.
4. Seeding implements shall be used at right angles to the general slope to minimize erosion.

Seeding:

Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch. Broadcast or drill seed uniformly at right angles to the general slope. Cover to recommended depth. Mulch the seeded area with hay or straw (70-90 lb. or two bales per 1000 sq. ft.) if necessary. Apply water daily or as necessary to maintain adequate soil moisture until plants obtain 1/2" growth. Some permanent seeding options are as follows:

Plant Name	Per Acre	Per 100 sq. ft.	Planting Dates	Depth
Bermuda Grass	10 lb.	0.25 lb.	4/1-8/15	1/2"
Fescue	40 lb.	0.9 lb.	9/1-11/1	1/2"
Perennial Rye	25 lb.	0.6 lb.	9/15-12-1 & 3/1-5/1	1/2"
Lovegrass	40 lb.	0.9 lb.	4/1-6/30	1/2"

Sodding:

Protect sod from drying or heating. Place slab sod on tilled moist soil in rows at right angles to slopes. Place each piece of sod firmly and securely, tamp or roll firmly after placing and maintain optimum moisture for at least two weeks.

XII. Structural practices (Part 4.5.11.A.3; VIII.B.7.j(3))

(Describe the structural practices to be used to divert flows form exposed soils, store flows or otherwise limit runoff and the discharge of pollutants. Consult EPA's National Menu of Stormwater Best Management Practices for examples. Specifically address any of the following types of structural practices that you may use.)

As indicated in the Sequence and Estimated Dates of Construction Activities, erosion and sediment controls (i.e., silt fence, earth dikes, check dams detention pond/sediment basin, inlet protection, and a stabilized construction entrance) will be constructed prior to clearing or rough grading of the site. During construction, as needed, and after the entire site is stabilized, the accumulated sediment will be removed from the silt fences and/or from the sedimentation basin when 50% of the design capacity has been filled by sedimentation. The collected sediment will be removed from the site and disposed of according to local regulations. Following the cleanup of the silt fences, permanent erosion control practices will be implemented in those areas. Silt fencing shall be placed and maintained around the storm sewer outlets. Erosion control will remain until it is time for paving and final stabilization.

The SWP3 shall 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 shall be avoided to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

1. 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 City of Claremore will consider factors such as site soils, slope, available area on site, etc. the City of Claremore will 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 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 in order to achieve maximum pollutant removal.

2. 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 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 in order to achieve maximum pollutant removal.

3. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel when necessary to provide a nonerosive 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).

a. Perimeter Control/Silt fences
b. Sediment Track-Out/Construction exist/entrance
c. Soil and Sediments Stockpiles/Outside of any buffers/perimeter sediment barrier/temporary stabilization
d. Dust Controls
e. Steep Slope (40% or greater) Disturbance/Divert runoff/Specialized erosion & sediment controls/stabilization practices
f. Preserve Topsoil
g. Minimize Soil Compaction
h. Storm Drain Inlet Protection
i. Constructed Stormwater Conveyance Channels
j. Earth dikes
k. Drainage swales
l. Sediment traps
m. Check dams
n. Rock outlet protection
o. Reinforced soil retaining systems
p. Concrete washout
q. Other

A. Stormwater Management

The existing property is not currently served by a storm sewer system. New storm sewer will be constructed on-site. After construction is complete all pervious areas disturbed during construction will be sodded or landscaped.

B. Other Controls

Construction Materials & Waste Disposal

All waste materials will be collected and removed by each trade working on the project. The debris is to be hauled from the site and properly disposed of at an approved dump facility. Materials used to construct exterior site improvements such as pipe, manholes, fencing, lighting, etc., may be stored outdoors, but shall not be stored in such a way to obstruct natural drainage or in any location where storm runoff might carry materials, including packing materials, from the storage area. If any materials are spilled or washed from where they were stored, they shall be properly collected and moved to a proper storage area immediately upon the discovery of such an event. The project superintendent will enforce cleanup operations by each trade prior to final payment. All personnel will be instructed regarding the correct procedure for waste disposal.

Offsite Vehicle Tracking

There will be a stabilized construction entrance on the site. Minimum entrance will be fifty feet (50') deep and twenty-five feet (25') wide. Temporary construction fencing will be installed as shown on the Site Plan Map to protect the construction area and limit access to it. Access to the site will be determined. Vehicles leaving the site will be washed as necessary to remove any excess mud or dirt to minimize soil being tracked from the site. Three inch or larger gravel will be used to prevent sediment trackout.

You must remove the deposited sediment by the **end of the same work day** in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. There are possibilities of sediment being tracked-out from your site onto the surface of this street, paved areas, and sidewalks. You must include provision to remove the track-out by sweeping, shoveling, or vacuuming these

surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

Concrete Washout Pit

If concrete will be used during construction, they will wash their truck at the site. Therefore, you must include requirements for concrete washout. Discharge of wastewater from the washout of concrete trucks/equipment is prohibited in accordance with Part VIII.B.3.c(1) of OKR04 permit, unless adequate controls measures are adopted as described in Part VIII.B.3.d(i) of OKR04. Specify appropriate control measures/liner system to make the *concrete washout pit leak proof* showing **the location on the site map**. Claremore requires and will establish a liner a minimum of five feet (5') by ten feet (10') (site specific) on all construction sites.

Hazardous Waste

Any hazardous waste materials, whether construction related or not, which may be located on site during construction will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in these practices, and the project superintendent who manages day-to-day site operations will be responsible for seeing that these practices are followed. Each trade contractor shall have a written Safety and Hazardous Materials Plan and shall submit the plan to the City of Claremore. Hazardous construction materials and waste must be stored in a manner that minimizes their contact with Stormwater. Should an emergency spill occur, contact 911 and request the Fire Department. Sawdust, kitty litter or other absorbent material shall be kept on site to use in the event of a spill to contain it. The construction personnel shall construct temporary berms as necessary to contain a larger spill and keep it from reaching any adjacent property.

Sanitary Waste

All sanitary waste will be collected from portable units placed on the site and maintained by a sanitary waste management contractor in accordance with State or local waste disposal, sanitary sewer, or septic regulations. Portable toilets to be used on-site, then the portable toilet shall be securely anchored to the ground to prevent any sanitary wastewater mixing with stormwater.

Other Pollutant Sources

There will not be any asphalt or concrete plants on site and there are no other known sourced of pollution on to this site. Discharge of wastewater from the washout of concrete trucks/equipment is prohibited in accordance with Part VII.B.3.c(1) of OKR04 Permit, unless adequate controls measures are adopted as

described in Part VIII.B.3.d(i) of OKR04. Specify appropriate control measures/liner system to make the concrete washout pit leak proof showing the location on the site map. ***If concrete will be used during construction, then there will be a dedicated concrete washout basin. The concrete washout basin will be bermed and then lined with an impervious liner to prevent discharge and the location will be designated on the Sediment and Erosion Control Map (Appendix B).***

XIII. SPILL PREVENTION AND RESPONSE

Oklahoma Department of Environmental Quality (ODEQ), 24-Hour

Emergency Response & Environmental Complaints Hotline, (800) 522-0206.

US EPA National Response Center Hotline, (800) 424-8802.

Spill kits will be located on site in areas deemed to have the potential for release of fluids. These will be checked for contents during normal inspections under the direction of the general superintendent. In the event of a release of fluids in excess of the reportable quantity the National Response Center will be notified at 1-800-424-8802. Please refer to the City of Claremore's Spill Prevention and Response Plan in the Appendices for further detail.

XIV. WASTE MANAGEMENT

A covered dumpster will be located at the project site for construction and domestic waste. The covered dumpster will be emptied as necessary to prevent the build-up of wastes.

Construction Materials & Waste Disposal

All waste materials will be collected and removed by each trade working on the project. The debris is to be hauled from the site and properly disposed of at an approved dump facility. Materials used to construct exterior site improvements such as pipe, manholes, fencing, lighting, etc., may be stored outdoors, but shall not be stored in such a way to obstruct natural drainage or in any location where storm runoff might carry materials, including packing materials, from the storage area. If any materials are spilled or washed from where they were stored, they shall be properly collected and moved to a proper storage area immediately upon the discovery of such an event. The project superintendent will enforce cleanup operations by each trade prior to final payment. All personnel will be instructed regarding the correct procedure for waste disposal.

Hazardous or Toxic Waste

Any hazardous waste materials, whether construction related or not, which may be located on site during construction will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in these practices, and the project superintendent who manages day-to-day site operations will be responsible for seeing that these practices are followed. Each trade contractor shall have a written Spill Prevention Plan and shall submit the plan to the City of Claremore. Hazardous construction materials and waste must be stored in a manner that minimizes their contact with stormwater. Should an emergency spill occur, contact 911 and request the Claremore Fire Department. Sawdust, dry absorbent, universal spill booms or other absorbent material shall be kept on site to use in the event of a spill to contain it. The construction personnel shall construct temporary berms as necessary to contain a larger spill and keep it from reaching any adjacent property.

Possible hazardous waste materials to consider during construction include, but are not limited to, fuels, solvents, hydraulic fluids, and paints.

Sanitary Waste

If portable toilets are to be used on-site, then the portable toilet shall be securely anchored to the ground to prevent any sanitary wastewater mixing with stormwater. All sanitary waste will be collected from portable toilet units placed on the site and maintained by a sanitary waste management contractor in accordance with State or local waste disposal, sanitary sewer, or septic regulations.

Other Pollutant Sources

There will not be any asphalt or concrete plants on site and there are no other known sourced of pollution on to this site. ***If concrete will be used during construction, then there will be a dedicated concrete washout basin. The concrete washout basin will be bermed and then lined with an impervious liner to prevent discharge and the location will be designated on the Sediment and Erosion Control Map (Appendix B).***

XV. INSPECTION, MAINTENANCE, CORRECTIVE ACTION

Inspections

Qualified personnel (the project superintendent or his properly trained designee) shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site shall be inspected at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

Where areas have been temporarily or permanently stabilized or runoff is unlikely due to winter conditions (e.g. site is covered with snow, ice or frozen ground exists), such inspections shall be conducted at least once every month.

Inspections should at a minimum consist of the following items:

1. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants exiting the site. Sediment and erosion control measures identified in the SWP3 shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

2. Based on the results of the inspection, the SWP3 shall be modified as necessary (e.g., show additional controls on map; revise description of controls) to include additional or modified BMPs designed to correct problems identified. Revisions to the SWP3 shall be completed within 7 calendar days following the inspection. If existing BMPs need to be modified or if additional BMPs are necessary, implementation shall be completed before the next anticipated storm event. If implementation before the next anticipated storm event is impracticable, they shall be implemented as soon as practicable.

3. A report summarizing the scope of the inspections, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection and major observations relating to the implementation of the SWP3 shall be made and retained as part of the SWP3 for at least three years from the date that the site is finally stabilized. Major observations should include: the location(s) of discharge of sediment or other pollutants from the site; location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional BMPs are needed that did not exist at the time of inspection. Actions taken in accordance with the requirements of OKR10 shall be made and retained as part of the SWP3 for at least three years from the date that the site is finally stabilized. Such reports shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the SWP3 and the OKR10. The report shall be signed in accordance with the OKR10. A sample inspect report form is included as an appendix to this plan.

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 identify Best Management Practices, (BMP's), that are not operating effectively, maintenance shall be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of Stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

Corrective Action

All deficiencies will be noted in the inspection forms and Corrective Action Log and addressed/corrected within seven (7) calendar days from the time of discovery. If it is infeasible to correct the deficiency within seven (7) calendar days, a note will be made in the records and the deficiency will be corrected as soon as practicable.

A Corrective Action Report will be created within 24 hours of discovering the occurrence noting the condition, the nature of the identified condition, the date and time of the condition identified, and how the condition was identified. Within 7 days of discovering the occurrence, a follow-up Corrective Action Report will be created noting any follow-up actions taken and dates the actions occurred along with a summary of stormwater control modifications made and dates.

Any modifications to stormwater controls will be updated and documented in the SWP3 within seven (7) calendar days of completing the corrective action work.

All corrective action documents will be made available upon request.

XVI. STAFF TRAINING REQUIREMENTS

Prior to commencement of earth disturbing activities, all pertinent personnel will be trained on the requirements of the OKR04 and OKR10 permits and the contents of this SWP3. Specifically, site personnel will be trained on inspection requirements and proper placement and usage of stormwater control measures.

A Staff Training log will be kept for record keeping of training.

XVII. NON-STORMWATER DISCHARGES

The following non-stormwater discharges from active construction sites are authorized by this provision:

a. Waters used to wash vehicles where detergents are not used;

b. Water used to control dust;

c. Routine external building wash down which does not use detergents;

d. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; and

e. Uncontaminated flows from excavation dewatering activities will be allowed if operational and structural controls are used to reduce any pollutant releases in order to avoid or minimize the impacts on water quality. These controls must be included in your SWP3.

All washing and back flushing of concrete mixer trucks will be done in an area established by the project superintendent that is away from any major drainage way on the site. The area shall be fully contained by the use of hay bales or earth dikes. The debris left from the back flushing of concrete mixer trucks shall be loaded in a dump truck, removed from the site and disposed of according to local regulations.

The only possible sources of authorized non-Stormwater discharge associated with construction activities are waters used to wash sediment and mud from trucks upon exiting the construction site, waters used to control dust, and uncontaminated flows from excavation dewatering activities.

All washing and dewatering will be done in an area established by the project superintendent that is away from any major drainage way on the site. The area shall be contained by the use of earth dikes or sediment control measures to prevent pollutant release and minimize the impacts on water quality.

XVIII. APPLICABLE LOCAL PLANS

This SWP3 is consistent with requirements specified in applicable sediment and erosion site plans of site permits and Stormwater management site plans and site permits approved by State or local officials.

This SWP3 will be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or Stormwater management site plans or site permits approved by State or local officials for which the permittee receives written notice.

CONTRACTOR CERTIFICATION

City of Claremore

Contractors, builders, regular suppliers or others (contractors) involved in construction activity who are not the operator, developer, or general contractor, and have not been issued the Stormwater Construction General Permit (Permit) authorization, execute this Contractor Certification which places the responsibility of complying with and abiding by the intent and purpose of the permit with the contractor for any and all work performed under the authority and direction of the contractor. Furthermore, the contractor assumes responsibility to avoid or eliminate any actual or potential adverse effects upon the environment according to the Stormwater Pollution Prevention Plan (SWP3), during all phases of building, construction, or delivery activity on any and all construction sites under the control and responsibility of the contractor as described in the SWP3.

The contractor must be thoroughly familiar with, and adhere to, the SWP3 and the Best Management Practices (BMP) within the SWP3. The contractor is certifying below that the assume all physical responsibility for any and all construction activities performed by the Contractor or under the direction and control of the Contractor, to avoid or eliminate any actual or potential adverse effects upon the environment pertaining to the properties of this project.

Certification

"I certify that I understand the terms and conditions of the Oklahoma Pollutant Discharge Elimination System Act (OPDES) General Permit that authorizes Stormwater discharges associated with construction activity from the construction site identified as part of this certification. I have read and understand the Operators Notice of Intent and Part 1.3 eligibility requirements for coverage under the general permit for Stormwater discharges from construction activities, including those requirements published in the modified OPDES General Permit OKR10 of September 13, 2012, and the SWP3 and BMP described pertaining to the project locations in Item 3 above. I agree that as a contractor, builder, regular supplier, or a support service company, I am responsible for installing and/or maintaining the appropriate pollution prevention measures that I am responsible for according to the agreement I have with the permittee. I understand that continued coverage under this permit is contingent upon maintaining eligibility as provided for in Part 1.3 of the permit."

Signature	Company name and address	Responsible for
Name: _____ Date: _____		
Name: _____ Date: _____		
Name: _____ Date: _____		
Name: _____ Date: _____		

Project Name: City of Claremore
Stormwater Pollution Prevention Plan

Inspection Date: _____ Name(s) of Inspector:_____

Qualifications of Inspector: _____

_____

_____

Disturbed areas and areas used for material storage that are exposed to precipitation:
Is there evidence of, or potential for, pollutants or sediments entering the drainage system (Y/N)?_____

Are Best Management Practices (BMP's) or sediment and erosion control measures, identified in the SWP3, operating correctly (Y/N for each of the following according to the attached specifications for each)?

Construction Entrance:_____ Silt Fence:_____

Sedimentation Basin:_____ Sediment Traps:_____ Vegetative Cover:_____

For all of the above items that are marked "Y":
I certify that the facility (ies) that are marked "Y" above is(are) in compliance with the SWP3 and the OKR10.

* ***Inspector's Signature***:_____ ***Date***:_____

At discharge locations or points, are erosion control measures effective in preventing significant impacts to

receiving waters (Y/N)?_____

Provide a detailed description of any of the following major observations:

- the location(s) of discharge of sediment or other pollutants from the site;
- location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
- location(s) where additional BMPs are needed that did not exist at the time of inspection

_____

_____

_____

_____

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

* ***Inspector's Signature***:_____ ***Date***:_____

Owner's Certification and Notification

The Owner and/or Developer responsible for construction activities is required to have an authorized representative near the top of the management chain certify this SWP3 document. The certification must be executed prior to commencing construction activities. The Owner and/or Developer is also responsible for submitting a Notice of Intent (NOI) a minimum of two days before construction activities begin. The NOI is to be sent to:

ODEQ
Water Quality Division Stormwater Unit
P. O. Box 1677
Oklahoma City, OK 73103-1677

Only the NOI's are to be sent. This SWP3 is not to be sent to this address unless otherwise requested. Blank NOI forms are included at the back of this SWP3.

Each party who has day-to-day responsibilities for site operations, and each party having control over the designs and specifications necessary to ensure compliance with plan requirements and permit conditions must ___submit an NOI. It is anticipated that this project will require more than one entity (e.g. owner, developer, or general contractor) submit an NOI. In this case those persons will become co-permittees. The Stormwater Pollution Prevention Plan must be completed prior to the submittal of an NOI.

A form for the required Contractor certification is included in this SWP3. Both the General Contractor and Sub-Contractor(s) responsible for erosion control and stabilization measures must complete this certification. Certificates are to be kept with the SWP3.

Upon final stabilization of the site a Notice of Termination (NOT) is to be completed and mailed to ODEQ. A blank NOT form is included at the back of this report. The NOT is to be sent to:

ODEQ
Water Quality Division Stormwater Unit
P. O. Box 1677
Oklahoma City, OK 73103-1677

OWNER'S CERTIFICATION:

"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 this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature:_____ Date:_____

Corrective Action Report Form

Purpose

This Corrective Action Report Form is designed to assist you in preparing corrective action reports for ODEQ's OKR04 MCM7. If you are covered under ODEQ's OKR04 MCM7, this form will enable you to create a corrective action report that complies with the minimum reporting requirements of Part VIII.B.7n the permit.

You are only required to fill out this form if one of the corrective action triggering conditions in Part VIII.B.7.n.(1).(a) occurs on your site. 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.

Instructions for Filling Out the Initial Report (Section A)

You must complete Section A of the report form within 24 hours of discovering the condition that triggered corrective action

Name of Project
Enter the name for the project.

Today's Date
Enter the date you completed this form.

Date/Time Problem First Discovered
Specify the date on which the triggering condition was first discovered. Also specify the time of the discovery.

Name/Contact Information
Provide the individual's name, title, and contact information as directed in the form.

Site Condition That Triggered Corrective Action
Under the OKR04 MCM7, corrective action is required when one of the triggering conditions occurs at your site. See OKR04 Part VIII.B.7.n. Check the box that corresponds to the condition that triggered this corrective action.

Description of the Site Condition
Provide a summary description of the condition you found that triggered corrective action and the specific location where it was found. Be as specific as possible about the location; it is recommended that you refer to a precise point on your site map. If you have already provided this explanation in an inspection report, you can refer to that report.

Deadline for Completing Corrective Action
For all projects, the deadline is either: (1) no more than 7 calendar days after the date you discovered the problem, or (2) if it is infeasible to complete work within the first 7 days, as soon as practicable following the 7th day. If your estimated date of completion falls after the 7-day deadline consistent with (2), above, explain (a) why you believe it is infeasible to complete work within 7 days, and (b) why the date you have established for making the new or modified stormwater control operational is the soonest practicable timeframe:

Instructions for Filling Out the Corrective Action Progress Table (Section B)

You must complete Section B of the report form no later than 7 calendar days after discovering the condition that triggered corrective action.

Section B.1 – Why the Problem Occurred
After you have had the opportunity to examine the problem more closely, provide details as to what you believe to be the cause of the problem, and specify the follow-up actions you took (along with the dates of such actions) to diagnose the problem.

Section B.2 – Stormwater Control Modifications to be Implemented
Provide a list of modifications you plan to make to your stormwater controls to correct the problem and the date you completed such work. Keep in mind that your work must be completed within the timeline specified in Section A for the completion of corrective action work.

Also, if a SWPPP modification is necessary, indicate the date you modified your SWPPP. Keep in mind that SWPPP changes must be made within 7 days of discovering the problem that triggered this corrective action.

Space is provided for you to include additional notes or observations regarding the change that you implemented at your site to correct the problem.

Section A – Initial Report (Complete this section within 24 hours of discovering the condition that triggered corrective action)					
Name of Project				**Today's Date**	
Date Problem First Discovered		**Time Problem First Discovered**			
Name and Contact Information of Individual Completing this Form					
What site conditions triggered the requirement to conduct corrective action *(check the box that applies)*:					

☐ A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Part VIII.B.7.n
☐ The stormwater controls that have been installed and maintained are not effective enough for the discharge to meet applicable water quality standards or applicable requirements iof the permit
☐ A prohibited discharge has occurred or is occurring

Provide a description of the problem:

Deadline for completing corrective action (*Enter date that is either: (1) no more than 7 calendar days after the date you discovered the problem, or (2) if it is infeasible to complete work within the first 7 days, enter the date that is as soon as practicable following the 7th day)*:

If your estimated date of completion falls after the 7-day deadline, explain (1) why you believe it is infeasible to complete work within 7 days, and (2) why the date you have established for making the new or modified stormwater control operational is the soonest practicable timeframe:

Section B – Corrective Action Progress

(Complete this section no later than 7 calendar days after discovering the condition that triggered corrective action)

Section B.1 – Why the Problem Occurred

Cause(s) of Problem (Add an additional sheet if necessary)	How This Was Determined and the Date You Determined the Cause
1.	**1.**
2.	**2.**

Section B.2 – Stormwater Control Modifications to be Implemented to Correct the Problem

List of Stormwater Control Modification(s) Needed to Correct Problem (Add an additional sheet if necessary)	Date of Completion	SWP3 Update Necessary?	Notes
1.		☐Yes ☐No If yes, provide date SWP3 modified:	
2.		☐Yes ☐No If yes, provide date SWP3 modified:	

Section C – Certification and Signature

Section C.1 – Certification and Signature by Contractor or Subcontractor

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

Signature of Contractor or Subcontractor: _____ **Date:**

Printed Name and Affiliation: _____

Section C.2 – Certification and Signature by Permittee

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

Signature of Permittee or "Duly Authorized Representative": _____ **Date:**

Printed Name and Affiliation: _____

BMP AMENDMENT LOG

No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

STORMWATER POLLUTION PREVENTION TRAINING LOG

Stormwater Pollution Prevention Training Log

Project Name:

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ❑ **Sediment and Erosion Controls**
- ❑ **Emergency Procedures**
- ❑ **Stabilization Controls**
- ❑ **Inspections/Corrective Actions**
- ❑ **Pollution Prevention Measures**

Specific Training Objective:_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		

All erosion and sediment control measures and other protective measures identified in the SWP3 must be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance shall be performed before the next anticipated storm event, but no later than seven (7) calendar days, or as necessary to maintain the continued effectiveness of Stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

Qualified personnel shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site, at least once every **fourteen (14) calendar days** and within **24 hours of the end of a storm event of 0.5 inches or greater.**

Project Name: _____

Inspection Date: _____ Name(s) of Inspector(s):_____

Qualifications of Inspector(s): _____

_____

Check which applies: Routine Inspection_____ Post 0.5" Rain Event Inspection_____

Disturbed areas that have been cleared, graded or excavated and areas used for material storage that are exposed to precipitation:

Is there evidence of, or potential for, pollutants or sediments entering the drainage system (Y/N)?_____

Are Best Management Practices (BMP's) or sediment and erosion control measures, identified in the SWP3, installed and operating correctly (Y/N for each of the following according to the attached specifications for each)?

Construction Entrance:_____ Dikes:_____ Silt Fence:_____

Sedimentation Basin:_____ Sediment Traps:_____ Vegetative Cover:_____

Concrete Wash Out:_____ Material/borrow storage:_____ Drainage Ways:_____

At discharge locations or points (outfalls), are erosion control measures effective in preventing significant impacts to receiving waters (Y/N)?_____

Are all chemicals or hazardous and toxic wastes on-site under cover or otherwise protected from comingling with stormwater? (Y/N) _____

Provide a detailed description of any of the following major observations:

- the location(s) of discharge of sediment or other pollutants from the site;
- location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
- location(s) where additional BMPs are needed that did not exist at the time of inspection;
- if discharge is occurring, note the characteristics of the discharge (color, odor, floating or suspended solids, foam, oil sheen, and other indicators of stormwater pollutants; and
- Identify any incidents of noncompliance observed.

_____

_____

_____

(Continue on additional paper, if necessary)

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

Inspector's Signature:_____ ***Date***:_____

Spill Prevention and Response Plan

for



CITY OF CLAREMORE
720 Ramm Road
Claremore, OK 74017
(918) 341-3629

January 26, 2016

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SECTION 1

Spill Prevention and Response Plan Introduction

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

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

1.1 Planning And Prevention

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

SECTION 2

Preventative Measures

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

2.1 Training

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

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

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

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

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

2.2 Release Response Equipment

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

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

2.3 Equipment Inspection

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

SECTION 3

Regulated Materials Storage and Handling

3.1 Containment

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

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

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

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

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

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

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

3.2 Vehicle and Equipment Maintenance

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

SECTION 4

Spill Response

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

4.1 Spill Coordinator

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

4.2 Immediate Response

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

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

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

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

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

SECTION 5

Reporting

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

SECTION 6

Notifications

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

6.1 Local, Federal and State Agencies

FIRE
FIRE DEPARTMENT
1325 N. SIOUX
, OK 74017
918-341-1477

POLICE
POLICE
200 WEST FIRST STREET
, OK 74017
918-341-12112

HOSPITAL
HILLCREST HOSPITAL
1202 NORTH MUSKOGEE PLACE
, OK 74017
918-341-2556

EMERGENCY ROOM
HILLCREST HOSPITAL
1202 NORTH MUSKOGEE PLACE
, OK 74017
918-341-2556

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

AMBULANCE
CALL 911

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

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

ROGERS COUNTY HEALTH DEPARTMENT
2664 North Highway 88
, OK 74017
918-341-3166

OKLAHOMA DEPARTMENT OF EMERGENCY MANAGEMENT
ODEM
405-521-2481

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

Attachment A
Response Team Contacts

RESPONSE TEAM CONTACTS

NAME:

TITLE/POSITION:

PHONE NUMBER:

SPILL COORDINATOR (SC):

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

TITLE/POSITION:

PHONE NUMBER:

OTHER REPRESENTATIVES: Charlene Lawrence

TITLE/POSITION: Pretreatment & Stormwater Manager

PHONE NUMBER: 918-341-3629

Attachment B
Typical Fuel, Lubricants, and Hazardous Materials

THE FOLLOWING CHEMICALS ARE PRESENT DURING NORMAL INDUSTRIAL ACTIVITIES.

FUELS:

- GASOLINE / DIESEL FUEL

EQUIPMENT FLUIDS:

- MOTOR OIL / HYDRAULIC FLUID / ANTIFREEZE

Attachment C
Spill Report Form

SPILL REPORT FORM

Date/time of spill: _____

Date/time of spill discovery: _____

Name and title of discoverer:_____

Spill Site Description: _____

Material spilled/Estimated volume: _____

Unique qualifier, if relevant, such as manufacturer: _____

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

_____

Topography and surface conditions of spill site: _____

_____

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

_____

Proximity to private or public water supply wells: _____

Weather conditions at the time of release: _____

Describe the causes and circumstances resulting in the spill: _____

_____

Describe the extent of observed contamination, both horizontal and vertical (i.e., spill-stained

soil in a 5-foot radius to a depth of 1 inch): _____

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

_____

Location of any excavated/stockpiled contaminated soil: _____

_____

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

environment: _____

_____

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

_____

Current status of cleanup actions: _____

_____

Name and company for the following:

Contractor Superintendent: _____

Spill Coordinator: _____

Landowner notified (if appropriate): _____

Date: _____

Form completed by: _____

Date: _____

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

_____

Date: _____

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

OKR04 REQUIREMENTS

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 42 **PART VIII: OPTIONAL PERMIT REQUIREMENTS FOR MUNICIPAL**

VIII. A

CONSTRUCTION ACTIVITIES

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 stormwater and certain non-stormwater 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 stormwater discharges from construction activities.

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

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 the 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.

Optional Permit Requirements for Municipal Construction Activities 1. Eligibility

a. This optional provision authorizes small Ms4s to discharge pollutants in stormwater runoff associated with municipal construction activities as defined in 40 CFR (Code of Federal Regulations) 122.26 (b)(14)(x) for construction sites of five or more acres, CFR 122.26 (b)(15)(i) for construction sites of more than one acre but less than five acres**,** and those construction site discharges designated by the Director as needing a stormwater permit under 122.26 (a)(1)(v), or under 122.26 (a)(9) and

VIII. B

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 43 122.26 (g)(1)(i). Any discharge authorized by a different OPDES or NPDES permit

may be commingled with discharges authorized by this permit.

b. This provision also authorizes stormwater discharges from support activities[1] (e.g., concrete batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:

. (1) Concrete batch plant activity is not located in the watershed of an Outstanding Resource Water[2] as defined in the Oklahoma Water Quality Standards.

. (2) The support activity is directly related to a construction site that is required to have OPDES permit coverage for discharges of stormwater associated with construction activity.

. (3) The support activity is not a commercial operation serving multiple unrelated construction projects by different operators, and does not operate beyond the completion of the construction activity at the last construction project it supports.

. (4) Appropriate controls and measures are identified in a SWP3 covering the discharges from the support activity areas.

2. Authorized Non-Stormwater Discharges The following non-stormwater discharges from active construction sites are authorized by this provision:

a. Waters used to wash vehicles where detergents are not used;

b. Water used to control dust;

c. Routine external building wash down which does not use detergents;

d. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; and

e. Uncontaminated flows from excavation dewatering activities will be allowed if operational and structural controls are used to reduce any pollutant releases in order to avoid or minimize the impacts on water quality. These controls must be included in your SWP3.

3. Non-Numeric Technology Based Effluent Limitations The stormwater control requirements in this part are the technology-based effluent limitations that apply to all discharges from construction sites eligible for coverage under this provision. These requirements apply the national effluent limitations guidelines and new source performance standards found at 40 CFR Part 450.

. 1 Discharges subject to a numeric effluent limitation guideline for Asphalt Batch Plants are not covered under this Permit and required to apply for permit coverage under stormwater multi-sector general permit OKR05.

. 2 See Part VII Definitions for details

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 44 **a. Erosion and Sediment Control Requirements**

You must design, install and maintain erosion and sediment that minimize the discharge of pollutants from earth-disturbing activities. You are required to minimize the amount of soil exposed during construction activities and also subject to the deadlines for temporarily and/or permanently stabilizing exposed portions of your site pursuant to Part VIII.B.3.b. You must account for the following factors in designing your stormwater controls:

The expected amount, frequency, intensity, and duration of precipitation.

The nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. If any stormwater flow will be channelized at your site, you must design stormwater controls to control both peak flowrates and total stormwater volume to minimize erosion at outlets and to minimize downstream channel and streambank erosion.

The range of soil particle sizes expected to be present on the site. You must direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers established under Parts VIII.B.3.a.(1) and VIII.B.5, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

. (1) Protection of surface water In order to minimize sediment discharges, if any water of the State are located

on or immediately adjacent to the site, you must maintain at least fifty (50) feet of natural buffer zone, as measured from the top of the bank to disturbed portions of your site, from any named or unnamed receiving streams, creeks, rivers, lakes or other water bodies unless 100 feet of natural buffer is required by Part VIII.B.4.b and VIII.B.5. There are exceptions from this requirement for water crossings, limited water access, and stream restoration authorized under a CWA Section 404 permit. Where no natural buffer exists due to preexisting development disturbances (e.g., structures, impervious surfaces) that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this part, unless you will remove portions of the preexisting development. Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you may refer to Exhibit 4 (Buffer Guidance) for sediment control alternatives. Additionally, this requirement is not intended to interfere with any other ordinance, or regulation, statute or other provision of law.

. (2) Install perimeter controls You must install sediment controls along those perimeter areas of your site that will receive stormwater from earth-disturbing activities. For linear projects with rights-of-way that restrict or prevent the use of such perimeter

controls, you must maximize the use of these controls where practicable and document in your SWP3 why it is impracticable in other areas of the project. You must remove sediment before it has accumulated to one (1)-half of the above-ground height of any perimeter control.

. (3) Minimize sediment track-out You must minimize the track-out of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting your construction site. To comply with this requirement, you must:

. (a). Restrict vehicle use to properly designated exit points.

. (b). Use appropriate stabilization techniques at all points that exit onto paved roads so that sediment removal occurs prior to vehicle exit.

. (c). Where necessary, use additional controls to remove sediment from vehicle tires prior to exit.

. (d). Where sediment has been tracked-out from your site onto the surface of off-site streets, other paved areas, and sidewalks, you must remove the deposited sediment by the end of the same work day in which the track- out occurs or by the end of the next work day if track-out occurs on a non-work day. You must remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

. (4) Control discharges from stockpiled sediment or soil For any stockpiles or land clearing debris composed, in whole or in part, of sediment or soil, you must comply with the following requirements:

. (a). Locate the piles outside of any natural buffers established under Parts VIII.B.3.a.(1) or VIII.B.4.b and physically separated from other stormwater controls implemented in accordance with Part VIII.B.3.a.

. (b). Protect from contact with stormwater (including run-on) using a temporary perimeter sediment barrier.

. (c). Where practicable, provide cover or appropriate temporary stabilization to avoid direct contact with precipitation or to minimize sediment discharge.

. (d). Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

. (e). Unless infeasible, contain and securely protect from wind.

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. (5) Minimize Dust In order to avoid pollutants from being discharged into surface waters, to the extent feasible, you must minimize the generation of dust through the appropriate application of water or other dust suppression techniques.

. (6) Minimize the Disturbance of Steep Slopes You must minimize the disturbance of steep slopes (i.e., slopes of 40% or greater). If it is not feasible to avoid disturbance of steep slopes, you must:

. (a). Divert concentrated or channelized flows of stormwater away from and around areas of disturbance on steep slopes.

. (b). Use specialized erosion and sediment controls for steep slopes, such as temporary and permanent seeding with soil binders, erosion control blankets, surface roughening, reducing the continuous slope length with terracing or diversions, gradient terraces, interceptor dikes and swales, grass-lined channels, pipe slope drains, subsurface drains, level spreaders, check dams, seep berms, and triangular silt dikes.

. (c). Use stabilization practices designed to be used on steep slopes. You must comply with the stabilization requirements as required in Part VIII.B.3.b.

. (7) Preserve Topsoil You must preserve native topsoil on your site, unless infeasible; you should stockpile and reuse it in areas that will be stabilized with vegetation if applicable.

. (8) Minimize Soil Compaction In areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed, you must either restrict vehicle and equipment use in these locations to

avoid soil compaction, or use techniques that condition the soils to support vegetative growth if necessary, prior to seeding or planting areas of exposed soil that have been compacted.

. (9) Protect Storm Drain Inlets If you discharge to any storm drain inlet that carries stormwater flow from your site directly to surface water (and it is not first directed to a sediment basin, sediment trap, or similarly effective control), and you have the authority to access the storm drain inlet, you must install inlet protection measures that remove sediment from your discharge prior to entry into the storm drain inlet. You must clean, or remove and replace the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, you must remove the deposited sediment by the end of the same work day in which it is found or by the end of the following work day if removal by the same work day is not feasible.

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. (10) Constructed Stormwater Conveyance Channels You must design channels to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. Minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

. (11) Sediment Basins If you install a sediment basin, you must comply with the following:

. (a). Design requirements. Provide storage for either the calculated volume of runoff from a 2-year, 24-hour storm, or 3,600 cubic feet per acre drained.

. (b). When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge of pollutants, unless infeasible.

. (c). Prevent erosion of the sediment basin using stabilization controls (e.g., erosion control blankets), and the inlet/outlet using erosion controls and velocity dissipation devices.

. (d). Sediment basins must be situated outside of surface waters and any natural buffers established under Parts VIII.B.3.a.(1) and VIII.B.4.b.

. (12) Dewatering Practices You are prohibited from discharging groundwater or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation associated with a construction activity, unless such waters are first effectively managed by appropriate controls. Uncontaminated dewatering water can be discharged without being routed to a control. You must also meet the following requirements for dewatering activities:

. (a). Do not discharge visible floating solids or foam.

. (b). Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering wastewater is found to contain these materials.

. (c). To the extent feasible, utilize vegetated, upland areas of the site to infiltrate dewatering water before discharge. In no case will surface waters be considered part of the treatment area.

. (d). At all points where dewatering water is discharged, comply with the velocity dissipation requirements of Part VIII.B.3.a.(10).

. (e). With backwash water, either haul away for disposal or return it to the beginning of the treatment process.

. (f). Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 48 **b. Stabilization Requirements**

You are required to stabilize exposed portions of your site in accordance with the following requirements:

(1) Deadlines for Initiating and Completing Stabilization

You must initiate stabilization measures immediately[3] whenever earth- disturbing activities have permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. As soon as practicable, but no later than 14 calendar days after the initiation of soil stabilization measures, you are required to have completed:

(a). For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or

(b). For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

If you discharge to an impaired water, or Outstanding Resource Water (ORW), or Aquatic Resource of Concern (ARC), you are required to complete the stabilization activities within seven (7) calendar days after the temporary or permanent cessation of earth-disturbing activities.

(2) Criteria for Stabilization

To be considered adequately stabilized, you must meet the criteria below depending on the type of cover you are using, either vegetative or non- vegetative.

. (a). For both temporary and final stabilization , if you are using vegetative cover to stabilize an exposed portion of your site, you must comply with one of the criteria:

. (b). Provide an established uniform perennial vegetative cover (e.g., evenly distributed without large bare areas), which

covers 70% or more of the density of coverage that was provided by vegetation prior to commencing earth-disturbing activities. When background vegetation covered less than 100% of the ground prior to commencing earth- disturbing activities, the 70% coverage criteria is adjusted as in following example:

. 3 The term “immediately” is used to define the deadline for initiating stabilization measures. In the context of this provision, “immediately” means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

. 4 Temporary and final stabilization in Part VII Definitions

If vegetation covered 50% of the ground prior to construction, then the requirement would be to provide a total vegetative cover at final stabilization of 70% of 50% (0.70 X 0.50 = 0.35), or 35% of the site.

(c). Immediately after seeding or planting the area to be vegetative stabilized, to the extent necessary to prevent erosion on the seeded or planted area, you must select, design, and install non-vegetative erosion controls that provide cover (e.g., mulch, rolled erosion control products) to the area while vegetation is becoming established.

(d). If you are using non-vegetative controls (e.g., hydromulch, erosion control blankets, riprap, geotextiles, and gabions) to stabilize exposed portions of your site, or if you are using such controls to temporarily protect areas that are being vegetatively stabilized, you must provide effective non-vegetative cover to stabilize any such exposed portions of your site.

c. Pollution Prevention Requirements

You are required to design, install, implement and maintain effective pollution prevention measures in order to minimize or prevent the discharge of pollutants. To meet this requirement, you are required to:

Eliminate certain pollutant discharges from your site [see Part VIII.B.3.c.(1)].

Properly maintain all pollution prevention controls [see Part VIII.B.3.c.(2)].

Comply with pollution prevention standards for pollutant-generating activities that occur at your site [see Part VIII.B.3.c.(3)].

. (1) Prohibited discharges You are prohibited from discharging the following from your construction site:

. (a) Wastewater from the washout of concrete, unless managed by an appropriate control as described in Part VIII.B.3.c.(2).(d).

. (b) Wastewater from the washout and cleanout of stucco, paint, from release oils, curing compounds

and other construction materials, unless managed by an appropriate control as described in Part VIII.B.3.c.(2).(d).

. (c) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.

. (d) Soaps, detergents or solvents used in vehicle and equipment washing.

. (e) Toxic or hazardous substances from a spill or other release.

. (2) Maintenance requirements You must ensure that all pollution prevention controls installed in accordance with this Part remain in effective operating condition and are protected from activities that would reduce their effectiveness. You must

inspect all pollutant-generating activities and pollution prevention controls in accordance with your inspection frequency requirements in Part VIII.B.7.m.(2) and document your findings in accordance with Part VIII.B.7.m.(5) if you find that controls need to be replaced, repaired, or maintained, you must make the necessary repairs or modifications in accordance with the following:

. (a). General Maintenance Requirements: You must initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.

. (b). Washing of Equipment or Vehicles: You must provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing. To comply with the prohibition in Part VIII.B.3.c.(1) for storage of soaps, detergents, or solvents, you must provide either cover (e.g., plastic sheeting or temporary roofs) to prevent these detergents from coming into contact with rainwater, or a similarly effective means designed to prevent the discharge of pollutants from these areas.

(c) Storage, Handling, and Disposal of Construction Products, Materials and Wastes: You must minimize the exposure to stormwater of any of the products, materials, or wastes specified below that are present at your site by complying with the requirements in this Part. To ensure you meet this requirement, you must do the following:

i. For building products in storage areas, you must provide either cover (e.g., plastic sheeting or temporary roofs) to prevent these products from coming into contact with rainwater, or a similarly effective means designed to prevent the discharge of pollutants from these areas.

ii. For pesticides, herbicides, insecticides, fertilizers, and landscape materials in storage areas, you must provide either cover (e.g., plastic sheeting or temporary roofs) to prevent these chemicals from coming into contact with rainwater, or a similarly effective means designed to prevent the discharge of pollutants from these areas; and

comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label.

iii. For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals to comply with the prohibition in Part VIII.B.3.c.(1), you must store chemicals in water-tight containers, and provide either cover (e.g., plastic sheeting or temporary roofs) to prevent these containers from coming

into contact with rainwater, or a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., spill kits), or provide secondary containment (e.g., spill berms, decks, spill containment pallets); and clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

iv. For hazardous or toxic waste (e.g., paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids), you must:

Separate hazardous or toxic waste from construction and domestic waste, store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, or local requirements,

Store all containers that will be stored outside within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in covered areas or having a spill kit available on site),

Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended methods of disposal and in compliance with federal, state, and local requirements.

Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

v. For construction and domestic waste (e.g., packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, Styrofoam, concrete, and other trash or building materials), you must provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and

domestic wastes. In addition, you must clean up and dispose of waste in designated waste containers on work days; and clean up immediately if containers overflow.

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 52 vi. For sanitary waste, you must position portable toilets so that

they are secure and cannot be tipped or knocked over.

(d). Washing of Applicators and Containers Used for Paint, Concrete, or Other Materials

To comply with the prohibition in Parts VIII.B.3.c.(1) and (2), you must provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials. To comply with this requirement, you must:

i. Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.

ii. Handle washout or cleanout wastes as follows:

Do not dump liquid wastes in storm sewers,

Dispose of liquid wastes in accordance with applicable requirements in Part VIII.B.3.c.(2).(c).

Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part VIII.B.3.c.(2).(c).

Locate any washout or cleanout activities as far away as possible from surface waters and stormwater inlets or conveyances, and,

To the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.

. (3) Emergency Spill Notification You are prohibited from discharging toxic or hazardous substances from a spill or other release, consistent with Part VIII.B.3.c.(1).(e). 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 established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24- hour period, you must notify the National Response Center (NRC) at (800) 424-8802 or, in the areas of Oklahoma, call (800) 522-0206 as soon as you have knowledge of the discharge. You must also, within seven (7) calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. Local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking

water supply agencies.

. (4) Fertilizer Discharge Restrictions

You are required to minimize discharges of fertilizers containing nitrogen or phosphorus. To meet this requirement, you must comply with the following requirements:

. (a). Apply at a rate and in amounts consistent with manufacturer's specifications, or document departures from the manufacturer specifications.

. (b). Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth.

. (c). Avoid applying before heavy rains that could cause excess nutrients to be discharged.

. (d). Never apply to frozen ground.

. (e). Never apply to stormwater conveyance channels with flowing water.

. (f). Follow all other federal, state, tribal and local requirements regarding fertilizer application.

4. Water Quality Based Effluent Limitations

Your stormwater discharges must be controlled as necessary to meet applicable water quality standards. 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. Where a discharge is already authorized under this Permit and is later determined to cause or have the reasonable potential to cause or contribute to the violation of an applicable water quality standard, the Director will notify the operator of such violation(s). The permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and document these actions in the SWP3. If violations remain or re-occur, then coverage under this Permit may be terminated by the Director, and an alternative general permit or individual permit may be issued. Compliance with this requirement does not preclude any enforcement activity as provided by the Clean Water Act (CWA) for the underlying violation. If such violation is determined, the Director may require you to:

Develop a supplemental BMP action plan describing SWP3 modifications to address adequately the identified water quality concerns;

Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or

Cease discharges of pollutants from construction activity and submit an alternative general permit or individual permit application.

a. Discharges to Waters Identified as Impaired Waters

If you discharge to impaired water that is impaired for sediment within one (1) stream mile, you are required to comply with the additional requirement in this part.

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. (1) Identify if you discharge to impaired waters: If you discharge to impaired waters, you must comply with the following requirements in Part VIII.B.4.a.(2), (3), and (4).

. (2) Site inspection requirements: You must conduct site inspections once every seven (7) calendar days at a minimum, and within 24 hours of a storm event of 0.5 inches or greater or within 24 hours of a discharge caused by snowmelt.

. (3) Corrective actions: If the inspection or visual examination results indicate any permit violations, you must implement the corrective actions required in Part VIII.B.7.n. However, a violation would result if you fail to implement the required corrective actions.

. (4) Stabilization requirements: You are required to comply with the following modified stabilization requirements as specified in Part VIII.3.b within seven (7) calendar days after the temporary or permanent cessation of earth-disturbing activities.

b. Discharges to Waters Identified as an Outstanding Resource Water (ORW) or Aquatic Resource of Concern (ARC)

If you discharge to water identified as ORW or your sites are located within areas identified as an ARC you must implement inspection, corrective actions and stabilization requirements provided in Part VIII.B.3.b. Also you must comply with the following additional requirements:

. (1) In order to minimize sediment discharges, if any ORW or ARC is located on or immediately adjacent to your site, you must ensure that a vegetated buffer zone of at least 100 feet is retained or successfully established/planted between the area disturbed and all perennial or intermittent streams. A vegetated buffer zone of at least 50 feet must be retained or successfully established/planted between the areas disturbed during construction and all ephemeral streams or drainages. If the nature of the construction activity or the construction site makes a buffer impossible, you must provide equivalent controls. Use Exhibit 4 (Buffer Guidance) for information to assist you in developing equivalent controls. There are exceptions from this requirement for water crossings, limited water access, and stream restoration authorized under a CWA Section 404 permit.

. (2) For drainage locations serving five (5) or more acres disturbed at one time, a temporary (or permanent) sediment basin and/or sediment traps shall be used to minimize sediment discharges within the areas of the ORW or ARC. You may use the information in Part VIII.B.3.a.(11) and VIII.B.7.j.(3) to assist you in complying with this requirement.

. (3) For any portion of the site that discharges to an ORW or ARC, instead of the inspection frequency specified in Part VIII.B.7.m.(2), you must conduct

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 55 inspections within seven (7) calendar days and within 24 hours of the

occurrence of a storm event of 0.5 inches or greater.

(4) For initiating and completing stabilization, you are required to complete the stabilization activities within seven (7) calendar days after the temporary or permanent cessation of earth-disturbing activities.

5. Endangered Species

a. Determine whether the project area drains to ARC for construction activities

. **(1) Refer to Exhibit 1, a map, and a list of all the waters of Oklahoma which the U.S. Fish and Wildlife Service and the Oklahoma Department of Wildlife Conservation consider to be sensitive for construction activities, because they harbor populations of federal or State listed species or their designated critical habitat.**

. **(2) If the proposed construction site is not located within any of these areas, the proposed construction stormwater discharge or stormwater discharge related activities are not likely to significantly affect endangered and threatened species.**

. **(3) If the proposed construction site is located within the corridor of any ARC, you must comply with Part VIII.B.5.**

b. Implementation of stormwater control measures to protect endangered and threatened species in ARC

(1) Applicants whose proposed construction site is located within an ARC must incorporate the following measures into the SWP3 for this site unless permit coverage is allowed under Parts I.E.2.d Criteria C, D and E. Other pollutants such as, but not limited to, oil, grease, solid waste (i.e. building material scrap, and trash), and human and hazardous waste, (e.g., paint and solvents), are not authorized for discharge under this Permit. These potential pollutants must be properly managed and their contact with stormwater minimized or eliminated to the greatest extent practicable.

. (a). Consistent with Part VIII.B.3, sediment must be retained on site to the greatest extent practicable; all sediment,

solid waste, and human waste control measures must be properly installed and maintained at all times; and off-site accumulations of any escaped sediment must be removed.

. (b). A vegetated buffer zone of at least 100 feet must be retained or successfully established/planted between the area disturbed during construction and all perennial or intermittent streams on or adjacent to the construction site. A vegetated buffer zone at least 50 feet wide must be retained or successfully established/planted between the areas disturbed during construction and all ephemeral streams or drainages. Buffer zones shall be measured from the top of the first defined bank of the stream and shown on the site map.

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If characteristics of the site or the project make it impossible to maintain the required buffer, refer to Exhibit 4 (Buffer Guidance) for information to assist you in developing equivalent sediment controls. You must maintain the buffer or selected alternative throughout your period of coverage under this Permit and no construction activities may be conducted in this area. All discharges through the buffer must be non- channelized or non-concentrated, and must first be treated by the site's sediment and erosion controls.

(c). Document in your SWP3 the following:

i. If the buffer is less than 100 or 50 feet, the width of the buffer vegetation to be retained.

ii. Information you relied on to comply with the requirement to achieve the equivalent sediment load reduction as an undisturbed naturally vegetated 100- or 50-foot buffer.

. (d). For any disturbances within the required 100 or 50-foot buffer area, you must comply with the following stabilization requirements, which replace the corresponding requirements in Part VIII.B.3.b:

i. You must immediately initiate stabilization in any exposed areas of the buffer where earth-disturbing activities have permanently or temporarily ceased, and will not resume for a period exceeding seven (7) calendar days. For the purposes of this Permit, earth- disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of your construction site will not resume for a period of 14 or more days, and earth- disturbing activities have permanently ceased when clearing and excavation within any area of your construction site has been completed, and final grade has been reached.

ii. Within seven (7) calendar days of initiating stabilization, you are required to have completed all soil conditioning, seeding, watering, mulching, and any other required activities related to the planting and establishment of vegetation for vegetative cover; and/or the installation or application of all non-vegetative measures for non- vegetative cover.

. (e). You are not required to comply with this buffer requirement for the following types of construction projects, provided that you limit the area of disturbance to the minimum needed to complete the construction and to access the site, and that you retain the natural vegetation in the buffer outside this area:

i. Construction of water crossings authorized under a CWA Section 404 permit (where required) for water lines, sewer lines, utility lines, and roadways.

ii. Construction of water-dependent structures and water access areas (piers, boat ramps, etc.) approved under a CWA Section 404 permit (where required) or

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 57 iii. Development of a site where no naturally vegetated buffer area

6.

exists due to prior disturbances.

. (f). You must conduct inspections within 7 calendar days and within 24 hours of a storm event of 0.5 inches or greater instead of the inspection frequency specified in Part VIII.B.7.m.(2).

. (g). You must meet any local requirements affecting construction in the buffer.

. (2) Consistent with Parts VIII.B.3.b and VIII.B.4.b, an implementation schedule must be included which describes the stabilization practices that will be used to control erosion during construction and when construction has permanently ceased. The preservation of mature vegetation on-site is preferred.

. (3) Consistent with Parts VIII.B.3.a and VIII.B.7.j, structural BMPs must be successfully implemented to divert uphill stormwater flows from crossing disturbed areas, to store flows (e.g., retention ponds) or to otherwise control runoff from disturbed areas during construction. At a minimum this must include silt fencing and vegetated buffer strips on all down slope boundaries of the area disturbed during construction. The construction of temporary or permanent stormwater detention or retention structures (e.g., ponds) is preferred, but these should not be constructed within intermittent or perennial stream channels or within floodplains.

. (4) Consistent with Part VIII.B.3.a.(10) and VIII.B.7.j.(3).(c), velocity dissipation devices must be incorporated into the design of outfall channels and discharge locations. Outfalls must be screened to prevent the discharge of solid materials with stormwater runoff.

. (5) Hazardous construction materials and waste must be stored in a manner that minimizes their contact with stormwater. An emergency response plan must be included which addresses the handling of accidental spills (see Part VIII.B.3.c).

. (6) The applicant must comply with any terms and conditions imposed under the eligibility requirements of Part I.E.2 to ensure that its stormwater discharges and stormwater discharge-related activities are protective of listed species and/or critical habitat. Such terms and conditions must be incorporated in the project's SWP3. If the eligibility requirements of Part I.E.2 cannot be met, the applicant may seek relief from the appropriate service in the form of an approved take. As an alternative, the applicant may seek coverage under a DEQ individual permit.

Stormwater Pollution Prevention Plans (SWP3s)

a. You must develop a preliminary SWP3 template for all construction projects or sites covered by this provision. This SWP3 template represents both controls under common site conditions and needs for unique water quality prevention. You shall use or modify this SWP3 template based on individual sites when it starts a project which is covered under this provision.

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b. The SWP3s shall be prepared in accordance with good engineering practices. Use of a licensed professional engineer (PE) for SWP3 preparation is not required by this provision. However, if any part of the SWP3 involves the practice of engineering[5] then those engineering practices and designs are required to be prepared by a licensed professional engineer. The SWP3 shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site. The SWP3 shall describe and ensure the implementation of practices that will be used to reduce the pollutants in stormwater discharges associated with construction activity at the construction site and assure compliance with the terms and conditions of this provision.

c. When developing SWP3s, small MS4s must determine whether listed endangered or threatened species or critical habitat would be affected by your stormwater discharges or stormwater discharge-related activities. Any information on whether listed species or critical habitats are found in proximity to the construction site must be included in the SWP3. Any terms or conditions that are imposed under Part VIII.B.5 of this provision to protect listed species or critical habitat from stormwater discharges or stormwater discharge-related activity must be incorporated into the SWP3. Small MS4s must implement the applicable requirements of the SWP3 required under this provision. A list and map of “Oklahoma Sensitive Waters and Watersheds Harboring Endangered and Threatened Species and their Critical Habitat of Concern” has been included in Exhibit 1. This information can also be obtained from the DEQ’s GIS mapping and Data Viewer at http://maps.deq.ok.gov/deq_wq/MapFrame.asp.

d. If your construction site discharges into a receiving water which has been listed on the Clean Water Act 303(d) list of impaired waters, and your discharges contain the pollutant(s) for which the water body is impaired, you must document in your SWP3 how the BMPs and other controls selected for your site will control the discharge of the

pollutant(s) of concern. If Part VIII.B.4.a applies to your discharge you must include in your SWP3 the additional requirements specified in that part.

e. Keeping Plans Current! The small MS4s must amend the SWP3 whenever:

5 Statutes and Rules of Oklahoma State Board of Licensure for Professional Engineers & Land Surveyors, Section 472.2 "Definitions" states that the practice of engineering means, "*Any service or creative work, the adequate performance of which requires engineering education, training and experience in the application of special knowledge of the mathematical, physical and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning and design of engineering works and systems, planning the engineering use of land and water, teaching of advanced engineering subjects or courses related thereto, engineering research, engineering surveys, engineering studies, and the inspection or review of construction for the purposes of assuring compliance with drawings and specifications; any of which embraces such services or work, either public or private, in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects, and industrial or consumer products or equipment of a mechanical, electrical, chemical, environmental, hydraulic, pneumatic or thermal nature, insofar as they involve safeguarding life, health or property, and including such other professional services as may be necessary to the design review and integration of a multidiscipline work, planning, progress and completion of any engineering services.*"

. (1) There is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants to the waters of the State that has not been addressed in the SWP3 or

. (2) Inspections or investigations by site operators, local, State or Federal officials indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants from sources identified under Part VIII.B.7.e, or is otherwise not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity.

7. Contents of SWP3

The SWP3 shall include the following items:

a. Stormwater Team Small MS4 must assemble a "stormwater 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 stormwater team, as well as their individual responsibilities. Each member of the stormwater 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 stormwater control measures, and when they will be made operational, including an explanation of how the sequence and schedule for installation of stormwater 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.**

. **(3) Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site.**

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. (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 stormwater and authorized non-stormwater flow onto, over, and from the site property before and after major grading activities.

. (5) Stormwater and allowable non-stormwater discharge locations, including: (a). Locations of any storm drain inlets on the site and in the immediate vicinity of the site. (b). Locations where stormwater or allowable non-stormwater will be discharged to waters of the State on or near the site.

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 61 (6) Locations of all potential pollutant-generating activities identified in Part

VIII.B.7.e.(1). below. (7) Locations of stormwater 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 take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges. You must also document any departures form 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 stormwater discharges or stormwater discharge-related construction activities. You must describe and implement the measures necessary to protect theses 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 stormwater discharges or stormwater discharge-related activities would have an effect on 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

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The SWP3 must include information on whether stormwater discharges or stormwater discharge-related activities would have an effect on 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 stormwater 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 stormwater shall be prevented from becoming a pollutant source for stormwater 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.

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(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 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 in order 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 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 in order 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.

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 65 (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 stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

m. Inspections

. (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[6]. 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

6 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.

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 66 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 stormwater 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 stormwater typically flows within the site, including drainage ways designed to divert/convey/treat stormwater.

v. All points of discharge from the site.

vi. All locations where stabilization measures have been implemented.

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 stormwater 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 stormwater discharge, including color, odor, floating, settled, or suspended

(b).

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 67 solids, foam, oil sheen, and other obvious indicators of stormwater

pollutants.

Also you are required to document whether your stormwater controls are operating effectively, and describe any such controls that are clearly not operating as intended or are in need of 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).

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.

Signature Requirements: Each inspection record must be signed in accordance with Part VI.H.

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.

(b). (c).

n. Corrective Actions[7] (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.

7 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.

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. (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 stormwater controls and making it operational as soon as practicable after the 7-day timeframe.

i. A required stormwater 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 stormwater 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 stormwater controls or procedures documented in your SWP3, you must modify your SWP3 accordingly within seven (7) calendar days of completing corrective action work.

(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).

(b).

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.

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 stormwater controls, including the dates such actions occurred.

ii. A summary of stormwater 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.

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 **Part VIII**, Page 69 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-stormwater listed in Parts I.B.2 and VIII.B.2 of this Permit that are combined with stormwater 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-stormwater component(s) of the discharge.

OKR04 EXHIBIT 4- BUFFER GUIDANCE

EXHIBIT 4: BUFFER GUIDANCE

The purpose of this guidance is to assist you in complying with the requirements in Parts VIII.B.3.a.(1) and VIII.B.4.b.(1) of this Permit regarding the establishment of natural buffers or equivalent sediment controls.

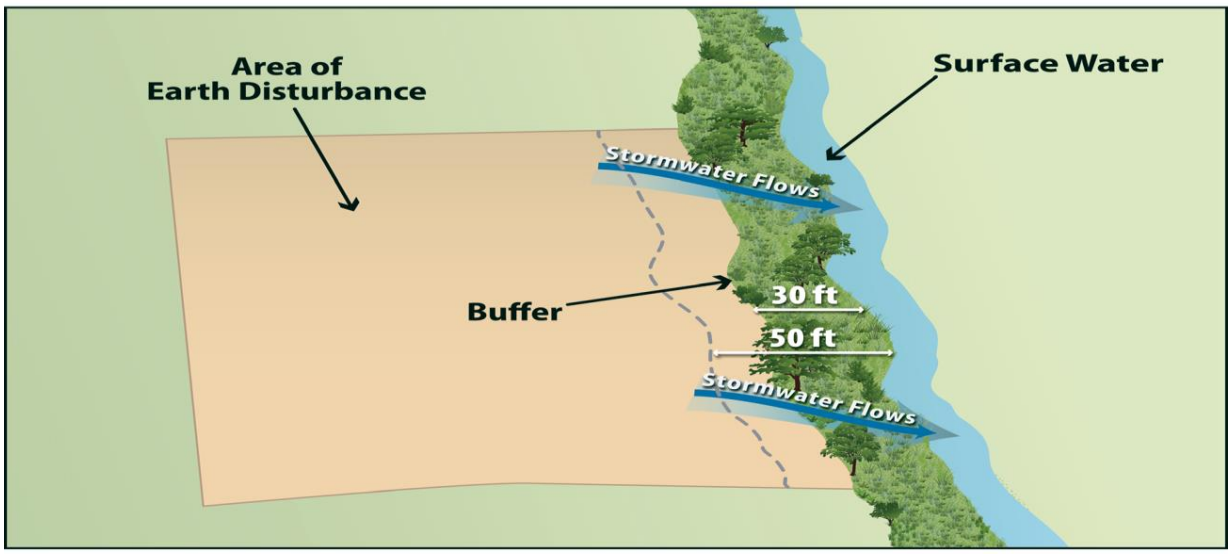
Step 1 - Determine Whether 100 Feet or 50 Feet of Natural Buffer Is Required

If your land disturbing activities will occur within the Aquatic Resources of Concern which are identified by USFWS and ODWC, a vegetated buffer of at least 100 feet is required between the area disturbed and all perennial or intermittent streams on or adjacent to the construction site, or a vegetated buffer of at least 50 feet is required between the area disturbed and all ephemeral streams. If your disturbing activities will be adjacent to the waters of the State, a vegetated buffer of at least 50 feet is required. Figure 4.1 illustrates when a site would be required to comply with the requirements in Part VIII.B.3.a.(1) due to their proximity to surface waters. If the surface water is not located within 50 feet of the earth-disturbing activities, Part VIII.B.3.a.(1) does not apply. If you determine that the buffer requirements apply to your site and those buffer requirements cannot be met, you may continue on to Step 2.

Figure 4.1: Example of Earth-Disturbing Activities within 50 feet of a Surface Water

Step 2 - Determine Compliance Alternatives to the Buffer Requirements

You have three compliance alternatives from which you can choose:



Alternative 1: Alternative 2:

Provide and maintain a 100-foot or 50-foot undisturbed natural buffer; or

Provide and maintain an undisturbed natural buffer that is less than 100-feet or 50-feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 100-foot or 50-foot undisturbed natural buffer; or

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Alternative 3: If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 100-foot or 50-foot undisturbed natural buffer.

The compliance alternative selected above must be maintained throughout the duration of permit coverage. The following provides detailed guidance for how you can comply with each of the compliance alternatives. Part 1 below provides guidance on how to provide and maintain natural buffers consistent with the Alternatives 1 and 2. Part 2 below provides guidance on how to comply with the requirement to provide a 100-foot or 50-foot buffer equivalent through erosion and sediment controls consistent with Alternative 2 and 3.

1. Guidance for Providing and Maintaining Natural Buffers

The following guidance is intended to assist you in complying with the requirements to provide and maintain a natural buffer during construction. This part of the guidance applies to you if you choose either Alternative 1 (100-foot or 50-foot buffer) or Alternative 2 (a buffer of < 100 feet or < 50 feet supplemented by additional erosion and sediment controls that achieve the equivalent sediment load reduction as the 100-foot or 50-foot buffer).

5. Buffer Width Measurement Where you are retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:

(1) The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or

(2) The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

6. Refer to Figure 4.2 and Figure 4.3. You may find that specifically measuring these points is challenging if the flow path of the surface water changes frequently, thereby causing the measurement line for the buffer to fluctuate continuously along the path of the waterbody. Where this is the case, DEQ suggests that rather than measuring each change or deviation along the water's edge, it may be easier to select regular intervals from which to conduct your measurement. For instance, you may elect to conduct your buffer measurement every 5 to 10 feet along the length of the water.

7. Limits to Disturbance within the Buffer You are considered to be in compliance with this requirement if you retain and protect from construction activities the natural buffer that existed prior to the commencement of construction. If the buffer area contains no vegetation prior to the commencement of construction (e.g., sand or rocky surface), you are not required to plant any additional vegetation. As noted above, any preexisting structures or impervious surfaces are allowed in the buffer provided you retain and protect from disturbance the vegetation in the buffer outside the preexisting disturbance.

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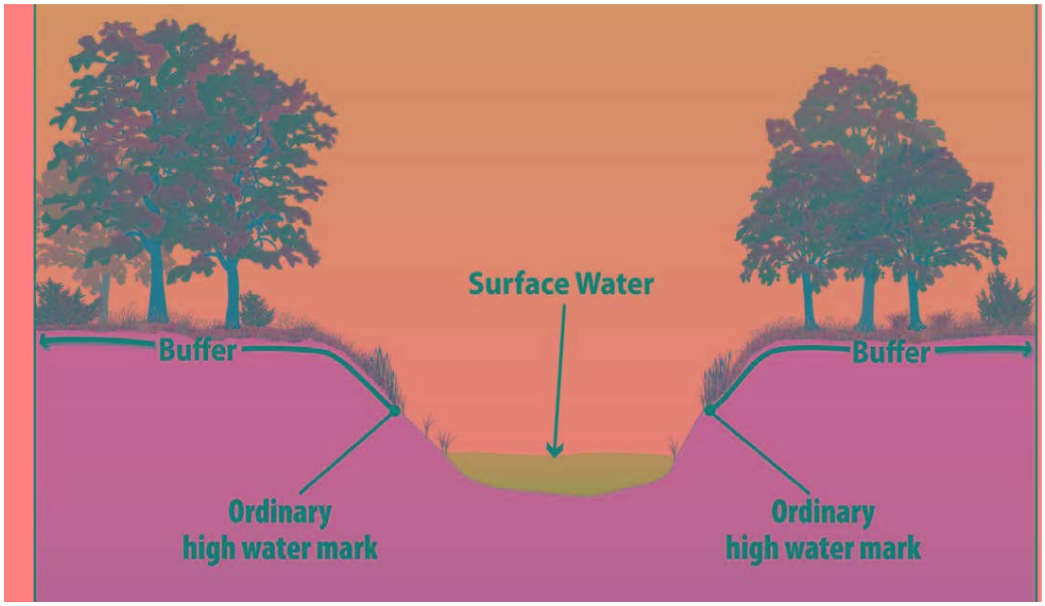
To ensure that the water quality protection benefits of the buffer are retained during construction, you are prohibited from conducting any earth-disturbing activities within the buffer during permit coverage.

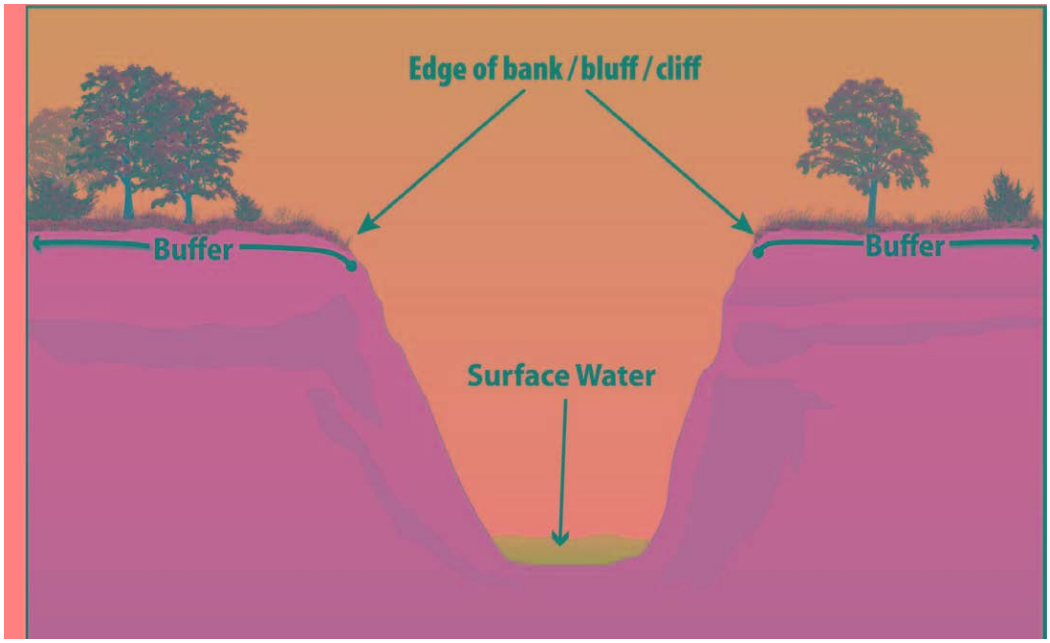
Figure 4.2

This image shows buffer measurement from the ordinary high water mark of the waterbody, as indicated by a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, and/or the presence of litter/debris.

Figure 4.3

This image shows buffer measurement from the edge of the bank, bluff, or cliff, whichever is applicable.





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c. Discharges to the Buffer: You must ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls (for example, you must comply with the Part VIII.B.3.a.(6).(b) requirement to establish sediment controls around the downslope perimeter of your site disturbances), and if necessary to prevent erosion caused by stormwater flows within the buffer, you must use velocity dissipation devices.

d. SWP3 Documentation: You must document the reduced width of the buffer you will be retaining and you must also describe the erosion and sediment controls you will use to achieve an equivalent sediment reduction, as described in Part 2 below. Note that you must also show any buffers on your site plan in your SWP3. Additionally, if any disturbances related to the exceptions in Part VIII.B.3.a.(1) occur within the buffer area, you must document this in the SWP3.

2. Guidance for Providing the Equivalent Sediment Reduction as the 100-foot or 50-foot Buffer

If you are selecting Alternative 2 (provide and maintain a buffer that is less than 100feet or 50 feet that is supplemented by additional erosion and sediment controls that, together, achieve the equivalent sediment load reduction as the 100-foot or 50-foot buffer) or Alternative 3 (implement erosion and sediment controls that achieve the equivalent sediment load reduction as the 100-foot or 50-foot buffer), the following guidance is intended to assist you in demonstrating that you will achieve the equivalent sediment reduction as the 100-foot or 50-foot buffer.

a. Determine Whether It Is Feasible to Provide a Reduced Buffer

DEQ recognizes that there will be a number of situations in which it will be infeasible to provide and maintain a buffer of any width. While some of these situations may exempt you from the buffer requirement entirely (See Part VIII.B.3.a.(1), if you do not qualify for one of these exemptions, there still may be conditions or circumstances at your site that make it infeasible to provide a natural buffer. For example, there may be sites where a significant portion of the property on which

the earth-disturbing activities will occur is located within the buffer area, thereby precluding the retention of natural buffer areas. DEQ believes there are likely to be other examples of situations that make it infeasible to provide any buffer area.

Therefore, in choosing between the 2 different compliance alternatives (Alternative 2 or 3), you should only elect to comply with Alternative 2 if it is feasible for you to retain any natural buffer on your site. (Note: For any buffer width retained, you are required to comply with the requirements in Part 1, above, concerning the retention of vegetation and restricting earth disturbances.) Similarly, if you determine that it is infeasible to provide a natural buffer of any size during construction, you should elect to comply with Alternative 3. After making this determination, you should proceed to Part 2 to determine how to provide controls that, together with any buffer areas that is being retained, if applicable, will achieve an equivalent sediment load reduction as the 100-foot or 50-foot buffer. You must describe why it is infeasible to provide and maintain an undisturbed natural buffer of any size in the SWP3.

OPDES Permit OKR04 for Small MS4s, Month Date, 2015 Exhibit 4. Buffer Guidance, Page 81 b. Design Controls That Provide Equivalent Sediment Reduction as 100-foot or 50-foot

Buffer

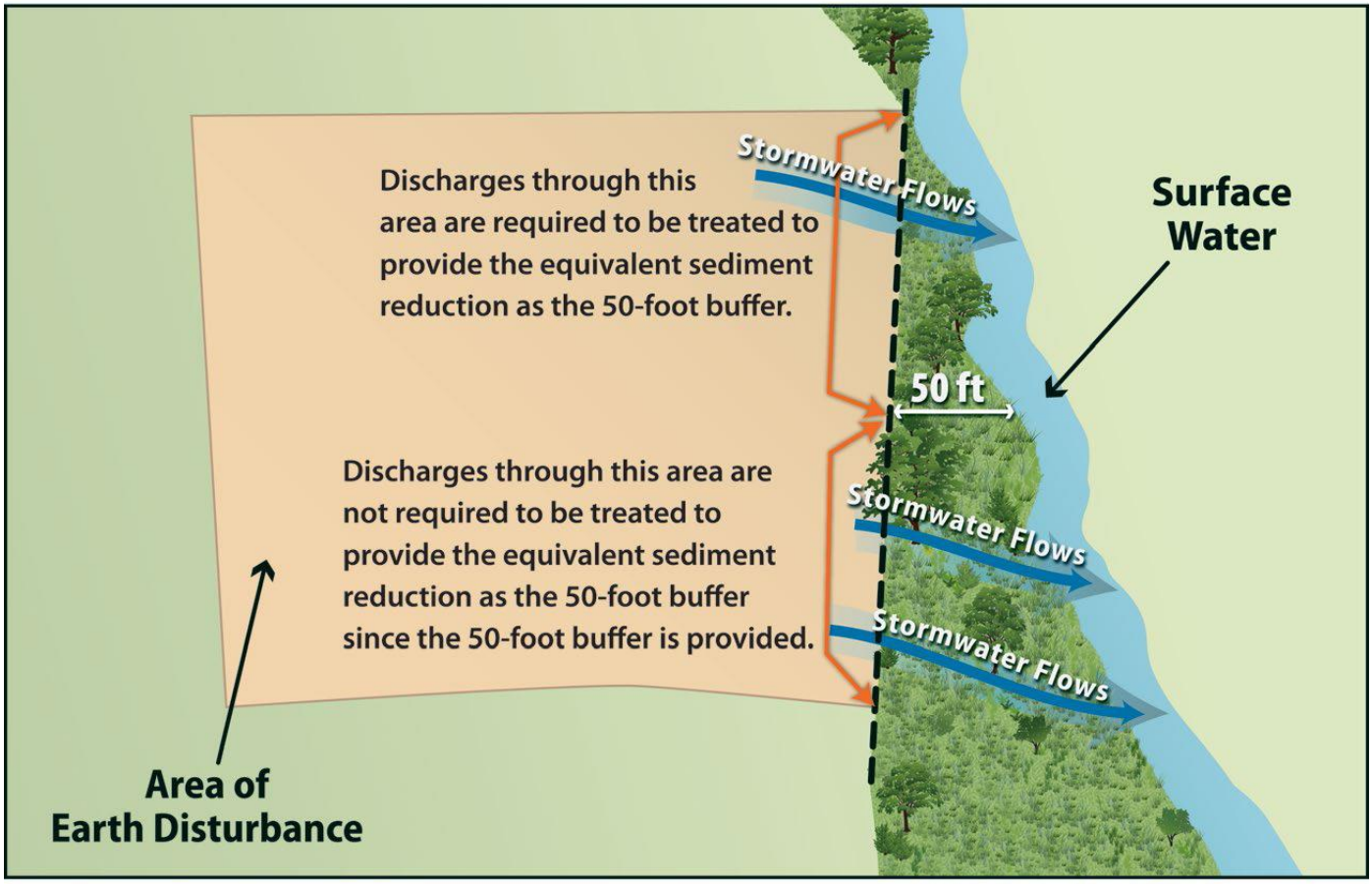
You must next determine what additional controls must be implemented on your site alone or in combination with any retained natural buffer, to achieve a reduction in sediment equivalent to that achieved by a 100-foot or 50-foot buffer.

Note that if only a portion of the natural buffer is less than 50 feet, you are only required to implement erosion and sediment controls that achieve the sediment load reduction equivalent to the 100-foot or 50-foot buffer for discharges through that area. You would not be required to provide treatment of stormwater discharges that flow through 100 feet 50 feet or more of natural buffer. See Figure 4.4.

Figure 4.4

Example of how to comply with the requirement to provide the equivalent sediment reduction when only a portion of your earth-disturbances discharge to a buffer of less than 100 feet or 50 feet

Guidelines to help you work through these requirements are provided below:



Step 1:

Estimate the Sediment Reduction from Your Site if You Had Retained a 100-foot or 50-foot Natural Buffer

In order to design controls that match the sediment removal efficiency of a 100- foot or 50- foot buffer, you first need to know what this efficiency is for your site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of sediment controls used to reduce the discharge of sediment prior to the buffer. DEQ has simplified this

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Step 2:

calculation by developing buffer performance tables covering a range of vegetation and soil types for the areas covered by the permit. See Attachment 1, Tables 4.1 through 4.4.

Note: buffer performance values in Tables 4.1 through 4.4 represent the percent of sediment captured through the use of perimeter controls (e.g., silt fences) and 100-foot or 50-foot buffers at disturbed sites of fixed proportions and slopes. Using Tables 4.1 through 4.4 (see Attachment 1), you can determine the sediment removal efficiency of a 100-foot or 50-foot buffer for your geographic area by matching the vegetative cover type and the type of soils that predominate at your

site. For example, if your site is located in Oklahoma City (see Table 4.1), and your buffer vegetation corresponds most closely with that of fescue grass, and the soil type at your site is best typified as sand, your site's sediment removal efficiency would be 90 percent.

In this step, you should choose the vegetation type in the tables that most closely matches the vegetation that would exist naturally in the buffer area on your site regardless of the condition of the buffer. However, because you are not required to plant any additional vegetation in the buffer area, in determining what controls are necessary to meet this sediment removal equivalency in Step 2 below, you will be able to take credit for this area as a fully vegetated "natural buffer."

Similarly, if a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you can treat the area of land not under control as having the equivalent vegetative cover and soil type that predominates on the portion of the property on which your construction activities are occurring. For example, if your earth-disturbances occur within 50 feet of a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10 foot area adjacent to the stream as having the equivalent soil and vegetation type as predominates in the 40 foot area under your control. You would then make the same assumption in Step 2 for purposes of determining the equivalent sediment removal.

Alternatively, you may do your own calculation of the effectiveness of the 50- foot buffer based upon your site-specific conditions, and may use this number as your sediment removal equivalency standard to meet instead of using Tables 4.1 through 4.4. This calculation must be documented in your SWP3.

Design Controls That Match the Sediment Removal Efficiency of the 100- foot or 50-foot Buffer

Once you have determined the estimated sediment removal efficiency of a 100- foot or 50-foot buffer for your site in Step 1, you will be required to select stormwater controls that will provide an equivalent sediment load reductions.

To make the determination that your controls and/or buffer area achieve an equivalent sediment load reduction as the 100-foot or 50-foot buffer, you may use stormwater controls listed in Tables 4.1 through 4.4 to select a single

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Step 3:

designed control, such as 12" or 6" waddle, roll material, silt fence or straw mulch (see Attachment 1), or you will need to use a model or other type of calculator. There are a variety of models available that can be used to support your calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other models.

Alternatively, you may elect to install a combination of stormwater controls and to retain some amount of a buffer. Whichever control(s) you select, you must demonstrate in your SWP3 that the controls will provide at a minimum the

same sediment removal capabilities as the 100-foot or 50-foot buffer (Step 1). You are allowed to take credit for the removal efficiencies of your required perimeter controls in your calculation of equivalency, because these were included in calculating the buffer removal efficiencies in Tables 4.1 through 4.4. (Note: You are reminded that the controls must be kept in effective operating condition until you have completed final stabilization on the disturbed portions of the site discharging to the surface water.)

If you are retaining a buffer of less than 100 feet or 50 feet, you may take credit for the removal that will occur from the reduced buffer and only need to provide additional controls to make up the difference between the removal efficiency of a 100-foot or 50-foot buffer and the removal efficiency of the narrower buffer. For example, if you are retaining a 30 foot buffer, you can account for the sediment removal provided by the 30-foot buffer retained, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided. To do this, you would plug the width of the buffer that is retained into RUSLE or another model, along with other stormwater controls that will together achieve a sediment reduction equivalent to a natural 50-foot buffer.

As described in Step 1 above, you can take credit for the area you have retained as a "natural buffer" as being fully vegetated, regardless of the condition of the buffer area. For example, if your earth-disturbances occur 30 feet from a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10-foot area as a natural buffer, regardless of the activities that are taking place in the area. Therefore, you can assume (for purposes of your equivalency calculation) that your site is providing the sediment removal equivalent of a 30- foot buffer, and you will only need to design controls to make up for the additional removal provided by the 20- foot of buffer that is not being provided.

Document How Site-Specific Controls Will Achieve the Sediment Removal Efficiency of the 100-foot or 50-foot Buffer

In Steps 1 and 2, you determined both the expected sediment removal efficiency of a 100-foot or 50-foot buffer at your site, and you used this number as a performance standard to design controls to be installed at your site, which alone or in combination with any retained natural buffer, achieves the expected sediment removal efficiency of a 100-foot or 50-foot buffer at your site. The final step is to document in your SWP3 the information you relied on to

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calculate the equivalent sediment reduction as an undisturbed natural buffer. DEQ will consider your documentation to be sufficient if it generally meets the following:

For Step 1:

Refer to the Table in Attachment 1 that you used to derive your estimated 100-foot or 50-foot buffer sediment removal efficiency performance. Include information about the buffer vegetation and soil type that predominate at your site, which you used to select the sediment load reduction value in Tables 4.1 through 4.4. Or, if you conducted a site-specific

calculation for sediment removal efficiency, provide the specific removal efficiency, and the information you relied on to make your site-specific calculation.

(1) Specify a single designed stormwater control (see Table 4.1 thru 4.4) or other stormwater controls that you used to estimate sediment load reductions from your site. Specify a model or other type of calculator that you used to support your calculation if any.

(2) The results of calculations showing how your controls will meet or exceed the sediment removal efficiency from Step 1. If you choose Alternative 3, you must also include in your SWP3 a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.