



THE CITY OF OKLAHOMA CITY STORMWATER MANAGEMENT PROGRAM

PERMIT NO. OKS000101
SEPTEMBER 15, 2013

CO-PERMITTEES

OKLAHOMA TURNPIKE AUTHORITY
OKLAHOMA DEPARTMENT OF TRANSPORTATION





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STORM WATER MANAGEMENT PROGRAM (SWMP)

Permit Number OKS000101

March 15, 2013 – March 14, 2018

The purpose of the Storm Water Quality Division is to provide inspections, enforcement, water quality assessments, public outreach, household hazardous waste services and emergency response for citizens, businesses, and government agencies so they can comply with the Clean Water Act and enjoy a safe and clean environment.

1. Storm Water Management Program (SWMP)

Program Components:

- A. Review and update the SWMP annually
- B. Revise the SWMP as necessary to reflect final permit

SWMP Area:

SWMP covers all areas located within the corporate boundaries of the City of Oklahoma City that are served by municipal separate storm sewers owned or operated by the permittee.

Responsibilities:

The SWMP, together with any attached interagency agreements, shall clearly identify the roles and responsibilities of each permittee. Each permittee shall continue implementing and updating, as necessary, the SWMP including pollution prevention measures, treatment or removal techniques, storm water monitoring, use of legal authority, and other appropriate means to control the quality of storm water discharged from the Municipal Separate Storm Sewer System (MS4) including annual reporting requirements. Controls and activities in the SWMP shall identify areas of permittee responsibility on a jurisdiction, applicability, or specific area basis. The SWMP shall include controls necessary to effectively prohibit the discharge of non-storm water into the MS4 and reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP).

Term of SWMP:

The SWMP shall cover the term of the permit and shall be updated as necessary, or as required by the Director, to ensure compliance with the statutory requirements of Section 402(p)(3)(B) of the Clean Water Act (CWA).



SWMP Requirements:

- Structural Controls and Storm Water Collection System Operation
- Areas of New Development and Significant Redevelopment
- Roadways
- Flood Control Projects
- Pesticide, Herbicide, and Fertilizer Application
- Illicit Discharge and Improper Disposal
- Spill Prevention and Response
- Industrial and High Risk Runoff
- Construction Site Runoff
- Public Education
- Employee Education
- Public Participation and Involvement
- Monitoring Programs

Area-Specific SWMP Requirements:

A. Waters identified by the latest CWA § 303(d) list of impaired waters must include all necessary BMPs that will ensure that the 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 water quality standards.

B. Discharge of a pollutant into any water for which a TMDL or watershed plan in lieu of a TMDL for that pollutant has either been established or approved by the Oklahoma Department of Environmental Quality (ODEQ) or the Environmental Protection Agency (EPA) is prohibited unless your discharge is consistent with that TMDL or watershed plan.

Implementation:

Implementation of the revised and updated SWMP shall begin on the effective date of the permit and may be achieved through participation with other permittees, public agencies, Citizens or private entities in cooperative efforts to satisfy the requirements of Part II of the permit.

Legal Authority:

Each permittee shall ensure legal authority to control discharges to and from those portions of the MS4 over which it has jurisdiction. This legal authority may be a combination of statute, ordinance, permit, contract, order or inter-jurisdictional agreements with permittees with existing legal authority to:

- Control the contribution of pollutants to the MS4 by Storm Water Discharges Associated with Industrial Activity and the quality of storm water discharged from industrial sites,
- Prohibit illicit discharges into the MS4,
- Control the discharge of spills, dumping or disposal of materials other than storm water into the MS4,
- Control through interagency or inter-jurisdictional agreements among permittees the contribution of pollutants from one portion of the MS4 to another,
- Require compliance with ordinances, permits, contracts or orders; and,
- Carry out inspections, surveillance, enforcement and monitoring procedures necessary to determine compliance with permit conditions.

SWMP Resources:

Each permittee shall provide adequate finances, staff, equipment and support capabilities to implement their activities under the SWMP.

SWMP Review and Update:

Each permittee shall participate in an annual review of the current SWMP in conjunction with preparation of the annual report. The SWMP may change during the life of the permit in accordance with approved procedures.

Retention of SWMP Records:

The permittee(s) shall retain the SWMP for at least three (3) years after coverage under this permit. A photostatic copy, photograph, microphotograph, photographic film or optical disk of the original records will be acceptable.

Discharge Goals:

The following goals are established for discharges from the Oklahoma City MS4:

- No discharge of toxics in toxic amounts.
- No discharge of pollutants in quantities that would cause a violation of Oklahoma Water Quality Standards.
- No discharge of floatable debris, oils, scum, foam, or grease in other than trace amounts.
- No discharge of non-storm water from the MS4 (except as provided in Permit)
- No degradation or loss of State-designated beneficial uses of receiving waters as a result of storm water discharges from the MS4. (Unless authorized by the State in accordance with the State Anti-Degradation Policy)
- Reduction of pollutants discharged to the Maximum Extent Practicable (MEP).



Cooperating Departments and Agencies:

City of Oklahoma City
Oklahoma Department of Transportation
Oklahoma Turnpike Authority



2. New and Re-development Program

Program Components:

- A. Examine all construction projects submitted for plan review. Require all plans to contain a site plan indicating Best Management Practices for sediment and erosion controls and require a DEQ Storm Water Discharge Permit (OKR10) to be obtained before receiving final approval.
- B. Continue to partner with the Development Services department, Development Center in requiring Storm Water Quality's final inspection before a Certificate of Occupancy is issued.
- C. Review local ordinances or regulations: Identify any legal regulatory barriers which prohibit alternative storm water management design practices [e.g., Low Impact Development (LID)] which function as infiltration, pollutant removal, storage, evapotranspiration or alternative conveyance practices.
- D. Develop an educational program which provides information regarding alternative storm water management practices to City staff, engineers, the development community and other stakeholders.
- E. Conduct educational events which include information regarding LID, pollutant removal, storage and other alternative storm water management processes and controls.
- F. Work with the development community, other stakeholders and City staff to propose updates to Municipal Code with regard to remove any legal and regulatory barriers identified in activity 2.c above and allow alternative storm water management practices.
- G. Update SWMP as necessary to include criteria and procedures for determining requirements for structural and non-structural controls on new and significant re-construction of roads and highways.
- H. Update construction Best Management Practices Manual as necessary for use by the regulated development/construction community.

General Program Description:

All construction plans submitted for City approval will be reviewed for compliance with Oklahoma City Municipal Code. Plans reviewed are required to have Best Management Practices (BMP's) which reduce or eliminate sediment erosion and the discharge of sediment and other construction related pollutants through storm water runoff. Site plans indicate the correct installation practices, BMP type and locations of BMP's selected for each construction site. A Storm Water Pollution Prevention Plan (SWPPP) is reviewed and a Notice of Intent (NOI) is required before a Construction Storm Water Discharge Permit is issued.

Oklahoma City's building and construction permitting system requires a review of all public and private construction plans submitted to Public Works, Utilities and Parks Departments. During this process, check prints are sent to multiple sections for review including SWQ. SWQ requires that all Construction sites within the Oklahoma City boundaries have a SWQ land disturbance permit. The owner/operator of the construction site is required to submit a



Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWP3) and Erosion Control site plan for review before a SWQ permit is issued. During the review process the check print plans are reviewed for compliance with City Municipal Codes, building codes and storm water best management practices to reduce or eliminate sediment erosion and other related construction potential pollutant sources.

When all land disturbing activity has been completed and disturbed areas have been stabilized the permittee will notify SWQ and request a final inspection. A Storm Water Construction Environmental Technician will inspect the site to determine if conditions have been met for the Notice of Termination (NOT), which includes:

- The site has been stabilized with a vegetative density of at least 70% per square foot of the original ground cover, or
- All storm water discharges from construction activities have been eliminated, or
- A transfer of owner/operations; operator is no longer in charge of the site and a transfer of coverage to a different operator has been received.

If the conditions have been met, the Technician will approve the NOT and turn in a Final Inspection to the Development Services Development Center.

If conditions have not been met then the NOT is not accepted and a re-inspection fee is assessed for each inspection thereafter until conditions are met.

From the plan review process to the final termination of the permit inspections are being made by Environmental Technicians to insure compliance with the SWP3

Annual reviews and updates are made to City ordinances and the SWMP to include criteria and procedures for determining and enforcing requirements for structural and non-structural controls on new and significant redevelopment and re-construction of roads and highways.

Annual reviews and updates are made to the Construction Best Management Practices Manual, which is used by the development and construction community.

Cooperating Departments and Agencies:


Oklahoma City Public Works Department

- GO Bond Program
- Storm Water Quality Management
- Field Services
- Drainage Engineering – Technical Review

Oklahoma City Utilities Department

Oklahoma City Planning Department

Oklahoma City Parks Department



3. Flood Control Projects and Structural Controls Program

Program Components:

- A. Update Capital Improvement Program list for the City of Oklahoma City proposed General Obligation Bond authorization for 2007.
- B. Submit a list of active Drainage and Paving Improvement projects and the status of each project.
- C. Continue the Drainage Maintenance Program related to repair of drainage structures and creek channel cleaning.
- D. Continue to review plans for the development of retention/detention ponds for compliance with Oklahoma City Drainage and Flood Control Ordinance.
- E. Continue to evaluate, prioritize, and install structural controls on developed areas or retrofitting of existing structures.

General Program Description:

Flood control projects and structural controls programs are partly maintained by both private and public entities. Oklahoma City's Streets, Traffic and Drainage Maintenance Division is primarily charged with the operation and maintenance of public roadways, curbs, surface and subsurface drainage within Oklahoma City. Exceptions exist for privately owned drainage, common areas and private right-of-way/easements.

Structural control assets include detention ponds, surface and subsurface curblines, channels, conduits and other drainage features designed to carry, hold, contain, remove debris and pollutants or otherwise transport storm water to receiving waters. The program accounts for the Capital Improvement Projects as well as the operation and maintenance of these assets.

Inspections of the drainage infrastructure is accomplished by multiple methods including Citizen complaint/inquiry, flooding reports, Closed Circuit TV inspections, debris accumulation observations, monitoring station reports among others.

On December 11, 2007, Oklahoma City citizens passed a \$835 million bond issue that included 11 propositions including roadways, parks and drainage projects. Currently approximately 35% of the projects have been started or completed with the final sale of bonds expected in 2019. Drainage improvements for past and present bond sales are reported in the Storm Water Quality Annual report to ODEQ.

Major Programs:

Inspection

Oklahoma City conducts regular drainage infrastructure inspections. This is accomplished from the initial document submittals through the life of the drainage system. Multiple divisions within the Public Works Department are involved directly or indirectly in the identification of damaged or poorly operating systems.

- OKC, PW Field Services

- OKC, PW Storm Water Quality Management
 - Closed Circuit TV Inspection. A CCTV steerable camera and transporter system is used to locate and describe problems within the storm drainage system. This camera system reduces risk to personnel by entering drainage systems which are too small or hazardous for human entry.
 - Monitoring Activities. Each site visit is documented. On sight observations are conducted which include structural defects, debris accumulations, erosion or structural issues.
- OKC, PW Streets Traffic, and Drainage Maintenance
 - Drainage.
 - CCTV Inspection. A non-steerable camera and transporter system is used to locate and describe problems within the storm drainage system.
- Oklahoma River Corridor Program. This program is responsible for maintenance on the Oklahoma River. Services include debris removal, maintenance and operation of dams, river dredging and emergency response support.
- Rural Road Program
- Channel Maintenance Program. Public Works Drainage Engineering currently contracts with five (5) contractors to maintain creeks, detention ponds and vacant lots owned by the City. Contractors provide services such as mowing, litter and other debris removal and herbicide treatment throughout the year. During the summer months, more emphasis is placed on mowing and debris removal. Channels are generally maintained monthly or after significant rainfall events which may deposit significant litter or other debris.

Complaint and Resolution:

Complaints are received from the general public, state or federal agencies or from City Departmental contacts. The major contact sources are identified below.

- OKC Action Center
- Public flooding and drainage complaints
- Direct Public Calls
- Visual/Monitoring Inspections

Maintenance:

- OKC PW Streets and Drainage Maintenance - The Public Works Drainage Maintenance Division is responsible for repairs made to drainage channels, conduits, access points and outfall structures

Capital Improvement:

- OKC PW GO Bond Program
- OKC PW Non-Bond Capital Improvement Projects



Asset Management:

- OKC PW Engineering Plan Review. Provides review of flood control structures including but not limited to Low Impact Development (LID) components, traditional detention, water quality control devices and waterway design to insure compliance with OKC Drainage and Flood Control Ordinances.
- OKC PW Administration. Maintaining Geographic Information Systems (GIS) asset management.
- OKC Information Technology. Maintaining GIS systems and providing IT support.

Permit Required Reporting and Associated Timelines

Activity	Responsible Permittee(s)	Date Due/Frequency
Update Capital Improvement Program list for the City of Oklahoma City proposed General Obligation Bond authorization for 2007	Oklahoma City	April 1, 2013
Submit a list of active Drainage and Pavement Improvement projects and the status of each project.	Oklahoma City	Annually
Continue the Drainage Maintenance Program related to repair of drainage structures and creek channel cleaning.	All	Annually
Continue to review plans for the development of retention/detention ponds for compliance with Oklahoma City Drainage and Flood Control Ordinance	Oklahoma City	Annually
Continue to evaluate, prioritize, and install structural controls on developed areas or retrofitting of existing structures.	Oklahoma City	Annually

The City will continue to evaluate, prioritize and install structural controls on developed areas or retrofitting of existing structures. These structures shall be operated in a manner to reduce the discharge of pollutants to the MEP.



4. Construction Site Runoff Program

Program Components:

- A. Continue the construction site runoff pollution prevention program, through permitting, inspections, and investigations.
- B. Continue the construction site runoff pollution prevention program by regulating runoff from construction sites, including necessary modifications to local ordinances for enforcement.
- C. Continue the construction site runoff pollution prevention program through public outreach and annual workshops.

General Program Description:

The construction erosion and sediment control permit efforts include a site inspection program and complaints response program. Environmental technicians conduct construction site reviews for compliance with Storm Water Pollution Prevention Plan requirements and associated permit related documentation.

Erosion and sediment complaints may be received from a number of sources including the general public via personal communication, OKC Action Center, other OKC Departmental contacts, windshield surveys or State/Federal Agencies. Complaints are investigated and compliance is achieved through several educational or administrative actions.

The City of Oklahoma City requires that a Construction Storm Water Discharge Permit be issued prior to the start of all land disturbing activities for the construction of new utilities, industrial, commercial or institutional facilities, multi-family residential units and residential subdivisions and demolitions. In order to obtain a permit, several documents must be provided:

- *Notice of Intent (NOI)*: Written notice that an owner/operator desires that a storm water discharge be authorized under a general permit.
- *Storm Water Pollution Prevention Plan (SWPPP)*: Written site-specific plan requiring the use of appropriate structural and non-structural BMP's to reduce pollutants discharged to the MS4 during the time of construction.
- *Erosion Control Site Plan*: Drawings identifying the placement of all planned BMP's with installation instructions.
- *Permit application fee*: City Ordinance 57-148.

As permits are issued, they are entered into the Accela Automation permitting database. The system manages all land and community development activities such as permits, inspections, plans and enforcement actions.

During the construction phase of a project, Storm Water Quality (SWQ) Environmental Construction Technicians inspect the construction site and associated permit required records. A "Maintenance and Inspection" report is completed. Deficiencies are noted and discussed with the owner/operator or other delegated site personnel. Corrective actions and



associated timelines of those actions are clearly communicated and documented. Deficiencies noted during subsequent inspections shall be corrected through the use of administrative enforcement actions which include issuance of Notice of Violation(s), Compliance Orders, Cease and Desist or progressive enforcement actions through the Oklahoma Municipal Counselor's Office.

Oklahoma City ordinances will be reviewed annually and modified as needed.

Appropriate education and training measures for City staff and construction site operators will be conducted annually.

Notifications to building permit applicants of their potential responsibilities under the OPDES permitting program, for construction site runoff, will be done by SWQ.

Municipal Construction Permits:

The City of Oklahoma City requires contractors working on City projects assume the role of "responsible party" and file for the Storm Water Discharge Permit. The Contractors have "daily operational control" of each project and therefore manage the installation and maintenance of erosion controls. SWQ Environmental Construction Technicians regularly inspect each project until completion.

Cooperating Departments and Agencies:

Oklahoma City Public Works Department

- Storm Water Quality Management
- Streets and Drainage Maintenance

Oklahoma City IT Department

Oklahoma City Development Services

Oklahoma City Public Information – Action Center

Oklahoma Department of Environmental Quality



5. Industrial and High Risk Runoff Program

Program Components:

- A. Continue the Industrial Program to identify, monitor, and control pollutants from targeted facilities.
- B. Continue the Industrial Program through inspection of facilities.
- C. Continue to develop and implement the Industrial Program through auditing Cosmetic Cleaners for compliance with City ordinance.
- D. Continue the Industrial Program through public outreach and annual workshops.

General Program Description:

In order to minimize the impact of stormwater discharges from industrial facilities the Storm Water Quality program includes an industrial component. Operators of industrial facilities with industrial activities that discharge or have the potential to discharge stormwater to the MS4 or directly to Waters of the United States, and operate under a specific Standard Industrial Codes (SIC), require authorization under a National Pollutant Discharge Elimination Systems (NPDES) industrial stormwater permit.

Permitting requires that a Notice of Intent (NOI) be submitted with a SWPPP kept on the facility site. Permitted facilities are audited on a regular basis. The Audit is completed and discussed with the facility representative. When facilities do not make corrections after an audit, a Notice of Violation may be issued. Facilities with violations that are not corrected may be issued a citation and required to appear in court.

SWQ's program includes the "No Exposure Certification for Exclusion" from obtaining an Industrial Storm Water Discharge permit. Those facilities must fill out a form for "No Exposure", SWQ will perform an audit on the facility to determine if the facility meets the requirements of "No Exposure". Every five (5) years these facilities must re-apply and SWQ will re-visit the facility for inspection purposes.

Cosmetic Cleaning permits are issued to companies using any system, machine or substance to remove undesirable substances from any surface or façade creating free foreign matter. Each permittee is required to complete an annual inspection form and return with the annual fee.

The Industrial permitting program conducts several workshops annually for all permitted facility operators to update industries of current or potential changes to regulations.

SWQ permit requirements from the Environmental Protection Agency (EPA) and the ODEQ requires reporting from all facilities subject to Emergency Planning and Community Right to Know Act (EPCRA), Superfund Amendments and Reauthorization Act (SARA) Title III, Section 313 reporters Toxic Release Inventory (TRI) facilities, Treatment, Storage and Disposal (TSD) facilities, and landfills that do not qualify for No-Exposure, to establish a 5-year "High Risk" sampling program.

An Affidavit of No Discharge for Storm Water Discharges Associated with Industrial Activities program is utilized to certify that a condition of no discharge exists at a facility and is re-submitted once every five years. The facility must maintain a condition of no-discharge at the facility site, if conditions change, the operator must obtain a permit.

An In-Active or Un-Staffed Site Certification is used to certify that there is no activity or no staff at the industrial facility. This certification excuses the facility from performing quarterly visual monitoring, however has to perform all of the other required tasks of the permit. The industrial facility/site must maintain conditions of not having any staff or all industrial processes are in-active in order to remain applicable. If conditions change resulting in industrial storm water discharges into the waters of the State, including the MS4s, the facility operator must contact their Oklahoma City Storm Water Environmental Technician before any discharges occur. Any industrial discharge without notification under any condition would be an unauthorized discharge and would be a violation under the Clean Water Act and subject to enforcement action.

OKC Municipal/Trust/Industrial/Contractor Permitted Facilities:

Airports Trust

Will Rogers World Airport, 7100 Terminal Dr., Ind. # 1398
Wiley Post Airport, 5915 Phillip J. Rhodes Av., Ind. # 1399
CE Page Airport, 2303 S. Cimarron Rd., Ind. # 1400

General Services Department

OKC Equipment Services, 115 N Shartel, Ind. # 1312
OKC Central Maintenance Facility, 3738 SW 15th, Ind. # 1638

Oklahoma State Fairgrounds Trust

State Fairgrounds, 500 Land Rush St., Ind. # 1727

Parks Department

Trosper Park Golf Course, 2301 SE 29th, Ind. # 1729

Public Works Department

Central Maintenance Facility, 3738 SW 15th, Ind. # 2598
Household Hazardous Waste Facility, 3738 SW 15th, NEC #2828
OKC Street Maintenance Division, 3738 SW 15th, Ind. # 1388

Transit Services Department

COPTA, 2000 S May, Ind. # 1455

Water/Wastewater Utilities Department

Southeast Landfill, 7001 S Bryant, Ind. # 1138
East Oak Recycling and Disposal Facility, 3201 Mosley Rd., Ind. # 1157
Oklahoma City Landfill, 7600 SW 15th, Ind. # 1235
All American Waste Control, 7540 SW 59th, Ind. # 1325 (City Contractor)
OKC Solid Waste Maintenance, 11501 N Portland, Ind. # 1388



Deer Creek WWTP, 20600 N Portland, Ind. # 1594
North Canadian WWTP, 12800 N Anderson Rd., Ind. # 1596
Witcher Pump Station, 5520 NE 108th, Ind. # 1597
South Canadian WWTP, 15924 S May, Ind. # 1598
Chisholm Creek WWTP, 22000 N Western, Ind. # 1599
First Vehicle Services, 11501 N Portland, Ind. # 1824 (City Contractor)
Southside Treatment Plant, 2701 NE 4th, Ind. # 1839

OKC Municipal Cosmetic Cleaning Permits

First Maintenance Company, 208 NW 60th, CC Ind. # 1470 (City Contractor)
OKC Arts Museum of Art, 415 Couch Dr., CC Ind. # 1610
Oklahoma State Fairgrounds, 500 Land Rush St., CC Ind. # 1663
OKC Traffic Ops, 1400 S Shartel, CC Ind. # 1694
COTPA/Metro Transit, 2000 S May, CC Ind. # 1710
OKC National Memorial, 620 Harvey, CC Ind. # 1719
Metropolitan Library System, 1364 NE 3rd, CC Ind. # 2584



6. Household Hazardous Waste Collection Facility Program

Program Components:

- A. Provide summary of evaluation and assessment of results from various collection/recycling/safe disposal events.
- B. Continue the Household Hazardous Waste Collection program, which includes a drop off location that provides for convenient hours of operation.
- C. Continue the Household Hazardous Waste Collection program through Neighborhood collection events.
- D. Continue the Household Hazardous Waste Collection program through Memorandum of Understanding with surrounding Phase II cities.

General Program Description:

The Household Hazardous Waste Collection Facility (HHW), which opened in 2003, provides a safe and economical process for managing a full range of hazardous materials. Typical types of household hazardous waste received include: cleaning products, automotive products, flammable products, lawn and garden chemicals, indoor pesticides, workshop/painting supplies and other products indicating hazardous materials are present.

A report and assessment of the results of collections from the permanent facility, special events and neighborhood collections is submitted to ODEQ annually.

The HHW facility is conveniently located near the junction of I-40 and I-44, within a 20-mile radius of over 450,000 households. The facility was designed to accommodate a high volume of traffic and manage large quantities of household hazardous waste on an annual basis. The facility serves the Citizens of Oklahoma City, covering 621 square miles, approximately 186,000 households and 610,000 residents.

The HHW program also provides additional services such as:

- Two special collection events in the Spring and Fall to accept old tires, e-waste, medications and ammunition
- Facility tours for community groups
- Mobile Neighborhood Collection services – collections that are held within the neighborhood associations
- Homebound Services – household chemical waste pickup at resident's homes
- Disaster Assistance Services – provide support with collection, transportation, and disposal of hazardous waste from affected areas.

The City has developed a Memorandum of Understanding that allows citizens, residing outside the City limits, to utilize the service offered at the facility and offers an excellent opportunity for the surrounding Phase II communities to work with the City in properly managing household hazardous waste.



Memorandum of Understanding

- City of Bethany
- City of Edmond
- City of El Reno
- City of Moore
- City of Shawnee
- City of The Village
- City of Warr Acres
- City of Yukon
- Tinker Air Force Base

Cooperating Departments and Agencies:

Oklahoma City Public Information Office
Oklahoma City Public Works Department – Storm Water Quality Management
Oklahoma City Utilities Department



7. Public Outreach Program

Program Components:

- A. Continue public outreach program through other agencies and associations, businesses, schools, and the general public.
- B. Install an average of 500 curb markers annually using volunteers and City employees.

The main emphasis of the Public Outreach Program is to educate, train and increase environmental awareness through workshops, school programs, and public events so that the public is informed about the City's storm water program.

General Program Description:

The SWQ Public Outreach Program promotes the proper management and disposal of used motor vehicle fluids and other household hazardous waste via presentations at schools, businesses, civic groups and government agencies. Displays at conventions, environmental workshops and community/civic organizations are used to distribute educational materials emphasizing ways to keep pollutants out of the MS4. Twice annually inserts in water bills are used to inform citizens about the special collections.

City staff training is held annually regarding the proper use, application and disposal of pesticides, herbicides and fertilizers.

The Public Outreach Program encourages public involvement through a quarterly "e-newsletter" with a circulation of over 3000, and through the SWQ web page www.okc.gov/swq that reaches neighborhood associations, community volunteer civic groups, permitted facilities and contractors.

Public involvement is encouraged through the "Curbs to Creeks" program. Both City staff and volunteer groups conduct installation of 500 curb markers annually. Permitted Industrial Facilities are encouraged to participate in the "Curb to Creek" program and mark facility storm drains.

Cooperating Departments and Agencies:

Oklahoma City Public Works, Streets and Drainage Maintenance
Oklahoma City Parks and Recreation Department
Oklahoma City Utilities Department, Rivers and Canals
Oklahoma City Public Information Office



8. Roadway Operation and Maintenance Program

Program Components:

- A. Continue the Roadway and Maintenance Program through panning crews, curb inlet cleaning, and the street sweeping contract.
- B. Update the SWMP to include any roadway operation and management changes.
- C. Provide a summary of activities from the Roadway and Maintenance Program annually.

General Program Description:

The Public Works Streets, Traffic and Drainage Maintenance Division manage the panning and the curb inlet cleaning crews to remove sediment and debris that could potentially clog storm drains.

Public Works, Field Services conducts surveys on roadway conditions at major residential streets. The City contracts roadway inspections to inspect the arterial streets. Inspections are completed by driving each arterial street, while sensors collect the type of roadway distress. This survey enables Oklahoma City a grade of current road condition. Poorly graded roadways are selected for further investigation or scheduled for future improvements.

Solid Waste Management Division of the Utilities Department and Storm Water Quality manage the Street Sweeping contract through an independent contractor.

Updates to the SWMP will be made to include any roadway operation and management changes and a summary of activities will be reported annually to ODEQ.

Cooperating Departments and Agencies:

Oklahoma City Public Works

- Streets and Drainage Maintenance
- Field Services Division

Oklahoma City Utilities Department

9. Pesticides, Herbicide and Fertilizer Application Program

Program Components:

- A. Continue annual training/education/certification classes on pesticide and fertilizer management techniques.
- B. Include appropriate reference to the Pesticide General Permit Management Plan in the SWMP.
- C. Develop and implement training for integrated pest management.

General Program Description:

The Storm Water Quality Management Division will facilitate and provide pesticide/fertilizer training classes throughout the year. Our goal is to ensure that City employees working with or applying chemicals are Certified Applicators, Certified Service Technicians or applicators-in-training. This requires a close relationship with the Oklahoma Department of Agriculture, Food and Forestry (ODAFF) in assuring appropriate regulatory training, annual certification examinations, documentation and maintenance of Continuing Education Units (CEU).

Oklahoma City submitted a Notice of Intent to the EPA in February 2012 for discharges of pesticides to waters of the United States. Oklahoma City's NPDES permit tracking number is OKG87A006. This permit requires that pesticide discharges are authorized in certain waters with the use of BMPs to reduce impacts associated with those discharges. Certain waters are excluded from this authorization (see table below).

Waterway	Oklahoma Water Body ID Number	Watershed
Aluma Creek	OK520710020080_00	Lake Arcadia
Arcadia Lake	OK520710020020_00	Lake Arcadia
Belle Isle Creek	OK520710020160_00	Lake Arcadia
Britton Creek	OK520710020070_00	Lake Arcadia
Canadian River, Deep Fork	OK520710020010_00	Lake Arcadia
Canadian River, Deep Fork	OK520710020060_00	Lake Arcadia
Deep Fork, Unnamed Tributary of	OK520710020075_00	Lake Arcadia
Forest Park Creek	OK520710020100_00	Lake Arcadia
Guy James Creek	OK520710020140_00	Lake Arcadia
Nichols Creek	OK520710020150_00	Lake Arcadia
Northeast Creek	OK520710020110_00	Lake Arcadia
Northeast Lake (Zoo)	OK520710020120_00	Lake Arcadia
Springlake Creek	OK520710020130_00	Lake Arcadia



Waterway	Oklahoma Water Body ID Number	Watershed
Tinker Creek	OK520710020040_00	Lake Arcadia
Wynn Creek	OK520710020050_00	Lake Arcadia
Elm Creek	OK520810000100_00	Lake Thunderbird
Elm Creek, East	OK520810000110_00	Lake Thunderbird
Elm Creek, West	OK520810000140_00	Lake Thunderbird
Hog Creek	OK520810000030_00	Lake Thunderbird
Hog Creek, West Branch	OK520810000040_00	Lake Thunderbird
Kitchen Creek	OK520810000150_00	Lake Thunderbird
Lake Stanley Draper	OK520810000130_00	Lake Thunderbird
Deer Creek, South	OF520510000290_00	Shawnee Twin Lake #2 (North)

EPA authorized the Oklahoma Department of Agriculture, Food and Forestry to issue agricultural-based Clean Water Act discharge permits during 2013. Oklahoma City's NPDES discharge permit is now under the jurisdiction of the ODAFF's Agricultural Pollutant Discharge Elimination System (AgPDDES) program which encompasses discharges from concentrated animal feeding operations, the application of biological or chemical pesticides and the discharges from forestry activities, among others.

The first Pesticide General Permit annual report was submitted in February 2012 to the EPA. Three programs were included; 1) Public Works Mosquito Larvicide Program, 2) Public Works Channel Spraying Program and 3) Parks & Recreation Slope Spray Program. Annually, City programs are reviewed to determine if the minimum qualifications are met to be included as a permitted activity.

Cooperating Departments and Agencies:

Oklahoma City Public Works


- Streets and Drainage Maintenance
- Drainage Engineering

Oklahoma City Parks and Recreation Department

Oklahoma City Utilities Department, Rivers and Canals

Oklahoma City Public Information Office

Oklahoma Department of Agriculture, Food and Forestry



10. Pollution Complaints and Spills Response Program

Program Components:

- A. Continue to respond to citizen complaints of pollution.
- B. Continue to respond as technical support for the City of Oklahoma City Hazardous Materials Unit on hazardous material incidents.
- C. Provide a summary of pollution complaints and spill responses annually.

General Program Description:

The City of Oklahoma City provides a one-stop citizen assistance office. Citizens can call, report online or email the Oklahoma City Action Center to report problems, including pollution concerns. These reported concerns are forwarded to the appropriate Department for addressing the issue. Storm Water Quality may be notified by phone or email depending on the priority of the concern. The request is tracked and upon resolution, a letter is sent to the citizen to notify them that the City is addressing the reported issue.

Other pollution concerns are reported directly to SWQ as Pollution Source Investigations. This program functions to reduce the number of illicit discharges by investigating each report, enforcing ordinances and requiring responsible parties respond to spills for proper cleanup.

SWQ field personnel and supervisors are 40 hour HAZWOPER certified and respond as technical support to the Oklahoma City Fire Department. Personnel are on-call 24 hours a day to respond to spills, discharges or other events which may cause or contribute to accidental or illicit discharges to the MS4 or other waterways. Results include the effective isolation, containment, removal or remediation of spilled or released products or waste materials.

Cooperating Departments and Agencies:

Oklahoma City Public Works, Storm Water Quality Management
Oklahoma City Fire Department
Oklahoma City Police Department
Oklahoma City Action Center
Oklahoma Department of Environmental Quality
Oklahoma Corporation Commission

11. Floatable Debris Program

Program Components:

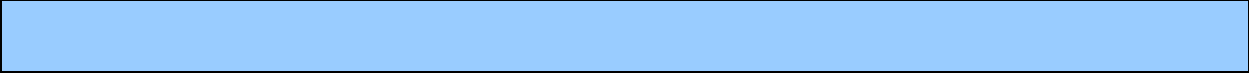
- A. Update the study targeting structural controls for floatables, including an update in the annual report.
- B. Continue floatable debris monitoring program for capturing and categorization at twenty-one (21) monitoring locations and continued maintenance at a frequency necessary for maintenance of the removal structures.
- C. Report all floatable debris removal quantities in cubic yards and include categorization of constituents for the permit year in the Annual Report.

General Program Description:

The floatable debris management program includes several City programs and volunteer initiatives. Two of the major program components include the Oklahoma River debris management efforts by the PW Streets and Drainage Maintenance Division and the PW SWQ Division. Other efforts which are applicable to this program include the PW Adopt-a-Street Program, Utilities recycling and solid waste management programs, volunteer cleanup programs, OKC's contracted street sweeping efforts and the Parks and Recreation Department's general grounds maintenance programs.

Cooperating Departments and Agencies:

- PW SWQ Division – OKC's MS4 Permit requires the deployment of 21 floatable debris monitoring stations. Each station must be maintained at a frequency to maintain optimal collection capabilities. Stations may include but are not limited to netting structures, storm drain inserts and debris barriers. Twenty-six debris barriers are installed within the Oklahoma River corridor. The river consists of three "river lakes" which are impounded by three low water dams. The debris barriers were installed in two (2) phases and vary in lengths to provide protection of the receiving water from debris discharged from lateral tributaries during storm related events. SWQ conducts any necessary inspection, operation, maintenance and replacement of the barriers. This program is administered by the SWQ Division.
- PW Streets and Drainage Maintenance, Oklahoma River Crews are charged with maintenance of the three low water dams, general maintenance of the Oklahoma River corridor and the removal of debris from the debris barriers and Oklahoma River. The maintenance fleet consists of six (6) marine vessels and four (4) full time personnel. Seasonal employees are added during the recreational season to assist with the additional tasks including debris management.
- Utilities Department's recycling and solid waste management programs – Solid waste management is a key component to maintaining clean and sanitary conditions. Recycling programs, bulky waste pickup and normal solid waste pickup is a key component to providing the services necessary to avoid these wastes from entering the storm drainage system or receiving waters through promiscuous dumping or other improper disposal patterns.

- 
- Adopt-a-Street is an outreach volunteer initiative where Citizens, civic organizations and businesses can adopt of portion of a street for litter removal. Oklahoma City provides oversight, management and removal of the bagged materials for proper disposal. In general, organizations are asked to adopt a 1 mile portion of a street and clean their adopted street four times each year.
 - Street Sweeping – Solid Waste Management Division of the Utilities Department and Storm Water Quality manage the Street Sweeping contract through an independent contractor. This contracted effort provides the removal of litter and other debris before rainfall runoff washes the materials into local storm drainages and receiving waters.



12. Wet Weather Analytical Monitoring Program

Program Components:

- A. Submit a revised monitoring list of three (3) representative monitoring locations.
- B. Conduct monitoring to characterize storm water discharges at three (3) representative monitoring locations at a frequency of two (2) times per permit year.
- C. Submit, in the annual report, analytical summary reports detailing constituent loadings from representative storm events during the permit year.

General Program Description:

The SWQ Division will continue to monitor selected representative locations to comprehensively identify pollutant concentrations and load changes over time. This program uses three (3) representative long-term monitoring stations to detail the concentration and loadings of certain key parameters. Monitoring efforts are conducted two (2) times during each permit year. Efforts are made to create temporal variability; however weather conditions may often preclude this.

Only qualifying rainfall events may be sampled. Criteria for these events include a period of at least 72 hours of dry weather and a rainfall of 0.10 inch or greater. The sampling process includes the collection of a discrete grab sample at or near the initial rainfall runoff stage which accounts for the “first flush sample”. Nine (9) individual sample collections are conducted at 20 minute intervals. These individual samples are often called aliquots. These aliquots are composited in the laboratory and analyzed as a composite result representing a portion of the initial or entire rainfall runoff event. The following calculation is used by laboratory personnel to composite the field collected grab samples.

$$\text{Quantity of Each Aliquot} = (a/b)*c$$

Where:

a = Aliquot flow amount

b = Total sum of the monitored event

c = Target Composite Amount

Example:

Aliquot	Discharge (CFS)	Amount/Bottle (mls.)
A1	0.21	207
A2	0.99	974
A3	0.55	541
A4	0.79	778

Total Discharge 2.54 (CFS)

Target Composite
Volume 2500 (mls.)

A second method may be used to create a composite sample. Automated sampling devices are used to collect flow proportioned aliquots which do not require further laboratory compositing. Automatic samplers may also be used to collect equal volume aliquots. As with a manual grab sample, laboratory compositing is necessary.

The previous Oklahoma City MS4 Permit (effective January 19, 2007 through January 18, 2012) included two different parameters; fecal coliform and diazinon. The current MS4 permit (effective March 15, 2013 through March 14, 2018) omits fecal coliform. *Escherichia coliform* (E. coli) was added as the fecal indicator bacteria. Diazinon was removed from the parameter list.

Monitoring Stations Description:

Monitoring Station 85 – Walnut Creek

Section 31, T13N R4W

Oklahoma County, Oklahoma

375 feet West of Rambling Road between Council and County Line Roads

Site Narrative: Located in an open concrete channel in the upper portion of the Walnut Creek Drainage basin. Storm Water Quality Division records indicate that the station has been monitored since 2006. Station facilities include a velocity/depth meter. The drainage area is approximately 188.47 acres and consists of roughly 35% impervious surfaces. The station was selected to represent residential land use.

Monitoring Station 616 – Unnamed Tributary to the Oklahoma River

NE\NW\SE\SW Section 4, T11N R 3W

Oklahoma County, Oklahoma

Near 550 SW 12th Street

Site Narrative: Reinforced concrete pipe outfall. Station 616 is considered a long-term monitoring site. Storm Water Quality records indicate the station has been monitored since 2003. Station facilities include an automatic sampler with peripheral velocity/depth meter. Continuous discharge is measured at the station. The drainage areas are approximately 727.7 acres and consist of roughly 53% impervious surfaces. The station was selected to represent a highly urbanized watershed.

Monitoring Station 615 – Unnamed Tributary to the Deep Fork River

SW\NW\NW\SW Section 9, T 12N R3W

Oklahoma County, Oklahoma

Near 5440 North Western Avenue

Site Narrative: Open concrete channel near the confluence of the Deep Fork River draining from the west and a large storm drain outfall from the southwest. The drainage area is approximately 9,184 acres and consists of roughly 38% impervious surfaces. This is an urban watershed with multiple land uses represented.

Monitoring Station 754 – Unnamed Tributary to the Deep Fork River

NW\NW\NW\NE 31, T13N R4W

Oklahoma County, Oklahoma

Located at the SE intersection of Britton Road and I-35 (north bound exit/service rd.)

Site narrative: Open concrete channel. Drainage is directly off Interstate I-35 northbound lanes via a concrete flume from the south. The highway runoff combines with a concrete channel. This concrete channel drains primarily the service roads and ramps. Upland drainage includes low residential and open space. The drainage area is approximately 151 acres and consists of roughly 11% impervious surfaces. The station was selected to represent Interstate/roadway runoff.

The discussed monitoring stations were selected to represent certain aspects of land use or impervious surfaces within Oklahoma City. Other stations may be monitored under this permit on as needed bases.

Analysis/Reporting Methods:

Sampling protocol will follow Storm Water Quality Standard Operating Procedures. Analysis methods will adhere to OAC 252.606-1-3(b)(7) adopted and incorporated by reference 40 CFR Part 136.

Reporting will consist of summary data reports displaying the composite and grab sample results. Additionally, field collected information such as turbidity, specific conductance, water temperature, total alkalinity and pH will be summarized and reported for each station.

Parameter	Unit	Minimum	Average	Maximum
BOD	mg/L		Yes	Yes
COD	mg/L		Yes	Yes
*Oil & Grease	mg/L		Yes	Yes
TSS	mg/L		Yes	Yes
TDS	mg/L		Yes	Yes
Total Nitrogen	mg/L		Yes	Yes
Total Kjeldahl Nitrogen	mg/L		Yes	Yes
Total Phosphorus	mg/L		Yes	Yes
Dissolved Phosphorus	mg/L		Yes	Yes
Total Cadmium	µg/L		Yes	Yes
Total Copper	µg/L		Yes	Yes
Total Lead	µg/L		Yes	Yes
Total Zinc	µg/L		Yes	Yes
*E. coli	CFU/100 ml		Yes	Yes
*pH	SU	Yes		Yes
**Hardness (as CaCO3)	mg/L	Yes	Yes	Yes



Parameter	Unit	Minimum	Average	Maximum
*Water Temperature	°C	Yes	Yes	Yes
Total Mercury	µg/L		Yes	Yes
Total Thallium	µg/L		Yes	Yes

*Parameters are acquired as a grab sample result.

**Parameters are acquired as a grab sample result and as a composite sample result.

Each monitored rain event will be tabulated. The following calculation will be used to determine the event loading.

$$\text{Parameter Event Loading} = A \times B \times (1/1000000) \times 2.2$$

$$\text{Total Liters per event} = \text{Aliquot 1} + \text{Aliquot 2} + \text{Aliquot 3} + \dots + \text{Aliquot 9}$$

Conversions:

Discharge is reported as cubic feet per second (CFS). Conversion from CFS to liters/20 minutes is as follows.

$$\text{Total liters/20 minutes} = C \times 60 \times 20 \times 28.32$$

Where:

A = Reported Parameter Concentration as mg/L

B = Total Calculated Discharge during Monitored Event as Liters

C = Instantaneous Discharge Reading as CFS

In Example:

Nine discharge measurements were acquired at Site 1114. Each discharge represents a 20 minute interval. The instantaneous discharge reading is converted to a volume per 20 minute time interval. Each of the calculated 20 minute intervals are added for a total volume during the monitored timeframe. The total volume calculated during this event was 396,593.3 liters.

Aliquot Number (20 minute intervals)	Discharge per Aliquot (cfs)	Volume per Aliquot (ft³)	Volume per Aliquot (L)
1	3.9	4680	132537.6
2	2.89	3468	98213.76
3	1	1200	33984
4	1.21	1452	41120.64
5	1.14	1368	38741.76
6	0.94	1128	31944.96
7	0.33	396	11214.72
8	0.18	216	6117.12



Aliquot Number (20 minute intervals)	Discharge per Aliquot (cfs)	Volume per Aliquot (ft³)	Volume per Aliquot (L)
9	0.08	96	2718.72
Total Volume (ft³) =		14004	
Total Volume (L) =		396593.3	

Biochemical oxygen demand (BOD) is analyzed as a flow weighted composite sample. In the same example, the composite result was 8.03 mg/L. Using the equation above, the event loading for BOD can be calculated.

$$\text{Parameter Event Loading} = A * B * 0.000002204 \text{ lb./mg}$$

$$\text{BOD Event Loading} = 8.03 \text{ mg/L} * 396,593.3 \text{ L} * 0.000002204 \text{ lb./mg}$$

The calculated event loading for BOD is 7.01 lbs.

Cooperating Departments and Agencies:

No cooperating Departments or Agencies are required for this permit component.

13. Priority Watershed Program

Program Components:

- A. Update the SWMP to include the Priority Based Monitoring Program.
- B. Submit a schedule for completion of each major monitoring milestone.
- C. Complete Part 1 Monitoring Requirement.
- D. Complete Part 2 Monitoring Requirement.
- E. Complete Part 3 Monitoring Requirement.
- F. Complete Part 4 Monitoring Requirement.
- G. Provide a comprehensive compilation of relevant biological collections and water quality information, if applicable, collected for each year.
- H. Based on results of the Priority Based Monitoring Program, submit a list of monitoring locations, collected information, summary data sheets and assessments regarding the status of the assessed reaches within the scope of relevant criteria for data collected through April 30 of odd – numbered years.

General Program Description:

The Watershed Characterization Monitoring Project was completed in April 2011. This project identified several stream segments which were not meeting one or more beneficial uses as defined in Oklahoma Administrative Code. In addition, the program identified streams stations which require data clarifications, additional parameter monitoring (due to use support assessment protocol changes) or needed additional information for current assessment of the stream segment due to the age of the historical information available (such as pesticide 303(d) listings).

Oklahoma City's March 15, 2013 Municipal Separate Storm Sewer System Permit (permit) detailed a new monitoring component. The Priority Based Monitoring Program is based on the results on the Watershed Characterization Program, which was a large scale multiple year assessment of the watersheds within Oklahoma City's jurisdiction. The information acquired and assessed for the Watershed Characterization Program was used to direct the monitoring efforts for the Priority Based Program. Other sources of information was and will continue to be researched for additional monitoring station inclusion include the applicable stream segments listed in historical or current 303(d) lists. Other sources of information may be used but must meet minimum data and quality assurance requirements for consideration.

The intent of the program is to collect information based on the identified beneficial use failures. Each basin identified as not supporting or as an undetermined status will be revisited. For many stations, two types of support failures were noted and categorized as a Level I or Level II segments. Based on standards violation rates, Level I stream segments consist of those applicable segments which exhibited a violation rate of <15%. Segments which exhibited a violation rate of ≥15% were considered Level II.

Level I stations will be visited to confirm/refute the original assessments at the historical monitoring station. At a minimum, additional data will be collected for select monitoring

parameters. These data will be added to the pool of information historically available (when applicable). Certain stations, which previous data was not collected by OKC or the historical data is greater than 5 years will be monitored as part of the Level I strategy to provide more recent information.

Level II stations, as previously described, exhibited a higher water quality standards violation rate. These watersheds will be selected for a comprehensive monitoring efforts which may include multiple station monitoring efforts throughout the basin to better describe and define the problem boundaries, more inclusive parameter selection and additional programs which may aid in targeting particular segments or tributaries contributing to the water quality or biological impairment.

Monitoring Station Selection:

Stations were selected from the original pool of Watershed Characterization sites for the Level I monitoring strategy. Level II stations were selected from the Watershed Characterization site pool and new stations were added to comprehensively assess the basins. Historical sites from inactive and active programs were researched to insure that stations with some historical information were used when appropriate.

Sample Acquisition:

Water quality samples, in-situ measurements and/or on sight observations will be conducted every fourteen days for a period of fifteen months. A total of thirty site visits (excluding relevant biological collection, maintenance visits, diurnal dissolved oxygen measurement events or other specialized sampling events) will be conducted during this period. Stations which exhibit fecal indicator bacteria violations will be sampled during the applicable recreational season. These stations may not meet the thirty data point target but will meet or exceed the minimum sample requirements described in OAC 785:46-15-3(d). Other specialized monitoring may be implemented including caffeine and triclosan monitoring. In these cases, a scheduled monitoring schedule will be developed which may not meet the data requirements of OAC 785:46-15-3(d).

Sample acquisition will typically consist of grab samples, however composite based samples or other methods may be used according to any relevant goals established for the stream segment.

Field sampling personnel will meet all quality assurance/quality control measures. For the Priority Monitoring Program, a 10% quality assurance goal has been designated. The following equation will be used to determine each stations quality assurance requirements.


$$\text{Total Amount of QC Samples} = S * P * M$$

Where:

S= Total number of required samples/parameter

P= Percentage of QC samples required

M= Number of monitoring locations within the basin.



In Example:

Station 616 requires 30 BOD samples over a fifteen month period. The quality assurance requirements of 10% must be achieved. There are three monitoring stations within the Station 616 watershed.

S*P*M

$30 * 0.10 * 3 = 9$ QC BOD samples required

A QC event shall consist of one split sample and one blank sample. To describe potential stream segment variability, a replicate (temporal or spatial) may be collected.

Documentation:

Field visits shall be documented and meet any and all criteria established within the Quality Assurance Project Plan (QAPP) established for the monitoring location(s). The QAPP will describe the project organization, station background/history, quality objectives/criteria, training/certification, documentation/records, measurements/data acquisition, assessment/oversight and data validation and usability.

Analysis/Reporting:

The data analyses objectives will vary depending on the categorized level or the impairment listing of each stream segment. However, certain analysis and reporting goals shall be completed for each station. Descriptive statistics such as minimum, maximum, mean and median values will be calculated. Nonparametric trend tests such as Mann-Kendall, Regional Kendall, rank-sum test for step-trend and Hodges-Lehmann estimator of step-trend magnitude will be conducted as-needed to analyze both temporal and spatial trends.

Final analysis will consist of both independent station and a pooled basin analysis. As indicated in OAC 785:46-15-3(b)(3), a single station may be considered representative of no more than ten stream miles for wadable streams. In many cases, several stations may be monitored within ten mile stream segment. The Water Body Identification Number for each stream reach will be researched and all data will be pooled from that segment if the segment length is 10 miles or less. If multiple stream segments exist, those stations will be analyzed independently and pooled for additional analysis.

Annually, the information collected for the Priority Based Monitoring Program will be tabulated and reported in the Oklahoma City Storm Water Quality Annual Report. A narrative will summarize the key benchmarks achieved during that permit term. An electronic data file will be included with the tabulated monitoring values.

Comprehensive data summary assessment reports will be generated and submitted to the Oklahoma Department of Environmental Quality by the following dates.



ODEQ Report Target Date	Program Area	Scheduled Program Completion Date
1-Sep-15	Part 1	12-Jun-13
	Part 2	4-Aug-14
1-Sep-17	Part 3	30-Sep-15
	Part 4	23-Nov-16

Cooperating Departments and Agencies:

No cooperating Departments or Agencies are required for this permit component.

14. Illicit Discharge Detection and Elimination Program

Program Components:

- A. Complete field screening, 100% of the 554 monitoring locations (Year 1).
- B. Complete field screening, cumulative 33% of the selected 554 monitoring locations (Year 2).
- C. Complete field screening, cumulative 33% of the selected 554 monitoring locations (Year 3).
- D. Complete field screening, cumulative 33% of the selected 554 monitoring locations (Year 4).
- E. Complete field screening, cumulative 100% of the selected 554 monitoring locations (Year 5).
- F. Submit field screening summaries including follow-up reports and summary statistics in the Annual Report.

General Program Description:

The Illicit Discharge Detection and Elimination Program (IDDE) functions to locate and eliminate illicit discharges and improper disposals into the MS4. This program shall 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 establishes priorities and schedules for screening the entire MS4 three times during the permit term. Year 1 consists of a full screening of the 554 stations. Years 2, 3 and 4 consists of monitoring approximately 33% of the 554 stations each year. Year 5 is a complete screening of the 554 monitoring stations. SWQ shall require the elimination of illicit discharges and improper disposal practices as expeditiously as reasonably possible. Where the elimination of an illicit discharge within thirty (30) days is not possible, SWQ shall require an expeditious schedule for removal of the discharge. In the interim, SWQ shall require the operator of the illicit discharge to take all reasonable measures to minimize the discharge of pollutants to the MS4.

Illicit Discharges and Improper Disposal: Non-storm water discharge to the MS4 shall be effectively prohibited. For the purpose of this permit, the following discharges need not be addressed as illicit discharges by the permittee(s) nor prohibited from entering the MS4: discharges regulated by a separate OPDES permit; and non-storm water discharges identified by the permittee as specified in item (a) below.

Permittee(s) shall identify in the SWMP any categories of non-storm water that are not prohibited from being discharged into the MS4, in accordance with conditions described in items (1) and (2) below.

1. Categories of non-storm water discharges that the permittee(s) may exempt from the prohibition on non-storm water entering the MS4 include:



- a. Water line flushing;
 - b. Landscape irrigation;
 - c. Diverted stream flows;
 - d. Rising ground waters;
 - e. Uncontaminated ground water infiltration to separate storm sewers;
 - f. Uncontaminated pumped ground water;
 - g. Discharge from potable water sources;
 - h. Foundation drains;
 - i. Air conditioning condensation;
 - j. Irrigation water;
 - k. Springs;
 - l. Water from crawl space pumps;
 - m. Footing drains;
 - n. Lawn watering;
 - o. Individual residential car washing;
 - p. Flows from riparian habitats and wetlands;
 - q. Dechlorinated swimming pool discharges;
 - r. Street wash water;
 - s. Discharges from emergency firefighting activities provided procedures are in place for the Incident Commander, Fire Chief, or other on-scene firefighting official in charge to make an evaluation regarding potential releases of pollutants from the scene. Measures must be taken to reduce any pollutant releases to the maximum extent practicable subject to all appropriate actions necessary to ensure public health and safety. Discharges or flows from firefighting training activities are not authorized.
2. Categories of non-storm water discharges exempted from the prohibition on non-storm water must not be reasonably expected (based on information available to the permittee[s]) to be significant sources of pollutants to the waters of the United States, because of either:
- a. The nature of the discharges; or
 - b. Conditions placed on the discharges by the permittee(s).

Monitoring Station Selection:

Stations were originally selected based on several key criteria addressed in 40 CFR Part 122.26. Sampling may occur from underground conduits including reinforced concrete boxes (RCBs), reinforced concrete pipes (RCPs), PVC or other materials used to transport storm water flows. Stations may be located at natural streams, improved channels, manholes and outfalls.

Sample Acquisition:

Sampling will generally consist of grab samples and in situ measurements. As previously noted, monitoring stations may include underground, above ground, natural or other improved channels. In some cases, extension poles or other devices (such as pumps) will be utilized to acquire a water sample for analysis.

Parameters include but are not limited to field measurements of total chlorine, phenol, detergents, total copper, pH, discharge and water temperature. Field observations include local land use, a site description, odors, water color, water clarity, floatables, deposits/stains, vegetative condition, structural condition and any observations of biological attributes.

Calibration, sampling and documentation shall follow the guidance requirements specified in the Storm Water Quality Standard Operating Procedures (listed in the table below).

SOP #	SOP Name	Revision Date
8	Flow Measurement (SSOM)	7/6/2007
9	Flow Measurement (Meter Method)	10/10/2007
14	Reagent Standards / Shelf Life	10/17/2007
16	Dry Weather/Illicit Discharge Monitoring	4/19/2007
25	Flow Measurement (Timed Volume Method)	10/9/2007
26	Equipment Decontamination	10/9/2007

Documentation:

Each field visit will be documented on an Illicit Discharge Field Screening Program Field Form. Follow-up investigations will be documented with a Dry Weather Follow-up Report. All field data will be entered into an Access database.

Analysis and Reporting:

Analysis consists of tabulating the information as it is received. Screening values for each parameter were established for follow-up purposes. If the screening values is met or exceeded, a follow-up investigation will be initiated. The table below displays the aforementioned screening values.

Parameter	Screening Value
pH	≤6.50 or ≥9.00 (SU)
Copper	*Any Detection
Phenol	*Any Detection
Total Chlorine	≥0.2 mg/L
Detergents	≥0.15 mg/L
Visual Observations	Any Observed Adverse Impact

Annual reporting is required for the IDDE program. Field collected information is tabulated and reported in a spreadsheet format and narrative format in Oklahoma City’s Storm Water Quality Annual Report. Basic program statistics are generated which include the number of scheduled locations, number of site visits, number and type of detections and number of

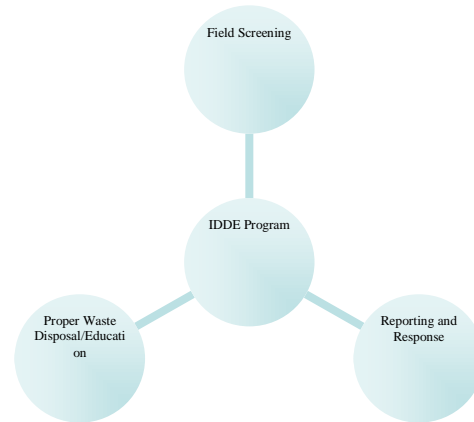


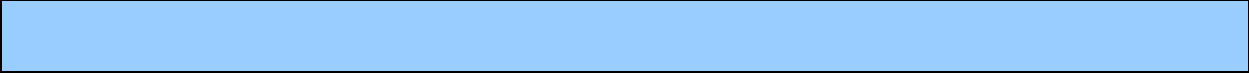
pollution investigations. Follow-up reports are generated and submitted with the tabulated data annually.

Cooperating Departments and Agencies:

The IDDE Program, as described above includes a screening program. However, the screening program is part of the larger IDDE Program efforts which encompasses several City programs. These programs include acquiring the proper contacts, training and proper waste disposal methods. The concept is to train City personnel and develop the internal Departmental and external entity contacts for effective and efficient response to spills or discharges. The major components are described below.

- Public Works, Storm Water Quality Spill Response - Personnel are on call 24 hours/day to respond to spills or other discharges which may cause or contribute to storm water pollution.
- Public Works, Storm Water Quality, Household Hazardous Waste Collection Facility - This facility is available to Citizens for proper disposal of normal household hazardous waste such as batteries, used oil, paint and cleaning products.
- Public Works, Storm Water Quality Outreach - Outreach efforts include multiple educational aspects. However, the center of these outreach efforts is to educate Citizens, businesses and civic organizations about the impact of polluted storm water discharges and how each person plays a part in reducing this impact.
- Public Works, Streets and Drainage Maintenance - Streets and Drainage Maintenance personnel have been trained to recognize accidental and illegal storm water discharges. This Division may often be the first response to an incident on City Streets.
- Public Works, Oil and Gas Division - Storm Water Quality works cooperatively with Oil and Gas Inspectors to respond to oil field related spills, emissions or other discharges.
- Oklahoma City Fire Department - Fire Department personnel are trained periodically with regard to storm water pollutants. The Fire Department may often be the first response to an accident or illicit discharge.
- Oklahoma City Police Department - Police Department personnel are trained periodically with regard to storm water pollutants. The Police Department may often be the first response to an accident or illicit discharge.
- Oklahoma City Office of Emergency Management - Department liaisons play a part in this office by providing clear communication lines between emergency, non-emergency, State and Federal personnel in response to an event.



- 
- Oklahoma City Action Center Hotline – Citizens can call, email or submit online issues, including pollution related issues, to Oklahoma City. The Action Center then forwards the issue to the applicable Department(s) for response.
 - Utilities Department – The Utilities Department maintains the water and waste water infrastructure. When potable and waste water discharges occur, Utilities Emergency Hotline is available 24 hours/day.
 - Oklahoma Department of Environmental Quality (ODEQ) – Storm Water Quality works closely with the Divisions of the ODEQ. Information is generally shared between the applicable ODEQ Divisions to respond accordingly to spills, complaints and illegal discharges.
 - Oklahoma Corporation Commission (OCC) – Storm Water Quality works closely with OCC field managers to respond to Oil and Gas related discharges.
 - Oklahoma Department of Wildlife Conservation (ODWC) – Storm Water Quality works cooperatively with the ODWC with regard to incidents which involve the death of aquatic or terrestrial wildlife.

15. Supporting Permit Conditions

Program Components:

- A. Submit completed interjurisdictional agreement(s) between permittees.

Interjurisdictional Agreements:

The City has agreed to supplement its permit application to allow the Oklahoma Department of Transportation (ODOT) and the Oklahoma Turnpike Authority (OTA) to be co-applicant and co-permittee through a Memorandum of Understanding (MOU).

- In 2006, the City and ODOT negotiated an updated MOU. The Oklahoma City Council approved the agreement with ODOT on August 1, 2006.
- In 2006, the City and OTA negotiated an updated MOU. The Oklahoma City Council approved the agreement with OTA on November 14, 2006.

All other MOU's are listed in Section 6 (Household Hazardous Waste/Used Motor Vehicle Fluids) of this report.

Supporting Departments and Agencies:

Fire Department

The Fire Department provides fire prevention, fire suppression, rescue and other emergency services. The department's comprehensive fire prevention programs include code enforcement, arson investigation and public education. The training work section provides state of the art training to fire fighters.


Spill prevention and response is a component of Oklahoma City's MS4 permit #OKS000101. SWQ and the Oklahoma City Fire Department HAZMAT Unit have worked together for many years to prevent, contain and respond to spills that have a potential to pollute the City's MS4(s). The spill response program includes a combination of spill response by each permittee and legal requirements for private entities within the permittees municipal jurisdiction.

Periodically, SWQ personnel are invited to speak with new Fire Department recruit classes to provide them an understanding of the roles and responsibilities and the Storm Water Quality Division and the MS4 Discharge Permit.

Police Department

The Oklahoma City Police Department, with a uniformed force of 1029 officers and 237 civilian employees, protects citizens and property from criminal activity, keeps the peace, enforces the law, apprehends criminals and helps prepare cases for prosecution.

The Oklahoma City Police Department may often be the first responders to an accident or incident which could cause or contribute to storm water pollution. New recruit police officers are periodically trained to understand the role and responsibilities of the Storm Water Quality Division.



General Services

- Fleet Services Division is charged with the operation and maintenance of the City vehicle and equipment fleet. Facilities are currently permitted through the Storm Water Quality Industrial Program.
- Building Management Division includes the skilled trades, mechanical and electrical support teams for City Facilities. Program managers are aware of Storm Water regulations and address those regulations to both in-house or contracted work performed.

Information Technology

The Information Technology Department (IT) is responsible for providing organizational support for technology-based communication and information systems. IT provides support related to Storm Water Quality's databases, Geographic Information Systems, mobile field computers and associated software.

Mayor and City Council

The Mayor and Oklahoma City Council approve ordinances, changes to ordinances, contracts, fees and annual budgets.

Municipal Counselor's Office/Municipal Court

All SWQ technicians are Municipal Code Enforcement officers. There are times when a permitted industrial facility or construction site will continue to have permit violations, at that time technicians can file an Affidavit of Probable Cause with the OKC Municipal Court.

Development Services Department

SWQ and the Code Enforcement section work together on issues that involve the potential for and occurrences of the contamination of City waterways.

Parks and Recreation Department

The Parks and Recreation Department provides a wide range of facilities, educational events, horticultural and garden experiences, facility management and grounds management services.

- As part of the Grounds Management Programs, Parks and Recreation employees receive annual pesticide, herbicide and fertilizer applicator training.
- Parks Administration is charged with the drafting of certain revocable permits for specific venues in Oklahoma City. These venues and associated activities may include primary body contact to surface waters. The revocable permits contain specific language regarding indicator bacteria numbers and management criteria to implement with regard to those criteria.
- The Golf Courses Division currently participates in compensatory mitigation. The James E. Stewart and Trospen Park golf facilities have ongoing compensatory mitigation projects located along the waterways running through the courses.

Personnel Department

The Personnel Department provides employee recruitment, selection, classification, compensation, training and benefit services.

- The Occupational Health Division provides medical surveillance screening to all SWQ emergency response personnel.

Planning Department

The Planning Department works with residents, businesses and community leaders to shape the appearance, use and development of Oklahoma City; to make Oklahoma City an even greater place to live. The Planning Department places a high priority on implementing new and innovative environmental friendly development techniques to protect sensitive public and private water supplies.

- The Comprehensive Planning and Urban Design Division focuses on three primary functions: urban design, comprehensive planning and current planning. Division responsibilities include drafting comprehensive plans and sector plans to provide policymakers, community groups and development interests the policy that ensures growth and development to achieve long-range goals.

Public Information and Marketing Department

The Public Information & Marketing (PIM) Department produces television, radio, web-based and print media informing the public about the City services such as the Household Hazardous Waste Facility services, hours of operation and types of chemicals accepted at the facility.

Other types of services provided by PIM include water bill inserts, “News to Know” newsletter, public service announcements are carried on Channel 20 and scheduling interviews with news outlets allow for cost effective program development.

PIM also assists with the development of informational brochures for SWQ’s Construction, Industrial, HHW, Public Outreach, and Environmental sections.

Public Works Department

The Public Works Department maintains the City’s infrastructure, streets, bridges, drainage, and traffic control facilities. The department reviews and issues construction related permits, works with engineers and contractors on capital improvement projects and improvements to City properties.

- The Streets and Drainage Maintenance Division is charged with the operation and maintenance of roadways and drainage networks among other duties. Streets emergency response provides early detection of illicit or accidental discharges which may impact the MS4. The Division functions as a key role in the activities associated with the ongoing inspection, maintenance and repair of the drainage system and roadways. The Division is responsible for the Salt Storage Facilities. The existing Central Maintenance Facility storage area holds up to 8,000 tons of salt and was put in service in October 2003. An additional facility has been constructed at 11633 N. Santa Fe Avenue.
- The Storm Water Quality Management Division is charged with the ongoing maintenance, records retention, reporting, education, collaboration and implementation of the permit required programs. Certain programs are implemented solely by the SWQ Division others are partially or wholly



implemented by other programs and Citizens.

- The Drainage Engineering Division is charged with various aspects of drainage review and maintenance of the storm drainage network including drainage plan review, creation and modification of drainage ordinances and approval of drainage related low impact development.
- The General Obligation Bond Program and Capital Improvement programs work towards the construction of new storm water infrastructure and other building projects such as streets, bridges, municipal facilities etc. These programs may require working with the US Corps of Engineers, the ODEQ and other stakeholders to insure environmental compliance.

Utilities Department

The Utilities Department provides the monthly customer service billing. The City includes a monthly storm water utility fee on water/sewer usage bills. This fee has created a dependable, dedicated fund for maintaining the City's MS4 systems. Fees are based on water meter size.

- Solid Waste Management includes the bulky collections, cart/curbside collections, field inspections and litter/illegal dumping management. In addition, Solid Waste administers the Street Sweeping Contract. The SWQ conducts periodic contractor audits to insure quality control.
- Line Maintenance Wastewater Section staff work to eliminate sanitary sewer line breaks and overflows. Personnel respond to Citizens calls and conduct the necessary repairs to sewer collection lines.
- Line Maintenance Water Section staff work to eliminate discharges from potable service lines. Personnel respond to Citizen calls and conduct the necessary repairs to potable distribution lines.
- Laboratory Analysis (Utilities Laboratory) provides assistance with regard to surface water testing, wastewater testing and potable water testing. The laboratory works with SWQ with regard to analysis of special collections related to the Oklahoma River, revocable permits (where primary body contact occurs) and various other surface water monitoring needs.

Office of Sustainability

The Office of Sustainability is responsible for enhancing the City's energy efficiency efforts and promoting sustainability throughout the organization and the community.

Zoo

The Zoo Pesticide "Walkabout" is one of the sessions provided to City employees with the intent of increasing applicator and service technician's awareness for pesticide safety, proper use and disposal, and understanding of pesticide application. Presenters select a topic of interest for that particular session such as insect control, garden & tree management. The discussion is followed by a tour of the grounds.



Legal Authority and SWMP Resources:

OKLAHOMA CITY MUNICIPAL CODE

Codified through

Ord. No. 23325, adopted March 27, 2007.

(Supplement No. 5, Update 7)

Chapter 16 Drainage and Flood Control

It is the purpose of this chapter to protect the general health, safety and welfare of the public from the hazards and damages of flooding from the various drainage areas in the City; to provide clean and sanitary channels for runoff; to prevent pollution of watersheds, streams and natural drainage channels; to prevent the encroachment of buildings or improvements on natural drainage channels; to equitably apportion the cost of improvements; to protect natural scenic areas; and to provide for the conservation of the natural resources of the area.

Chapter 47 Sewers and Sewage Disposal

No person shall deposit or discharge any wastewater, industrial waste, or other polluted waters or liquids on public or private property, in or adjacent to any natural outlet or any natural watercourse, or in any storm sewer within the City, or in any area under the jurisdiction of the City without the approval of the Environmental Protection Agency and the Department of Environmental Quality.

Chapter 48 Soil Disturbing Activities

No person may clear, grade, fill, excavate, store, mine, dispose of soil and earth materials, perform any other land-disturbing or land filling activity, or cause or allow any such activities without first obtaining a valid permit.

Chapter 57 Water Resources Article VI. Storm Water Management

It is purpose of this article to protect, maintain and enhance the environment of The City of Oklahoma City and the short-term and long-term public health, safety, and general welfare of the citizens of Oklahoma City by controlling discharges of pollutants to the City's storm water system and to maintain and improve the quality of the community water into which the storm water outfalls flow, including, without limitation, the lakes, rivers, streams, ponds, wetlands, sinkholes, and groundwater of Oklahoma City.

Chapter 57-148 Permit application fees

(a) Each application for the issuance of a New Facility Permit under this article shall be accompanied by a minimum non-refundable fee of \$55.00 plus such additional fees for land disturbing activity or industrial activity as may be required below.



(b) Each application for the issuance of a land disturbing permit under this article shall be accompanied by a non-refundable permit fee of \$55.00 per location.

(c) Each application for an existing facility permit required by Section 57-146 shall be accompanied by a fee of \$55.00.

Chapter 58-10 Wreckers

(f) Each wrecker driver dispatched to the scene of an accident shall be responsible for clearing from the street all debris existing as a result of such accident, including any ordinary vehicle fluids found at the scene of collisions and absorbing material used to absorb vehicle fluids.

Chapter 60-5 Payment required

All persons required by the Oklahoma City Municipal Code, 1993, to pay a fee for a license, permit, certificate, inspection, action, use, or other service shall pay to the City the amount established in the General Schedule of Fees.



**OKLAHOMA DEPARTMENT OF
TRANSPORTATION**

**REVISED STORMWATER MANAGEMENT
PROGRAM (SWMP)**

**PERMIT NO. OKS000101
(Oklahoma City)**

Revised September 9, 2013



1. Introduction

Under Oklahoma Discharge Elimination System Permit (OPDES) No. OKS000101 the Oklahoma Department of Transportation (ODOT) is authorized to discharge pollutants associated with stormwater from rights of way within the City of Oklahoma City. In accordance with that permit, ODOT is responsible to provide a revised Stormwater Management Program (SWMP) six months from the effective date of the permit which was March 15, 2013 and by April 1 each year annually. This first revised document is due to the Oklahoma Department of Environmental Quality (ODEQ) on September 16, 2013. This document is the revised SWMP prepared in accordance with this requirement. The document is organized into the following sections, outlining ODOT compliance actions under the permit:

- Section 2 New and Re-Development
- Section 3 Flood Control Projects and Structural Controls
- Section 4 Construction Site Runoff
- Section 5 Industrial High Risk Runoff
- Section 6 Household Hazardous Waste / Used Motor Vehicle Fluids
- Section 7 Public Outreach
- Section 8 Roadway Operation and Maintenance
- Section 9 Pesticide, Herbicide, and Fertilizer Application
- Section 10 Pollution Compliant and Spills Response Program
- Section 11 Floatables
- Section 12 Wet Weather Analytical
- Section 13 Watershed Characterization
- Section 14 Illicit Discharge Detection and Elimination Program
- Section 15 Supporting Permit Conditions, Monitoring Programs, and Documents



2. New and Re-Development

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity c: Revise ordinances and update SWMP with criteria and procedures.

ODOT does not have legal authority to pass ordinances or to regulate land development activities by others.

ODOT will consider the use of storm water quality BMP's in new highway construction on a case by case basis. ODOT will also consider the use of storm water quality BMP's in major redevelopment or highway expansion projects on a case by case basis.

Activity d: Update SWMP to include criteria and procedures.

ODOT will consider the use of storm water quality BMP's in new highway construction on a case by case basis. ODOT will also consider the use of storm water quality BMP's in major redevelopment or highway expansion projects on a case by case basis.

Activity e: Update Construction BMP Manual.

ODOT will review construction runoff control procedures and performance from April 2013 to April 2014 and update manual as necessary.



3. Flood Control Projects and Structural Controls

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity c: Continue drainage maintenance program related to repair of drainage structures and creek channel crossings.

ODOT will maintain ODOT drainage facilities in accord with standard operating procedures.



4. Construction Site Runoff

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity a: Continue program using permitting, inspections, and investigations

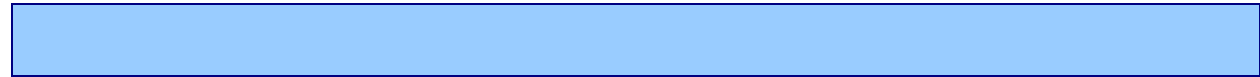
Because ODOT does not have the legal authority to regulate construction activities, ODOT will not “permit” construction activities, however, ODOT will require adherence to Special Provision 220. ODOT will require contractors to obtain coverage under OKR10. ODOT will conduct construction site inspections and investigations as required.

Activity b: Regulate runoff from construction sites including enforcement provisions

Because ODOT does not have the legal authority to regulate construction activities or impose enforcement provisions, Oklahoma City conducts this activity within their jurisdiction. ODOT does not allow third parties to construct facilities on our rights of way.

Activity c: Conduct public outreach and annual workshops

ODOT will collaborate with the Contractor’s Association to conduct one contractor workshop during the permit year ending April 2014.



5. Industrial High Risk Runoff

This permit requirement is not applicable to ODOT. It has been assigned to the City of Oklahoma City.



6. Household Hazardous Waste / Used Motor Vehicle Fluids

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity a: Provide summary of evaluation and assessment of results from collection / recycling / safe disposal events.

ODOT will collect and recycle used oil and automotive fluids generated at our service centers and maintenance yards in Oklahoma City.

Activity d: Continue the household hazardous waste collection program via MOU's with surrounding Phase II cities.

ODOT has not entered into any MOU's.



7. Public Outreach

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity a: Continue public outreach program

ODOT will continue our statewide anti-litter campaign, Oklahoma, Keep Our Land Grand and the the litter hot-line (1-888-5-LITTER), to report someone littering anywhere across the state.

School-age children will continue to be invited annually to enter a storm water quality poster contest, sponsored by ODOT, Oklahoma Department of Environmental Quality, Oklahoma Department of Education; Keep Oklahoma Beautiful, a non profit organization; and the Cherokee Nation.

ODOT will continue to coordinate the work of over 1,000 Adopt-a-Highway groups (46 in Oklahoma City) who remove litter from their two-mile section of state highways at an interval of four times a year.

ODOT will continue to conduct the “TRASH-OFF”, an annual volunteer spring roadside cleaning event.



8. Roadway Operation and Maintenance

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity a: Continue program through panning crews, curb inlet cleaning, and street sweeping.

ODOT will operate and maintain roadway facilities in accord with existing standard operating procedures. Right of way mowing will be conducted six times per year in the Oklahoma City area.

Activity b: Update SWMP to include any roadway operation and maintenance changes.

ODOT will update SWMP if any changes occur.

Activity c: Provide annual summary of activities.


ODOT will provide annual summary.

Landscape

ODOT will continue to operate the Highway Tree Grant Program, which uses ODOT Transportation Enhancement funds to plant landscaping trees throughout the state.

Wildflowers

ODOT will continue to conduct wildflower planting. Drill seeders, specifically designed for wildflower seed, are used by ODOT for planting on highway roadsides. These drills are available for use for Oklahoma communities and organizations.



9. Pesticide, Herbicide, and Fertilizer Application

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity a: Continue annual training / education / certification classes on management techniques.

ODOT will continue to conduct training, education, and certification regarding management techniques. ODOT staff will be instructed to apply these chemicals in accord with their manufacturer's instructions.



10. Pollution Compliant and Spills Response Program

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity a: Respond to citizen pollution complaints.

ODOT will continue to record and respond to citizen pollution complaints.

Activity b: Respond as technical support for HMU on hazardous material incidents.

This permit requirement is not applicable to ODOT. It has been assigned to the City of Oklahoma City.

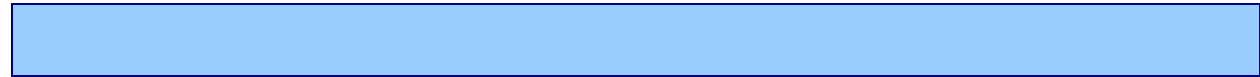
Activity c: Provide summary of pollution complaints and spill responses annually.

ODOT will summarize complaints and spill response activities annually.



11. Floatables

This permit requirement is not applicable to ODOT. It has been assigned to the City of Oklahoma City.



12. Wet Weather Analytical

This permit requirement is not applicable to ODOT. It has been assigned to the City of Oklahoma City.



13. Watershed Characterization

This permit requirement is not applicable to ODOT. It has been assigned to the City of Oklahoma City.



14. Illicit Discharge Detection and Elimination Program

This permit requirement is not applicable to ODOT. It has been assigned to the City of Oklahoma City.



15. Supporting Permit Conditions, Monitoring Programs, and Documents

Required ODOT compliance activities are summarized in Part III.A. of the permit, as noted below:

Activity a: Submit inter-jurisdictional agreements.

ODOT has previously submitted our agreement with the City.



**OKLAHOMA
TURNPIKE
AUTHORITY**

STORM WATER MANAGEMENT PROGRAM (SWMP)

Permit Number OKS000101

March 15, 2013 – March 14, 2018

BACKGROUND

In compliance with the Oklahoma Pollutant Discharge Elimination System Act (OPDES Act), and the rules of the State of Oklahoma Department of Environmental Quality (DEQ); Federal Clean Water Act; and NPDES Regulations, the Oklahoma Turnpike Authority (OTA), with the City of Oklahoma City, and the Oklahoma Department of Transportation (ODOT) became co-permittees and are allowed to discharge stormwater from the Municipal Separate Storm Sewer (MS4) System under Permit Number OKS000101.

The Oklahoma Turnpike Authority has prepared this Stormwater Management Program (SWMP) to comply with the permit requirements and address storm water pollution related to highway planning, design, construction, and maintenance activities throughout the Oklahoma Turnpikes. OTA administers the implementation and ensures enforcement to mitigate pollution in storm water runoff from the Turnpike facilities, roadways and right-of-ways.

This SWMP shall cover the term of the permit and shall be updated as necessary, or as required, to ensure compliance with statutory requirements of the Clean Water Act, and with the annual reporting requirements of the permit. OTA is required to report the status of the SWMP including any modifications, and the plans for implementing those modifications.

Coverage for this permit will be for the Turner and Kilpatrick turnpikes, but components of this SWMP are implemented on all the Turnpikes.



Permit Enforcement and Oversight

The City will be the primary lead in construction site inspections, local record keeping, and oversight of Phase I compliance. OTA will rely on the City for assistance in enforcement on noncompliant parties involved with OTA construction parties.

In addition, OTA plans to work closely with the City when off-site storm water enforcement is necessary since OTA does not have the legal authority of enforcement within the Oklahoma City municipal area. Particularly in events that OTA personnel positively identifies a unauthorized non-storm water discharging source with a potential to cause pollution, the City will be contacted to investigate.



OTA STORMWATER MANAGEMENT PROGRAM


While, majority of the requirements are undertaken by the City as the lead entity under the agreement between the City and OTA, the following summarizes the OTA's stormwater management program, outlined according to the permit. As a requirement, an annual reporting of the status and proposed changes to the program will be submitted to the ODEQ in accordance with the frequency requirements of the permit. This program takes into account the components to which major activities of the OTA are generally focused.

I. Structural Controls and Storm Water Collection System Operations.

Culverts, roadside ditches and water detention structures serve as backbone of a stormwater conveyance system. As such, assuring that flow is not impeded because of clogging by accumulated sediments or debris is crucial to its effective operation. Maintenance activities are performed continuously throughout the year. It includes activities such as storm sewer and culverts inspection, cleaning and repairs, open ditch cleaning, and vegetation controls. As part of the vegetation control, regular mowing and proper disposal of mowing debris is practiced, with the objective of avoiding accumulation and obstructing flow of water. Roadside ditches are also cleared of deposits that could impede water flow or could end up in the creeks or lakes.

For development projects with disturbance area of over an acre, a Stormwater Management Plan is a requirement. This is in conjunction with to the requirements of the following OTA 2010 Standard Specifications:

- Section 107.2 – Storm Water Management
- Section 220 – Management of Erosion, Sedimentation and Storm water pollution prevention and Control
- Section 221 – Temporary Sediment Control



In the Storm Water Management Plan for projects, structural practices which are applicable are marked as recommended for use in the project. Examples of structural practices are among others are:

- stabilized construction exits
- temporary silt fences and dikes
- diversion, interceptor or perimeter dikes
- rock filter dams
- paved ditch with ditch liner protection
- temporary sediment basins and filters
- rip-rap
- sandbag berms
- inlet sediment filters.

The effectiveness of controls is a function of variables related to site conditions, highway design, and other stormwater considerations. OTA adopts the most site appropriate measure that conforms to the objectives of minimizing storm water pollution from point and non-point sources.

OTA also has an inventory of all existing culverts along the turnpike systems for reference mapping, and to aid in the outfall determination. The culverts and other structures are inspected annually and whenever there are instances such as floodings, that necessitate a structure check-up.

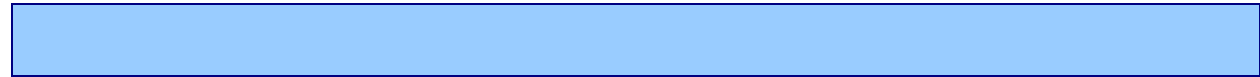


II. **Areas of New Development and Significant Redevelopment:**

OTA's program of development is guided by its 5-year Capital Plan. The Capital Plan enumerates projects throughout the whole Oklahoma turnpike system per year, and is also updated annually. In its development and re-development projects, OTA tries to minimize vegetation disturbance, changes in on-site natural features such as slopes and filtration areas which can greatly alter the peak flows and affect downstream receiving body. The use of Low Impact Development (LID) will also be considered if feasible for turnpike projects.

All construction plans for development projects of the OTA are reviewed and required to include a Stormwater Management Plan. Included in this plan are: descriptions of the project site, erosion and sediment controls enumerating soil stabilization practices, structural practices as well as contractor's responsibility. The contractor is likewise required to submit a Storm Water Pollution Prevention Plan (SWPPP) to obtain a permit, in compliance with ODEQ General Permit (OKR10), which authorizes discharges of stormwater associated with construction activities. The SWPPP shall be prepared in accordance with good engineering practices and shall describe and ensure the implementation of practices that will be used to reduce the pollutants in storm water discharges associated with construction activities at the site and assurance with the terms and conditions of the permit.

OTA shall also incorporate emerging technology for potential inclusion into the contractors SWPPP as well as the Construction BMP Manual. The selection of technology shall be based on feasibility criteria relative to highway design and results shall be reported annually.




III. Roadways:

OTA has a street sweeping program which involves routine sweeping and clean-up after deicing. The John Kilpatrick and Turner Turnpikes are swept twice a year to ensure that the lane miles are operating in a manner that will minimize discharge pollutants from the roadway. During such operation, shoulders are swept to remove accumulated sediment, salt and other debris.

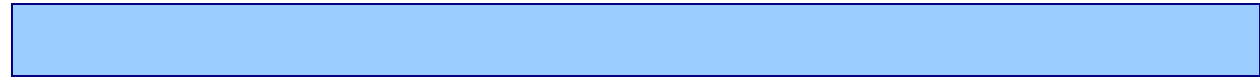
In addition, trash containers are properly maintained for the collection and disposal of trash on turnpikes.

Construction sites are required to be swept and maintained regularly, as part of good housekeeping, and thus avoiding dust, rocks and other construction debris from getting into the roadways, which are not only hazardous, could also be an impediment to stormwater flow by blocking or clogging the drains. It could also be intermixed with sheet flow and end up in the receiving body of water thus causing pollution.



IV. **Pesticide, Herbicide, and Fertilizer Application:**

OTA requires all turnpike herbicide applicators together with contract applicators to be licensed and subject to all of the regulations under the Oklahoma Herbicide Applicators Law including the re-certification. Applicators receive yearly training on pesticides, herbicides, and fertilizer chemicals from the Oklahoma Vegetation Management Association.



V. **Illicit Discharges and Improper Disposal:**

As part of good housekeeping, a program on the discharge or disposal of used motor vehicle fluids, grass clippings, leaf litter and animal wastes within the turnpike limits is observed by the Maintenance personnel. Contents of trash and litter bins are disposed of properly; used oil is collected and recycled by a private contractor who routinely picks up the spent oil. Batteries and non-bio degradable wastes such as tires are returned to stores where they were purchased.


OTA will continue its litter collection program with the addition of a recycling program if feasible. The on-going program will be reviewed and a documentation of the frequency as well as recording of the quantities of litter collected, separated and recycled will be studied. As an added measure, lids on trash receptacles should be always secure to avoid trash from becoming litter and be a source of floatables.

VI. Construction Site Runoff

Construction is one of the major undertakings of the turnpike as far as storm water is concerned. As mentioned under areas of re-development and new development, OTA requires that the contractor comply with General Permit (OKR10) for Storm Water Discharges from Construction Activities within the State of Oklahoma. This entails obtaining an authorization from the DEQ to enable to discharge pollutants in storm water runoff associated with construction activities. OTA strictly adheres to not issuing a Work Order without the authorization from the DEQ. Part of the permitting process is the preparation of a Storm Water Pollution Prevention Plan (SWPPP) covering the discharges and prepared in accordance with good engineering practices. Identified in the SWPPP document are the potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site. The SWPPP shall describe and ensure the implementation of practices that will be used to reduce the pollutants in stormwater.

OTA realizes that construction activities contribute to soil erosion and can result in sediment and pollutant transport to local waterways by stormwater runoff. Sediment transport from soil erosion can be effectively controlled or reduced by the use of several preventive measures, BMP's (Best Management Practices). OTA tries to implement the following BMP's as preventive processes, among others :

- **Scheduling** – Schedule construction phases around the weather to better manage erosion and sediment control. The project schedules usually sequence construction activities with the installation of erosion and sediment control measures. The purpose is to reduce the amount and duration of soil exposed to erosion by wind, rain and vehicle tracking. Planning incorporates the use of schedule or flow chart to layout the construction plans. Work out the sequencing and timetable for starting and completion of each activity such as clearing, grading and excavation, pouring foundations, installing utilities, etc. Within the turnpike rights-of-way, OTA maintains site stabilization year-round, and keeps wet season sediment trapping devices in an operational condition. Whenever possible, OTA schedules work to minimize the extent of site disturbance at any one time. Routinely verify that the work is progressing in accordance with the project schedule. And if progress deviates, corrective actions are taken.
- **Erosion Control** – Soil stabilization is a key component in the control of erosion. By stabilizing disturbed soil areas with covers or binders, the exposed soils are less likely to erode from the effects of wind or rain. OTA tries to design projects to maintain areas of existing vegetation to reduce the amount of sediment in sheet flow runoff by maximizing existing site vegetation and minimizing the extent of the disturbed area. Fencing is likewise observed. Contractors are also required to control and properly dispose of construction spoils such as discarded building materials, concrete truck washouts, sanitary wastes and litter, especially if construction of project requires resources to be located within the limits of the floodplains. They are required to remove resources from the floodplains at the end of each workday.
- **Site Plan Review procedures** – OTA recognizes the importance of proper site planning to incorporate consideration of potential water quality impacts. Areas which shall be disturbed and affected by the development should be taken into account; therefore a site



assessment should be included as part and parcel of the bid award process and findings of which be included in the SWPPP.

- **Accountability procedures** – OTA’s plan to ensure compliance with its erosion and sediment control mechanism includes sanctions and enforcement mechanisms. Possible sanctions include stop work orders, fines, bonding requirements, and permit denials.
- **Water or environmentally safe soil stabilizer** – is required to be sprayed on all exposed earth surfaces during clearing, grading, earth moving and other site preparation. Dry disturbed areas and dry stockpiles of soil is watered throughout the day to minimize dust. Trucks transporting dry soil are required to be covered by tarpaulins. Care should be taken when applying water and stabilizer to prevent washing sediment off-site or storm drains or natural waterways. Grading activities need to be restricted when winds exceed 15 miles per hour or as deemed necessary by the Construction Inspector.

As such, OTA will draft and establish a Construction Stormwater Quality BMP Guidance booklet to recommend practices relating to construction activities for stormwater runoff. This document shall outline procedures for quality assurance/quality control which should be observed in construction sites. Best Management Practices relevant to turnpike development projects, as well as post-construction information will be taken into account in this booklet.

VII. Public Education

The permit requires a program that has been successful in the past, to be revised, updated and shall provide a description of the how the information would be disseminated to individuals on awareness about storm water.

OTA shall continue to focus on increasing general awareness to their employees, Turnpike Contractors and the general public of the links between land use practice and storm water pollution. Information regarding stormwater runoff, adverse effects of polluted stormwater runoff will be continuously updated and supplemented. The following activities constitute the OTAs public education campaign:

- **A stormwater brochure** will be circulated on the pikepass website (www.pikepass.com) to provide information on effects of polluted stormwater run-off and what each individual can do to minimize if not avoid the adverse effects of pollution to bodies of water. The brochure shall be updated at least once a year to supplement familiarity about wastewater. This material shall also contain updates on OTA projects in relation to stormwater, its best management practices and success in implementation.
- **The bookmark** which was created containing “10 things you can do to prevent storm water runoff pollution” is still distributed to visitors of the OTA headquarters. This period, OTA intends to come up with a different design and include more information about stormwater. This proposed bookmark shall also be distributed to all turnpike employees, as well as to patrons, contractors and visitors of the turnpike workplaces.
- **OTA has allocated a spot on the pikepass website** to contain information about stormwater management. Said Information shall be updated to contain recent information regarding OTA’s efforts on stormwater management; as well pikepass contact information on reporting pollution and littering on the turnpike systems.



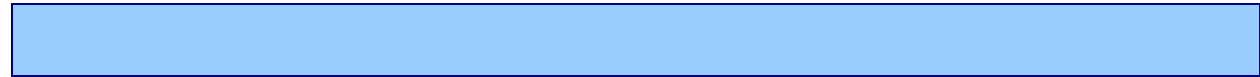
VIII. Employee Education

OTA Engineering Staff attends conferences, training and seminars initiated by the ODEQ as part of its involvement in storm water awareness. Annually, DEQ sponsors the storm water conference, a 2-day event which presents highlights in storm water activities, emerging technology, EPA guidelines and updates and other useful information.

Further, OTA Maintenance has regular training activities relative to good housekeeping, included but not limited to:

- mowing procedures – height protocol to maintain
- herbicide spraying – frequency and location of application
- maintenance of equipment – procedure in handling spent oil, discarded parts (batteries and tires recycling), vehicle wash area drainage and discharge
- Highway and bridge cleaning and sweeping – protocols and procedures in maintaining debris-free roadways and bridges, and proper disposal of debris and/or appurtenance replaced or repaired.
- De-icing programs, salt storage procedures – handling, storage and post event cleanup.
- A pro-active approach will be taken on drains and inlets. It is proposed that there be a check-up on drain inlet barriers and its surrounding areas, before and after storms, at 24-hour intervals during extended storms, and weekly during the rainy season. This is to ensure that no impediments to the flow are present, and no pollutants will be washed with the storm water.

OTA however, relies on emergency response personnel from the City to handle spill events and/or accidents that occur within the turnpikes.



IX. Public Participation and Involvement

OTA intends to strengthen its information campaign targeting employees, on-site contractors and individuals using OTA facilities about the steps they can take to reduce storm water pollution and how to become involved in storm water management programs. In general, target pollutant sources along the Turnpike include sediments from erosion as a result of slope changes and development, improperly controlled construction sites, and litter.

Steps which will be taken to involve the public include:

- Print media – including newsletters and brochures
- Website postings – efforts taken by OTA on storm water programs.
- Litter hotline – OTA has a number to be contacted to report pollution and littering within the turnpike systems.

Once the OTA SWMP is accepted and approved, the document will be posted on the website and would be made available for the public to obtain copies.