

OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM

Department of Environmental Quality

FACT SHEET

Reissuance of the Oklahoma Pollutant Discharge Elimination System (OPDES) Permit No. OKS000101 for stormwater discharges from the Oklahoma City Municipal Separate Storm Sewer System (MS4)

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1. NOTICE OF INTENT TO ISSUE A PERMIT

The Oklahoma Department of Environmental Quality (DEQ) has made a tentative determination to reissue a permit for the discharge of storm water from the MS4 in the application. Permit requirements are based on the Clean Water Act (33 U.S.C. 1251 et seq.), hereinafter referred to as the Act, and OPDES regulations OAC 252:606-1-3(b)(3)(L) adopting and incorporating by reference 40 CFR 122.26, as amended.

2. PERMITTING AUTHORITY

The permitting authority is the Oklahoma DEQ, P.O. Box 1677, Oklahoma City, OK 73101-1677

3. APPLICANT(S)

The Applicants are:

City of Oklahoma City, 420 West Main, Oklahoma City, OK 73102

Oklahoma Department of Transportation (ODOT), 200 N.E. 21 Street, Oklahoma City, OK 73105

Oklahoma Turnpike Authority (OTA), P.O. Box 11357, Oklahoma City, OK 73136

Who corporately and/or individually own/operate portions of the Oklahoma City MS4. Oklahoma City, ODOT, and OTA have been operating under co-permittee status and the DEQ wishes to encourage the cooperative efforts of these owners of portions of the Oklahoma City MS4. The DEQ will include ODOT and OTA as co-permittees in the final permit provided (1) Oklahoma City, ODOT, and OTA continue the Memorandum of Agreement in principle to be co-permittees; and (2) ODOT, and OTA continue to provide Storm Water Management Programs (SWMP) for their portions of the MS4 (subject to appropriate schedules for program implementation and augmentation) prior to issuance of the Agency's final permit decision.

4. DESCRIPTION OF THE MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

As authorized by Section 402(p) of the Act, this permit is being proposed on a system basis. This permit covers all areas within the corporate boundary of the City of Oklahoma City (hereafter referred to as Oklahoma City) served by, or otherwise contributing to discharges from municipal separate storm sewers owned or operated by the applicant(s) listed above.

5. DISCHARGES AUTHORIZED BY THIS PERMIT

a. Storm Water

This permit authorizes all existing or new stormwater point source discharges to waters of the States from the MS4.

b. Non-storm Water

This permit does authorize the discharge of storm water commingled with flows contributed by process wastewater, non-process wastewater, or Storm Water Associated with Industrial Activity, provided such discharges are authorized under separate OPDES or National Pollutant Discharge Elimination System (NPDES) permits. In addition, certain types of non-storm waters listed in OPDES regulations OAC 252:606-1-3(b)(3)(L) adopting and incorporating by reference 40 CFR 122.26(d)(2)(iv)(B)(1) are allowable if appropriately addressed in the Storm Water Management Program (SWMP).

The following demonstrates the difference between the Act's statutory requirements for discharges from municipal storm sewers and industrial sites:

- i. Section 402(p)(3)(B) of the Act required an effective prohibition on non-storm water discharges to a MS4 and controls to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP).
- ii. Section 402(p)(3)(A) of the Act requires compliance with treatment best conventional pollutant control technology(BCT) or best available technology economically achievable (BAT) and Section 301 water quality requirements on discharges of Storm Water Associated with Industrial Activity.

Because of the difference in the statutory requirements, and the fact that the Act does not exempt Storm Water Associated with Industrial Activity from the requirement to obtain a separate OPDES permit, these storm water discharges cannot be authorized by the MS4 permit. Such discharges would require a separate OPDES permit. However, the permittees are responsible for the quality of the combined discharge, and have a vested interest in locating uncontrolled and unpermitted illicit and industrial stormwater discharges.

c. Spills

This permit does not authorize discharges of material resulting from a spill. If discharges from a spill are necessary to prevent imminent threat to human life, personal injury, or severe property damage, the permittees have the responsibility to take (or insure the party responsible for the spill takes) reasonable and prudent measures to minimize the impact of discharges on human health and the environment.

6. RECEIVING STREAM SEGMENTS AND DISCHARGE LOCATIONS

The discharges from the MS4 are into the Canadian River, Oklahoma River, Coon Creek, Deep Fork of the Canadian River, Deer Creek, Hefner Lake, Hog Creek, North Canadian River, Overholser Lake, Pecan Creek, Stanley Draper Lake, and Little River.

7. EFFECTIVE DATES

Compliance with permit conditions is required on the effective date, except: as specified in the Part III compliance schedules; and for SWMP conditions in Part II.A (refer to Section 12 of this Fact Sheet).

8. PUBLIC NOTICE

Upon publication of the public notice and this fact sheet, a 30-day public comment period shall begin. During this period, any interested persons may submit written comments on the draft permit (including the proposed SWMP), to the DEQ point of contact listed below. Also during this period any person may request a public meeting to clarify issues involved in the permit decision. A request for a public meeting shall be in writing and shall state the nature of the issues proposed to be raised. A public meeting will be held if the DEQ determines there is a significant degree of public interest in the draft permit.

9. DEQ POINT OF CONTACT

For information, contact:

Ms. Karen Milford
Water Quality Division
Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677
Phone: (405) 702-8191
Fax: (405) 702-8101
E-mail: Water.comments@deq.ok.gov

10. BASIS FOR PERMIT CONDITIONS

a. Statutory Basis for Permit Conditions

The reapplication process for this permit is in accordance with the MS4 Permit Reapplication Policy of May 17, 1996. The conditions established by this permit are based on Section 402(p)(3)(B) of the Act which mandates that a permit for discharges from MS4s must: effectively prohibit the discharge of non-storm water to the MS4; and require controls to reduce pollutants in discharges from the MS4 to the Maximum Extent Practicable (MEP) including Best Management Practices (BMPs), control techniques, system, design and engineering methods, and other such provisions determined to be appropriate. MS4s are not exempt from compliance with Water Quality Standards. Section 301(b)(1)(C) of the Act requiring that OPDES permits include limitations, including those necessary to meet water quality standards, applies. The intent of the permit conditions is to meet the statutory mandate of the Act.

As authorized by OPDES regulations OAC 252:606-1-3(b)(3)(Z) adopting and incorporating by reference 40 CFR 122.44(k), the permit will be utilizing BMPs, a comprehensive SWMP, as the mechanism to implement the statutory requirements. Section 402(p)(3)(B)(iii) of the Act clearly includes structural controls as a component of the MEP requirement. The DEQ has encouraged permittees to explore opportunities for pollution prevention measures, while reserving the more costly structural controls for higher priority watersheds, or where pollution prevention measures are unfeasible or ineffective.

b. Regulatory Basis for Permit Conditions

As a result of the statutory requirements of the Act, the DEQ promulgated the MS4 Permit application regulations, OPDES regulations OAC 252:606-1-3(b)(3)(L) adopting and incorporating by reference 40 CFR 122.26(d). These regulations described in detail the permit application requirements for operators of MS4s. The information in the application, the previous permit, and submitted reports were utilized by the DEQ to develop the permit conditions and determine the permittee status in relationship to these conditions.

c. Discharge Goals and Limitations

i. Discharge Goals:

The following goals apply to discharges from MS4s and were considered in review of the SWMP and in preparation of the draft permit. In implementing the SWMP, the permittees are required to aspire to these goals. The goals are included to further define the intent of the permit, but are not to be directly interpreted as discharge limitations independent of the SWMP and any numeric or narrative limitations under Parts II and IV of the permit:

- (a). No discharge of toxics in toxic amounts. It is the national policy that the discharge of toxics in toxic amounts be prohibited (Section 101 [a][3] of the Act). The Oklahoma Water Quality Standards (Section 785:45-5-12[e][6]) states, "Surface waters of the State shall not exhibit acute toxicity and shall not exhibit chronic toxicity outside the mixing zone."
- (b). No discharge of pollutants in quantities that would cause a violation of State Water Quality Standards. Section 301 (b)(1)(C) of the Act and OPDES regulations OAC 252:606-1-3(b)(3)(Z) adopting and incorporating by reference 40 CFR 122.44(d) require that OPDES permits include "...any more stringent limitations, including those necessary to meet water quality standards, treatment standards, or schedule of compliance, established pursuant to State law or regulations..." Implementation of the SWMP is reasonably expected to provide for protection of State water quality standards.
- (c). No discharge of floatable debris, oils, scum, foam, or grease in other than trace amounts. The Oklahoma Water Quality Standards (OAC 785:45-5-9) require waters of the State to "...be maintained so as to be essentially free of floating debris, bottom deposits, scum, foam, and other materials, including suspended substances of a persistent nature, from other than natural sources."
- (d). No discharge of non-storm water from the MS4, except in accordance with Part I.B.1.a. Permits issued to MS4s are specifically required by Section 402(p)(3)(B) of the Act to "...include a requirement to effectively prohibit non-storm water discharges into the storm sewers..." The OPDES regulations OAC 252:606-1-3(b)(3)(L) adopting and incorporating by reference (40 CFR 122.26[d][2][iv][B][1]) allows the permittee to accept certain non-storm water discharges, where they have not been identified as significant sources of pollutants. Any discharge subject to its own OPDES or NPDES permit is not subject to the ban on non-storm water discharges.
- (e). No impact or loss of state-designated beneficial uses of receiving waters as a result of storm water discharges from the municipal separate storm sewer (unless authorized by the State in accordance with the State's Anti-degradation Policy). The state of Oklahoma has adopted an Anti-degradation Policy as part of their Water Quality Standards 785:45-3-1 which provides for maintenance of: existing in-stream water uses; existing water quality levels where existing water quality exceeds the levels necessary to support propagation of fish, shellfish, wildlife, and recreation, in and on the water (except where the State has determined that lowering water quality is necessary to accommodate important economic or social development in the area where the waters are located); existing water quality where high quality waters constitute an outstanding natural resource (e.g. waters of national and state parks and wildlife refuges or exceptional recreational or ecological significance); and compliance with Section 316 of the Act where potential water quality impairment is associated with a thermal discharge.

ii. Discharge Limitations:

No numeric limitations are proposed at this time. In accordance with OPDES regulations OAC 252:606-1-3(b)(3)(Z), adopting and incorporating by reference 40 CFR 122.44(k), the DEQ has required a series of BMPs, in the form of a comprehensive SWMP, in lieu of numeric limitations.

11. STORM WATER MANAGEMENT PROGRAM (SWMP)

The SWMP submitted by the permittees is required to contain program elements for each of the items in Table A.

Table A - Storm Water Management Program Elements

Required Program Element	Permit Parts	Regulatory References OPDES Regulations OAC 252.606-1-3(b)(3)(L)*
Structural Controls	II.A.1	(d)(2)(iv)(A)(1)
Areas of new development & Significant redevelopment	II.A.2	(d)(2)(iv)(A)(2)
Roadways	II.A.3	(d)(2)(iv)(A)(3)
Flood control Projects	II.A.4	(d)(2)(iv)(A)(4)
Pesticides, Herbicides, & Fertilizers Application	II.A.5	(d)(2)(iv)(A)(6)
Illicit Discharges and Improper Disposal	II.A.6	(d)(2)(iv)(B)(1)-(3) & (IV)(B)(7)
Spill Prevention and Response	II.A.7	(d)(2)(iv)(B)(4)
Industrial and High Risk Runoff	II.A.8	(d)(2)(iv)(C), (iv)(A)(5)
Construction Site Runoff	II.A.9	(d)(2)(iv)(D),
Public Education	II.A.10	(d)(2)(iv)(A)(6), (iv)(B)(5), and (iv)(B)(6)
Employee Education	II.A.11	(d)(2)(iv)(B)(6),(iv)(D)(4)
Public Participation and Involvement	II.A.12	(d)(2)(iv)
Monitoring Programs	II.A.13	(d)(2)(iv)(B)(2), (iii), (iv)(A), and (iv)(C)(2)

*Adopting and incorporating by reference (40 CFR 122.26)

Oklahoma state regulations OAC 252:606-1-3(b)(3)(L) adopting and incorporating by reference 40 CFR 122.26(d)(2)(iv), authorize separate proposed programs for co-permittees, and imposition of controls for different areas of the MS4 on a watershed, jurisdiction, or individual outfall basis. Due to differences in climate, topography, historical development patterns, legal authority, sensitivity of receiving waters, and many other factors; the DEQ believes some flexibility in prioritizing the scope and timing of individual program elements must be afforded the permittees. The standard of reducing the pollutants to the MEP is therefore applied to the SWMP as a whole, rather than to each individual program element. The DEQ believes this approach is in accordance with Section 402(p)(3)(B) of the Act and the intent of Congress. For the purposes of this document, the SWMP is considered a single document attached to the permit with each permittee's individual SWMP constituting a "chapter". All references to SWMP refer to this single "combined" document.

The following summarize the SWMP elements submitted by the permittee(s) to satisfy the requirements. Where elements were deemed by the DEQ to require augmentation, or where significant submittals were indicated in the SWMP, schedules were included in Part III of the permit. Dates contained in the Part III schedules were based on the assumption that the permit will have an effective date of February 25, 2013 and may be adjusted appropriately if this date is significantly delayed or if comments received on the draft permit during the public comment period warrant.

a. Structural Controls

The MS4 and any storm water structural controls shall continue to be operated in a manner to reduce the discharge of pollutants to the MEP. Permittees will continue to provide a description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants in discharges from MS4.

Oklahoma City will continue to maintain and inspect the MS4's structural controls owned or operated by the City. Permittees will continue to update the SWMP to include operation and maintenance procedures and schedules for storm water structural controls annually.

b. Areas of New Development and Significant Re-development

Provide a description of the areas of new development and significant redevelopment program. Continue to implement and enforce, updating as necessary, the comprehensive master planning process (or equivalent) to develop, implement, and enforce controls to minimize the discharge of pollutants from areas of new development and significant re-development after construction is completed.

Oklahoma City has existing ordinances regulating development. The policy described in the SWMP includes reliance on existing ordinances and policies for permitting development and construction. The permit requires the City to complete any necessary revisions to ordinances or rules and update the SWMP to include criteria and procedures for determining and enforcing requirements of structural and non-structural controls in the areas of new development and significant re-development annually. Permittee(s) shall promote Low Impact Development (LID) and other green design strategies as an effective Best Management Practice (BMP) to minimize the impact of urban runoff discharges from those areas on the receiving streams. LID and other green designs which use on-site natural features, such as filtration and infiltration can greatly reduce peak flow and pollutant loads of urban runoff.

The City has established a master plan for development, which has been organized on a basin-by-basin basis. Education of building inspectors and the regulated community on current and future local requirements has already begun.

ODOT and OTA are required to update their programs for controlling runoff from new roadway drainage systems annually.

c. Roadways

Provide a description of your Roadway program, including practices for operating and maintaining public streets, roads and highways and procedures for reducing impacts on receiving waters of discharges from your MS4. Public streets, roads, and highways shall continue to be operated and maintained in a manner to minimize discharge of pollutants, including those pollutants related to deicing or sanding activities.

Oklahoma City has a program for the operation and maintenance of public roadways to minimize the discharge of pollutants. The current program continues to include sweeping of streets for the removal of trash, litter, and sediment, and a litter and debris removal program. Oklahoma City's Public Education Program will include elements for litter prevention.

The permit continues to require updating the SWMP to include specific procedures and schedules for roadway operation and maintenance by all co-permittees. ODOT and OTA would also continue to be responsible for preparation of additional information on the roadway storm sewers they operate, primarily for management and planning purposes.

d. Flood Control Projects

Provide a description of the Flood Control Program. Impacts on receiving water quality shall continue to be assessed for all flood control projects. The feasibility of retrofitting existing structural flood control devices to provide additional pollutant removal from storm water shall continue to be evaluated.

Permittees are required to prepare criteria to assure that flood control projects are assessed for the projects' impact on water quality, and evaluate existing flood control devices to determine if retrofitting is feasible. The Flood Control Program is already part of the SWMP and is being implemented.

e. Pesticide, Herbicide, and Fertilizer Application

Provide a description of the Pesticide, Herbicide & Fertilizer Application Program. Each permittee shall continue to implement controls to reduce the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied by the permittee's employees or contractors to public property. The use, storage, disposal, and transportation of pesticides, herbicides, fertilizers and their containers must be in compliance with the regulations of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (40 CFR Parts 150-189).

A public education program was developed to increase public awareness on the impacts of improper storage and use of herbicides, fertilizers, and pesticides. The permit continues to require permittees to implement annual training and education on herbicide, pesticide, and fertilizer use.

f. Illicit Discharges and Improper Disposal

Provide a description of the Illicit Discharges and Improper Disposal Program. Each permittee shall update the illicit discharges and improper disposal program. An ongoing program to detect and eliminate illicit discharges and improper disposal into the MS4 is required. Non-storm water discharges shall continue to be effectively prohibited. However, the permittee may allow certain non-storm water discharges as listed in 122.26(d)(2)(iv)(B)(1). The SWMP shall continue to identify any allowed non-storm water discharges, along with any conditions placed on such discharges.

- i. Implementation of a public education program on illicit discharges and improper disposal is required. Oklahoma City and any co-permittees were required to submit a list of non-storm water discharges that are allowed or not allowed to discharge to the MS4 and reasons for these determinations.
- ii. Each permittee shall continue to prevent (or require the operator of the sanitary sewer to eliminate) unpermitted discharges of dry and wet weather overflows from sanitary sewers into the MS4. Each permittee shall continue to limit the infiltration of seepage from sanitary sewers into the MS4.

Oklahoma City currently implements a program for maintenance of the sanitary sewer system. The City is required to update the SWMP to include a program for limiting seepage from sanitary sewers into separate storm sewers. Neither OTA nor ODOT operate any sanitary sewers.

- iii. The discharge of floatables (e.g. litter and other human generated solid refuse) into the MS4 shall continue to be reduced.

The permittees have litter control programs. The permit continues to require permittees to implement a floatables control education program, install twenty-one (21) floatables monitoring stations, and continue a study for targeting of floatables controls.

- iv. The discharge or disposal of used motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, and animal wastes into the MS4 shall be prohibited. The permittees shall continue to ensure the implementation of programs to collect used motor vehicle fluids (at a minimum, oil and antifreeze) for recycle, reuse, or proper disposal and to collect household hazardous waste materials (including paint, solvents, pesticides, herbicides, and other hazardous materials) for recycle, reuse, or proper disposal.

Oklahoma City continually implemented a public education program aimed at proper management and disposal of household hazardous waste and used motor fluids. The City continually provided a publicly accessible program that also includes opportunities for drop-off of certain materials on a weekly basis.

ODOT and OTA continue to address used motor vehicle fluids at their vehicle maintenance yards. It is anticipated that OTA and ODOT would participate in public education on household hazardous waste, but would serve in more of a support capacity (e.g. traffic control, signs, public service announcements, other contributions of resources, etc.) for collection events.

- v. A program to locate and eliminate illicit discharges and improper disposal into the MS4 shall continue to be implemented. This program shall continue to include dry weather screening activities to locate portions of the MS4 with suspected illicit discharges and improper disposal. Follow-up activities to eliminate illicit discharges and improper disposal may be prioritized on the basis of magnitude and nature of the suspected discharge; sensitivity of the receiving water; and/or other relevant factors. This program shall continue to establish priorities and schedules for screening (described in Part II.A.6. of the permit) the entire MS4 at least once during the permit term. Facility inspections may be carried out in conjunction with other permittee programs (e.g. pretreatment inspections of industrial users, health inspections, fire inspections, etc.), but must include random inspections for facilities not normally visited by the permittee.

Oklahoma City will continue to conduct an on-going system wide dry weather screening program for the MS4, with 100% of the selected 554 monitoring locations at least once during the permit term. ODOT and OTA would continue to be included in this program. Oklahoma City will also continue to be inspecting industrial and commercial facilities.

Each permittee shall continue to require the elimination of illicit discharges as expeditiously as possible and the immediate ending of improper disposal practices upon identification of responsible parties. Where elimination of an illicit discharge within thirty (30) days is not possible, the permittee shall continue to require an expeditious schedule for removal of the discharge.

The permittee(s) must continue to update the SWMP to include follow-up activities, with priorities and schedules, for suspected illicit discharges, and expeditious elimination of identified sources of such discharges.

g. Spill Prevention and Response

Provide a description of the Spill Prevention and Response Program. A program to prevent, contain, and respond to spills that may discharge into the MS4 shall continue to be implemented. The spill response program may include a combination of spill response actions by the permittees (and/or another public or private entity), and legal requirements for private entities within the permittees' jurisdiction.

Oklahoma City currently implements a spill response program as part of general public protection. ODOT and OTA also participate in spill response on their roadway rights of way. The permit continues to require incorporation of spill response procedures as part of the SWMP, which will reduce materials discharging into the MS4.

h. Industrial and High Risk Runoff

A program to identify and control pollutants in stormwater discharges to the MS4 from municipal landfills; other treatment, storage, or disposal facilities for municipal waste (e.g. transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal and recovery facilities and facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge the permittee determines are contributing a substantial pollutant loading to the MS4 shall be implemented. The program shall continue to include inspections, a monitoring program (described in Part II.A.8. of the permit), and a list of industrial storm water sources discharging to the MS4 that shall continue to be maintained and updated as necessary.

Oklahoma City has implemented a stormwater permitting program for high-risk runoff, and complete/enforcement and inspection programs. ODOT and OTA are not expected to have any high-risk facilities discharging into their storm sewers that are not addressed under the Oklahoma City program.

i. Construction Site Runoff

A program to reduce the discharge of pollutants from construction sites shall continue to be implemented. This program shall continue to include: 1) requirements for the use and maintenance of appropriate structural and nonstructural control measures to reduce pollutants discharged to the MS4 from construction sites; 2) inspection of construction sites and enforcement of control measures requirements; 3) appropriate education and training measures for construction site operators; and 4) notification of appropriate building permit applicants of their potential responsibilities under the OPDES permitting program for construction site runoff.

Oklahoma City has begun education efforts aimed at both City personnel and the regulated community. A formalized construction site runoff pollution prevention program, including permitting of construction sites and operators, is in place. An updated program will continue to be fully implemented annually.

OTA and ODOT are already subject to storm water permitting requirements for construction sites. Incorporation of a comprehensive program for controlling silt and runoff from roadway projects during construction would follow the same schedule proposed for Oklahoma City.

j. Public Education

A public education program shall include the following elements:

- i. A written description of how you plan to inform individuals and households about the steps they can take to reduce storm water pollution;
- ii. A written description of how you plan to inform individuals and groups on how to become involved in the storm water program (with activities such as local stream restoration activities);
- iii. Your outreach strategy, including the mechanisms (e.g., printed brochures, newspapers, media, workshops, etc.) you will use to reach your target audiences, and how many people you expect to reach by your outreach strategy over the term of the permit;
- iv. A program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or improper disposal of materials into the MS4;
- v. A program to promote, publicize, and facilitate the proper management and disposal of used oil and household hazardous wastes; and
- vi. A program to promote, publicize, and facilitate the proper use, application, and disposal of pesticides, herbicides, and fertilizers by public, commercial, and private applicators and distributors.

Oklahoma City continues to plan a series of public education activities on the following topics: general awareness on stormwater quality; proper use and storage of pesticides, fertilizers, etc.; compliance with local development and construction site controls; illicit discharges and improper disposal (including a storm water web page); and requirements of the SWMP. The City continues to anticipate using public meetings, brochures, public access TV, classroom instruction materials, etc. as part of the public education program. ODOT and OTA would be expected to cooperate in these efforts.

k. Employee Education

Permittees shall continue to revise and update as needed a program to educate appropriate employees on internal policies and procedures, including education for engineers, specialists, and inspectors on the rules and regulations for permit compliance and municipal ordinances. Your program must include employee training to prevent and reduce storm water pollution from MS4 activities. your program must address public space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

l. Public participation and Involvement

Permittees shall continue to develop and implement a plan to encourage public involvement and participation in the development and implementation of your SWMP, including opportunities for the public to participate in developing, implementing and updating your SWMP. You must comply with State and local public notice requirements when implementing your public involvement/participation program.

m. Monitoring Programs

- i. The goals of the monitoring program are to:
 - (a). Protect, maintain, and restore high quality chemical, physical, and biological conditions in the waters of the United State;
 - (b). Reverse the past trends of stream deterioration through improved water management practices;

- (c). Maintain physical, chemical, biological, and stream habitat conditions in City streams that support aquatic life, along with appropriate recreational, water supply, and other water uses;
 - (d). Restore streams damaged by inadequate water management practices of the past by re-establishing the flow regime, chemistry, physical conditions, and biological diversity of natural stream systems as closely as possible; and
 - (e). Promote and support educational and volunteer initiatives that enhance public awareness and increase direct participation in stream stewardship and the reduction of water pollution.
- ii. The following monitoring programs shall continue to be implemented (see Part V of the permit for a description of additional monitoring requirements).
- (a). Priority Based Monitoring Program: Oklahoma City will develop an advancing monitoring program based on the results of Oklahoma City's Watershed Characterization Program.
 - (b). Dry Weather Screening Program: Oklahoma City will continue a field screening with 33% of the selected 556 monitoring locations annually.
 - (c). Wet Weather Screening Program: Oklahoma City will continue to conduct a monitoring program to characterize stormwater discharges at three (3) representative monitoring locations at a frequency of two (2) times annually.
 - (d). Industrial and High Risk Runoff Monitoring Program: Oklahoma City will continue an Industrial and High Risk Monitoring Program to identify, monitor and control pollutants from targeted facilities.

12. SWMP COMPLIANCE

Compliance with Part II.A of the Permit will be accomplished by the implementation of and compliance with the described activities of the various elements of the permittees SWMP, as modified by compliance schedules contained in Part II. Permittees must fully implement the SWMP, except as indicated in Part III, on the effective date of the permit. All the required support and initiation procedures for the program elements should be established, and the elements' activities performed as described and scheduled.

The SWMP contains implementation schedules for some of the program elements. In addition there are SWMP augmentation schedules in Part III of the permit. The schedules in Part III will take precedence in the case of any conflict between the Part III schedules and the SWMP schedules. Permittees' adherence to the SWMP, including implementation schedules contained in the SWMP and schedules contained in Part III will be considered compliance with Part II.A of the permit.

13. ROLES AND RESPONSIBILITIES OF PERMITTEES

The regulation OAC 252:606-1-3(b)(3)(L) adopting and incorporating by reference 40 CFR 122.26(d)(2)(vii) requires permittees to describe the roles and responsibilities of each entity applying for the permit to ensure effective coordination. Interagency Agreements are the means by which the permittees propose to implement the SWMP and monitoring program. Each of the permittees continues to plan to implement their individual programs on the portion of the system that they own and operate. Permittees are accountable for understanding their role and responsibilities regarding permit conditions.

14. PERMITTEES LEGAL AUTHORITY

The permittees are required to have the legal authority necessary to successfully enforce, implement, and complete the various activities described in the permit and SWMP. Oklahoma City, ODOT, and OTA stated in the application that adequate legal authority exists or is being sought for the following requirements: control the contribution of pollutants to, and quality of storm water from industrial sites contributing to the storm sewer system; prohibit illicit discharges to the storm sewer system; control spills, dumping or improper disposal to the storm sewer system; control of the contribution of pollutants from one portion of the storm sewer system to the other; require compliance with ordinances; perform site inspections and monitoring.

15. PERMITTEES RESOURCES

Part II.F of the permit requires permittees to provide adequate support capabilities to implement their activities under the SWMP. Compliance with Part II.F will be demonstrated by the permittees ability to fully implement the SWMPs, monitoring programs, and other permit requirements. The permit does not require specific funding or staffing levels, thus providing the permittees the ability, and incentive, to adopt the most efficient and cost effective methods to comply with permit requirements.

16. TYPES AND QUANTITY OF POLLUTANT PARAMETERS DISCHARGED

The permittees sampled three (3) locations selected to provide representative data indicating the quality and quantity of stormwater discharges from the Oklahoma City MS4 as a whole. Parameters sampled included conventional and priority pollutants. The DEQ reviewed this information during the permitting process. Monitoring data was intended to be used by the permittees to assist in their determination of appropriate stormwater management practices. DEQ used the data to review the application and to determine pollutants of concern discharging from the MS4 that should be monitored during the permit term.

It is increasingly important to address 303(d) listing and Total Maximum Daily Loads (TMDLs) issues. The Priority Based Monitoring Program (see Part V.A of the permit) provides the mechanisms to improve the efficiency of watershed initiatives, planning, and protection. Analysis in the watershed will allow non-point sources to be addressed at the source of origination. The 303(d) status will be considered in setting the watershed monitoring schedule.

a. 303(d) List of Impaired Waters

The Oklahoma City Storm Sewer System discharges into various waterbodies that are listed on the Oklahoma Impaired Waters List, or 303(d) List. This list of waterbodies is updated biennially and contains information regarding the reason, or cause, for the impairment.

The Oklahoma City MS4 permit contains conditions that are sufficient to prevent further impairment of these waterbodies. The EPA and DEQ have approved assessment in each watershed according to an agreed schedule.

As each watershed and its associated causes are assessed, a determination will be made to remove the listing or perform further study. Should further study be required and additional storm water controls identified in a TMDL are necessary in order to maintain applicable water quality standards for each waterbody, this permit may be modified in accordance with the Re-opener Clause.

Additional information about specific waterbodies and/or causes is given in the footnotes of Table A.

Table A. 303(d) Water Bodies within Oklahoma City Limits ^a

Water Body ID	Name	Cause for Impairment
OK520510000290_00	Deer Creek, South	Oil & Grease, Dissolved Oxygen
OK520520000010_10 OK520520000010_20	Canadian River, North	Pathogens (Enterococcus, E. Coli, Fecal Coliform)
OK520520000010_30 OK520520000010_40	Canadian River, North	Pathogens (Enterococcus, E. Coli, Fecal Coliform), Dissolved Oxygen
OK520520000030_00	Choctaw Creek	Dissolved Oxygen
OK520520000090_00	Crutch Creek	Oil and Grease
OK520520000110_00	Cherry Creek	Cadmium, Dissolved Oxygen, Selenium
OK520520000150_00	Crooked Oak Creek	Chloride, Enterococcus, E. Coli, Fecal Coliform, Oil & Grease, Dissolved Oxygen, Total Dissolved Solids
OK520520000210_00	Canadian River, North	Pathogens (Enterococcus, E. Coli, Fecal Coliform,.) Oil & Grease, Dissolved Oxygen
OK520520000230_00	Campbell Creek	Dissolved Oxygen, Sulfates
OK520520000240_00	Mustang Creek	E. Coli, Dissolved Oxygen
OK520520000250_00	Canadian River, North	Dieldrin, Fecal Coliform, Sulfate, Turbidity,
OK520520000260_00	Overholser Lake	Sulfates, Turbidity
OK520520000350_00	Airport Heights Creek!	Dissolved Oxygen, Turbidity
OK520530000030_00	Shell Creek	Dissolved Oxygen
OK520530000270_00	Perimeter Creek!	Oil & Grease
OK520610010230_00	Cow Creek	Dissolved Oxygen, Selenium
OK520610020060_00	Foreman Creek	Dissolved Oxygen
OK520610020070_00	Dry Creek	Oil & Grease, Dissolved Oxygen
OK520710020020_00	Arcadia Lake	Chlorophyll-a, Turbidity
OK520710020060-00	Canadian River, Deep Fork	Pathogens (Enterococcus, E. Coli, Fecal Coliform,.)
OK520800020080_00	Pecan Creek	Oil & Grease
OK520810000030_00	Hog Creek	Dissolved Oxygen, Turbidity
OK520810000040_00	Hog Creek, West Branch	Dissolved Oxygen
OK520810000100_00	Elm Creek	E. Coli, Total Dissolved Solids, Turbidity
OK520810000110_00	Elm Creek, East	Dissolved Oxygen
OK520810000130_00	Stanley Draper Lake	Turbidity
OK620910040100_00	Chisholm Creek	Enterococcus, Nitrates
OK620910040140_00	Bluff Creek	Pathogens (Enterococcus, E. Coli, Fecal Coliform,.)
OK620910040200_00	Hefner Lake	Dissolved Oxygen

^aThese 303(d) water bodies are found in Appendix C of the 2010 Integrated Water Quality Assessment Report

b. Permit Requirements for Addressing the Pollutants

Table B below lists requirements of this permit that will address the various pollutants suspected of causing impairment of waterbodies on the 303(d) list.

Table B. Permit Requirements for Addressing 303(d) Pollutants

Pollutant	Measures that Address the Pollutants
Pesticides	<ul style="list-style-type: none"> ✓ Implement controls to reduce discharges related to the storage and application of pesticides, herbicides and fertilizers applied by permittees employees and contractors. ✓ Continue and improve the public/employee education program. (Ref. Section 11. e. & f. of the fact sheet)
Nutrients, Total Dissolved Solids (TDS) Turbidity Pathogens Low Dissolved Oxygen Algal Biomass Chloride Oil and Grease Selenium Cadmium (Metals)	<ul style="list-style-type: none"> ✓ Maintain and inspect the storm water structural controls owned or operated by the MS4. ✓ Implement and enforce controls to minimize the discharge of pollutants from areas of new construction and significant redevelopment. ✓ Operate and maintain public streets to minimize discharge of pollutants including deicing and sanding operations. ✓ Continue assessment of flood control devices, and consider retrofitting those in need of repair. ✓ Continue the program to detect and eliminate illicit discharges and improper disposal. ✓ Continue and improve the public/employee education program. ✓ The Spill prevention and response program will continue to improve the prevention, response, and containment of spills. ✓ Continue to improve the program that identifies industrial and high-risk facilities such as landfills, treatment, storage and waste disposal facilities, hazardous waste treatment, storage and disposal or recovery. ✓ Continue to improve the program to reduce the discharge of pollutants from construction sites which includes the proper and timely use and maintenance of appropriate structural and nonstructural control measures, inspection of construction sites and enforcement of control measures. Appropriate and timely public education and training of construction site operators (Ref. Section 11. a, b, c. d. f. of the fact sheet)

17. MONITORING AND REPORTING

a. Reports Required

Permittees are required by OAC 252:602-1-3(b)(3)(Q) adopting and incorporating by reference (40 CFR 122.42[c][1]) to contribute to the preparation of an annual system-wide report including the status of implementing the SWMP; Proposed changes to the SWMPs; revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application; a summary of the data, including monitoring data, that is accumulated throughout the reporting year; annual expenditures and the budget for the year; a summary describing the number and nature of enforcement actions, inspections, and public education programs; and identification of water quality improvements or impact. The permittees are required to perform annual evaluations on the effectiveness of the SWMP, and institute or propose modifications necessary to meet the overall permit standard of reducing the discharge of pollutants to the MEP. In order to allow the orderly collection of budgetary and monitoring data, it was determined to allow the annual report submittal date to relate to the permittees' annual calendar year and monitoring seasons. Oklahoma City's calendar year and first dry season ends on December 31st, the annual report is due April 1st. Copies of these reports will be available to the public.

b. Monitoring

The permittees are required, according to OAC 252:606-1-3(b)(3)(L) adopting and incorporating by reference (40 CFR 122.26[d][2][iii][C] and [D]), to monitor the MS4 to provide data necessary to assess the effectiveness and adequacy of SWMP control measures; estimate annual cumulative pollutant loadings from the MS4; identify and prioritize portions

of the MS4 requiring additional controls, and identify water quality improvements or impact. The permittees are responsible for conducting any additional monitoring necessary to accurately characterize the quality and quantity of pollutants discharged from the MS4.

Particular attention will be directed toward watershed monitoring of 303(d) listed water bodies to determine the source of impairment. Remedies will include the immediate cessation of the discharge, removal of obvious sources, and investigation for other sources.

Due to the variability of storm water discharges, the cost of the monitoring program needs to be balanced with the monitoring objectives and the more important goal of actually implementing controls that will directly affect the quality of the storm water discharged. The permit requires two types of monitoring: representative monitoring and floatables monitoring.

i. Representative Monitoring:

Monitoring of the discharge of representative locations will provide information on the quality of runoff from the MS4, and a mechanism to evaluate reductions in pollutants discharged from the MS4. Results from the monitoring program will be submitted annually.

(a). Analytical Monitoring: The permittees are required to monitor for the parameters listed in Table V.B. of the permit throughout the permit term. Monitoring will be conducted at three (3) representative monitoring locations within the targeted micro-watersheds.

1) Parameters:

The DEQ established permit parameter monitoring requirements based on the information available regarding storm water discharges and potential impacts of these discharges. The basic parameter list allows satisfaction of the regulatory requirement OAC 252:606-1-3(b)(3)(L) adopting and incorporating by reference 40 CFR 122.26(d)(2)(iii)(A)(4).

The monitoring of Diazinon was required due to the EPA's experience with other MS4 and POTW (Publicly Owned Treatment Work) treatment plant discharge monitoring data. It was not included in the application monitoring requirements and previous permit monitoring has not indicated Diazinon as a significant problem for the Oklahoma City MS4.

2) Frequency: Three (3) representative monitoring locations will be selected in the micro-watersheds within Oklahoma City Corporate Boundaries at least two (2) times per permit year.

(b). Biological Monitoring: Biological monitoring techniques offer the ability indirectly to assess the quality of stormwater discharges from the MS4 by assessing the "health" of the receiving water. Rapid bio-assessment protocols evaluate the number, diversity, and relative "pollution tolerance" of aquatic species in the receiving waterbodies (e.g. streams, rivers, lakes, etc.). Either fish or benthic organisms (bottom-dwelling insects, etc. that serve as a food supply for higher organisms) can be studied. Comparing the types and numbers of organisms collected from water bodies receiving discharges from the MS4 to those collected from a "reference site" relatively un-impacted by urban runoff, provides an indication of how degraded the water body is. For example, a healthy stream would typically have greater species diversification and a higher number of species that require clean water to survive and reproduce. A degraded stream would have relatively fewer species and a larger proportion of species that are tolerant of pollution.

While rapid bio-assessments do not directly measure the quality of storm water discharges, they can be an important (and cost effective) tool in tracking trends in water quality.

ii. Floatables Monitoring:

Installation of twenty-one (21) floatables monitoring stations will be accomplished to investigate trends in water quality issues related to manmade debris and floatables. The comparison of yearly monitoring results should allow the permittees and the DEQ to assess the impact of the SWMP elements as they relate to the reduction and elimination of floatables discharge from the MS4.

18. PERMIT MODIFICATIONS

a. Re-opener Clause

The DEQ may reopen and require modifications to the permit (including the SWMP) based on the following factors: changes in the State's Water Quality Management Plan and State or Federal requirements; adding permittees; SWMP changes impacting compliance with permit requirements; other modifications deemed necessary by the DEQ as a result of any additional provisions necessary to comply with requirements of an approved TMDL. Implementation of the SWMP is expected to result in the protection of water quality standards. The permit does, however, contain a re-opener clause should new information indicate the discharges from the MS4 are causing, or significantly contributing to, a violation of the state's water quality standards.

b. Other Changes

The DEQ has attempted to develop permit language to clarify the permit requirement concerning possible changes to the SWMP, permittees status, and other changes.

- i. Modify Existing Phase I Permit: additional co-permittees shall be covered by negotiated agreements with Phase II MS4 communities. Permittees shall adhere to Part II. D.
- ii. Terminated Permittees: The process for terminating coverage for an existing permittee shall adhere to the regulations OAC 252:606-1-3(b)(3)(II) adopting and incorporating by reference 40 CFR 122.64. A notice of intent to terminate will be issued in accordance with permit procedures.
- iii. SWMP Changes: The SWMP is intended as a functioning mechanism for the permittees' use. Therefore, minor changes and adjustments to the various SWMP elements are expected. Incorporating this form of document into an OPDES permit has some inherent conflicts. The rules concerning permit changes and modifications do not easily translate to the minor changes that will be necessary to occur to the various elements during the permit term. The changes may be necessary to more successfully adhere to the goals of the permit. The DEQ has determined that these minor changes that are specifically described in the permit shall not be considered permit modifications as defined in the regulations. Part II.G.2 of the permit describes the allowable procedure for the permittees to perform additions and minor changes to the SWMP. This section in no way implies that the permittees are allowed to impact or change elements that directly related to permit conditions for the SWMP. Any changes requested by the permittees shall be reviewed by the DEQ. The DEQ has 60 days to respond to the permittees and inform them if the suggested changes will impact or change the SWMP's compliance with a permit requirement and therefore are either disallowed or require a formal permit modification procedure.

- iv. Additions: It is the intent of the DEQ to allow the permittees to annex lands and accept the transfer of operational authority over portions of the MS4 without mandating a permit modification. Implementation of appropriate SWMP elements for these additions (annexed land or transferred authority) is required. Upon notification of the additions in the annual report, the DEQ may require a modification to the permit based on the new information.
- v. Watershed Monitoring: The permit is issued on a system-wide basis in accordance with Section 402(p)(3)(i) of the Act and authorizes discharges from all portions of the MS4. Particular attention will be directed toward watershed monitoring of 303(d) listed water bodies to determine the source of impairment. Remedies will include the immediate cessation of the discharge, removal of obvious sources and investigation for other sources.
- vi. TMDL Requirements: The permit may be reopened and modified during the life of the permit to address any additional provisions necessary to comply with requirements of an approved TMDL.

19. CONSIDERATIONS UNDER FEDERAL LAW

The discharge that is being controlled by the terms and conditions of this permit is the result of natural precipitation, and as such would continue to be discharged regardless of the DEQ action represented here. The terms of this permit do require that the permittees minimize or reduce to the maximum extent practicable, pollutants in storm water runoff. The DEQ has made a tentative determination that this permit will not adversely affect any listed endangered or threatened species, and/or their critical habitat.