

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE  
DALLAS, TEXAS 75202-2733

December 22, 1994  
FACT SHEET

for draft National Pollutant Discharge Elimination System (NPDES) Permit No. OKS000101, for the Oklahoma City Municipal Separate Storm Sewer System to discharge to waters of the United States.

**1. NOTICE OF INTENT TO ISSUE A PERMIT.** The Environmental Protection Agency (EPA) has made a tentative determination to issue a permit, after consultation with the State of Oklahoma, for the discharge of storm water from the Municipal Separate Storm Sewer System described in the application. Permit requirements are based on the Clean Water Act (33 U.S.C. 1251 *et seq.*), hereafter referred to as the Act, and NPDES regulations (40 CFR Parts 122 and 124).

**2. PERMITTING AUTHORITY.** The NPDES permitting authority is: U.S. Environmental Protection Agency, Region 6, Permits Branch, 1445 Ross Avenue, Dallas, Texas 75202-2733.

**3. APPLICANT(S).** The Applicant(s) is(are): City of Oklahoma City. Oklahoma Department of Transportation (ODOT) and Oklahoma Turnpike Authority (OTA) also own/operator portions of the Oklahoma City Municipal Separate Storm Sewer System. Oklahoma City, ODOT, and OTA have been working on co-applicant status for some time and the Agency wishes to encourage, and not hinder, the cooperative efforts of these owners of portions of the Oklahoma City Municipal Separate Storm Sewer System. The Agency proposes to include ODOT; and OTA as co-permittees in the final permit provided (1) Oklahoma City, ODOT, and OTA provide an agreement in principle to be co-permittees; (2) Oklahoma City, ODOT, and OTA commit to expeditious schedules to complete interjurisdictional agreements; and (3) ODOT, and OTA provide initial Storm Water Management Programs for their portions of the Municipal Separate Storm Sewer System (subject to appropriate schedules for program implementation and augmentation) prior to issuance of the Agency's final permit decision. Oklahoma City, ODOT, and OTA are to be commended for their consensus, cooperation, and partnership building efforts necessary to be co-permittees.

**4. PERMIT WRITER.** The permit writer is: Brent Larsen, Municipal Permits Section (6W-PM).

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

## **6. DISCHARGES AUTHORIZED BY THIS PERMIT.**

**a. Storm water.** This permit authorizes all existing or new storm water point source discharges to waters of the United States from the Municipal Separate Storm Sewer System (MS4).

**b. Non-storm water.** This permit does authorize the discharge of storm water commingled with flows contributed by process wastewater, non-process wastewater, or Storm Water Associated with Industrial Activity **provided** such discharges are authorized under, or applied for, separate NPDES permits. In addition, certain types of non-storm waters listed in 40 CFR 122.26(d)(2)(iv)(B)(1) are allowable if appropriately addressed in the Storm Water Management Program (SWMP).

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

- i. Section 402(p)(3)(B) of the Act required an effective prohibition on non-storm water discharges to a MS4 and controls to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP).
- ii. Section 402(p)(3)(A) of the Act requires compliance with treatment technology (BAT/BCT) and Section 301 water quality requirements on discharges of Storm Water Associated with Industrial Activity.

Because of the difference in the statutory requirements, and the fact that the Act does not exempt Storm Water Associated with Industrial Activity from the requirement to obtain a separate NPDES permit, these storm water discharges can not be authorized by the MS4 permit. Such discharges would require a separate NPDES permit. However, the permittees are responsible for the

quality of the combined discharge, and have a vested interest in locating uncontrolled and unpermitted illicit and industrial storm water discharges.

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

**7. RECEIVING STREAM SEGMENTS AND DISCHARGE LOCATIONS.** The discharges from the MS4 are into Cimarron River, Deer Creek, Canadian River, W. Elm Creek, E. Elm Creek, Little River, Sprink Creek, Cow Creek, Deer Creek, Walnut Creek, Chisolm Creek, Bluff Creek, Deep Fork River, Arkansas River and tributaries thereto in the North Canadian River Basin (Water Quality Management Basin 5 - Segments 520510, 520520, 520810, 520610, et. al.) and the Upper Arkansas River Basin (Water Quality Management Basin 6 - Segment 620910). The discharges are located on those waters in the City of Oklahoma City, in Oklahoma, Canadian, Pottawatomie, and Cleveland Counties, Oklahoma. The designated uses of the receiving streams include: Public and Private Water Supply, Warm Water Aquatic Community, Habitat Limited Aquatic Community Agriculture, Municipal and Industrial Process and Cooling Water, Primary Recreation, Secondary Recreation, and Aesthetics.

**8. EFFECTIVE DATES.** Compliance with permit conditions is required **30** days from the issuance of the permit, except:  
a. as specified in the Part III compliance schedules; and  
b. for SWMP conditions in Part II.A (refer to section 13 of this fact sheet).

**9. PUBLIC NOTICE.** Upon publication of the public notice and this fact sheet, a 30 day public comment period shall begin. During this period, any interested persons may submit written comments on the draft permit, including the proposed SWMP, to the EPA point of contact listed below. Also during this period any person may request a public hearing to clarify issues involved in the permit decision. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

**10. EPA POINT OF CONTACT.** For additional information contact Ms. Ellen Caldwell at (214) 665-7513, Permits Branch (6W-PS), U.S. Environmental Protection Agency, 1445 Ross Ave, Dallas, Texas 75202-2733

**11. BASIS FOR PERMIT CONDITIONS.**

**a. Statutory basis for permit conditions.** The conditions established by this permit are based on Section 402(p)(3)(B) of the Act which mandates that a permit for discharges from MS4s must: effectively prohibit the discharge of non-storm water to the MS4; and require controls to reduce pollutants in discharges from the MS4 to the maximum extent practicable including best management practices, control techniques, and system, design and engineering methods, and such other provisions determined to be appropriate. MS4s are not exempt from compliance with Water Quality Standards. Section 301(b)(1)(C) of the Act requiring that NPDES permits include limitations, including those necessary to meet water quality standards, applies. The intent of the permit conditions is to meet the statutory mandate of the Act.

As authorized by 40 CFR 122.44(k), the permit will be utilizing Best Management Practices, a comprehensive SWMP, as the mechanism to implement the statutory requirements. Section 402(p)(3)(B)(iii) of the Act clearly includes structural controls as a component of maximum extent practicable requirement. The EPA has encouraged permittees to explore opportunities for pollution prevention measures, while reserving the more costly structural controls for higher priority watersheds, or where pollution prevention measures are unfeasible or ineffective.

**b. Regulatory basis for permit conditions.** As a result of the statutory requirements of the Act the EPA promulgated the MS4 Permit application regulations, 40 CFR 122.26(d). These regulations described in detail the permit application requirements for operators of MS4s. The information in the application (Part 1 and 2) was utilized by the EPA to develop the permit conditions and determine permittees status in relationship to these conditions.

**c. Discharge goals and limitations.**

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

**No discharge of toxics in toxic amounts.** It is the National Policy that the discharge of toxics in toxic amounts be prohibited (Section 101(a)(3) of the Act). The Oklahoma Water Quality Standards (Section 785:45-5-12(e)(6)) states "Surface waters of the state shall not exhibit acute toxicity and shall not exhibit chronic toxicity outside the mixing zone."

**No discharge of pollutants in quantities that would cause a violation of**

**State water quality standards.** Section 301(b)(1)(C) of the Act and 40 CFR 122.44(d) require that NPDES permits include "...any more stringent limitations, including those necessary to meet water quality standards, treatment standards, or schedule of compliance, established pursuant to State law or regulations..." Implementation of the SWMP is reasonably expected to provide for protection of State water quality standards.

**No discharge of floatable debris, oils, scum, foam, or grease in other than trace amounts.** The Oklahoma Water Quality Standards (OAC 785:45-5-19) require waters of the State to "...be maintained so as to be essentially free of floating debris, bottom deposits, scum, foam and other materials, including suspended substances of a persistent nature, from other than natural sources."

**No discharge of non-storm water from the municipal separate storm sewer system, except in accordance with Part I.B.2.** Permits issued to MS4s are specifically required by Section 402(p)(3)(B) of the Act to "...include a requirement to effectively prohibit non-storm water discharges into the storm sewers..." The regulation (40 CFR 122.26(d)(2)(iv)(B)(1)) allows the permittee to accept certain non-storm water discharges where they have not been identified as significant sources of pollutants. Any discharge subject to its own NPDES permit is not subject to the ban on non-storm water.

**No degradation or loss of State-designated beneficial uses of receiving waters as a result of storm water discharges from the municipal separate storm sewer (unless authorized by the State in accordance with the State's Antidegradation Policy).** The State of Oklahoma has adopted an Antidegradation Policy as part of their Water Quality Standards (OAC 785:45-3-1) which provides for maintenance of: existing instream water uses; existing water quality levels where existing water quality exceeds the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (except where the State has determined that lowering water quality is necessary to accommodate important economic or social development in the area where the waters are located); existing water quality where high quality waters constitute an outstanding natural resource (e.g. waters of National and State parks and wildlife refuges or exceptional recreational or ecological significance); and compliance with Section 316 of the Act where potential water quality impairment is associated with a thermal discharge.

**ii. Discharge Limitations:** No numeric limitations are proposed at this time. In accordance with 40 CFR 122.44(k), the EPA has required a series of Best Management Practices, in the form of a comprehensive SWMP, in lieu of numeric limitations. Numeric limitations will be included in the final permit if required by the State as a condition for certification of the permit under Section 401 of the Act.

**12. STORM WATER MANAGEMENT PROGRAM.** The SWMP submitted by the permittees was required to contain program elements for each of the items in **Table A**.

**Table A - Storm Water Management Program Elements**

Required Program Element	Permit Parts	Regulatory References (40 CFR 122.26)
Structural Controls	II.A.1	(d)(2)(iv)(A)(1)
Areas of new development & significant redevelopment	II.A.2	(d)(2)(iv)(A)(2)
Roadways	II.A.3	(d)(2)(iv)(A)(3)
Flood Control Projects	II.A.4	(d)(2)(iv)(A)(4)
Pesticides, Herbicides, & Fertilizers Application	II.A.5, A.10.c	(d)(2)(iv)(A)(6)
Illicit Discharges and Improper Disposal	II.A.6, A.10.a-.b	(d)(2)(iv)(B)(1)-(3), (iv)(B)(7)
Spill Prevention and Response	II.A.7	(d)(2)(iv)(B)(4)
Industrial and High Risk Runoff	II.A.8, A.11.c	(d)(2)(iv)(C), (iv)(A)(5)
Construction Site Runoff	II.A.9	(d)(2)(iv)(D)
Public Education	II.A.10	(d)(2)(iv)(A)(6), (iv)(B)(5), (iv)(B)(6)
Monitoring Program	II.A.11, V	(d)(2)(iv)(B)(2), (iii), (iv)(A), (iv)(C)(2)

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

The following summarize the SWMP elements submitted by the permittee(s) to satisfy the requirements. Where elements were deemed by the EPA to require augmentation, or where significant submittals were indicated in the SWMP, schedules were included in Part III of the permit. Dates contained in the Part III schedules were based on the assumption that the permit will have an effective date of **March 1, 1995**, and may be adjusted appropriately if this date is significantly delayed or if comments received on the draft permit during the public comment period warrant.

**a. Structural Controls:** *The MS4 and any storm water structural controls shall be operated in manner to reduce the discharge of pollutants to the Maximum Extent Practicable.*

Oklahoma City will maintain and inspect the MS4's structural controls owned or operated by the City. Permittees will update the SWMP to include operation and maintenance procedures and schedules for storm water structural controls by July 1, 1996

**b. Areas of New Development and Significant Redevelopment:** *A comprehensive master planning process (or equivalent) to develop, implement, and enforce controls to minimize the discharge of pollutants from areas of new development and significant re-development after construction is completed.*

Oklahoma City has existing ordinances regulating development, and is in the process of updating these ordinances to better address water quality concerns. The policy described in the SWMP includes reliance on existing and proposed policies for permitting development and construction. The City is currently working on revisions to local ordinances and procedures for new and significant redevelopment. The permit requires the City to complete any necessary revisions to ordinances or rules and update the SWMP to include criteria and procedures for determining and enforcing requirements for structural and non-structural controls on new and significant by July 1, 1997. The City has proposed establishment of a master plan for development, which would be developed on a basin by basin basis. Education of building inspectors and the regulated community on current and future local requirements has already begun.

ODOT and OTA, if included as permittees, will be required to adopt programs for controlling runoff from new roadway drainage systems by July 1, 1996.

The permit requires the City and any co-permittees to develop (or adopt) a guidance manual of planning technical criteria to address water quality concerns for development projects after construction by July 1, 1997, and implement the development control programs by July 1, 1998.

**c. Roadways:** *Public streets, roads, and highways shall be operated and maintained in a manner to minimize discharge of pollutants, including those pollutants related to deicing or sanding activities.*

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

The permit requires updating the SWMP to include specific procedures and schedules for roadway operation and maintenance, by all co-permittees, by July 1, 1995, but actual implementation of this program would be required to start by July 1, 1995. ODOT and OTA would also be responsible for preparation of additional information on the roadway storm sewers they operate, primarily for management and planning purposes, during the first year of the permit.

**d. Flood Control Projects:** *Impacts on receiving water quality impacts shall be assessed for all flood control projects. The feasibility of retro-fitting existing structural flood control devices to provide additional pollutant removal from storm water shall be evaluated.*

Permittees are required to prepare criteria to assure that flood control projects are assessed for the projects' impact on water quality; and evaluate existing flood control devices to determine if retrofitting is feasible. The Flood Control Program will be added to the SWMP by July 1, 1996, with implementation beginning by July 1, 1996.

**e. Pesticide, Herbicide, and Fertilizer Application:** *Each permittee shall implement controls to reduce the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied, by the permittee's employees or contractors, to public property.*

A public education program is under development to increase public awareness on the impacts of improper storage and use of herbicides, fertilizers and pesticides. The permit requires permittees implement annual training and education on herbicide, pesticide, and fertilizer use by July 1, 1995.

**f. Illicit Discharges and Improper Disposal:** *An ongoing program to detect and eliminate illicit discharges and improper disposal into the MS4. Non-storm water discharges shall be effectively prohibited. However, the permittee may allow certain non-storm water discharges as listed in 122.26(d)(2)(iv)(B)(1). The SWMP shall identify any allowed non-storm water discharges, along with any conditions placed on discharges.*

Implementation of a public education program on illicit discharges and improper disposal is required by July 1, 1995. Oklahoma City, and any co-permittees will be required to submit a list of non storm water discharges that are allowed or not allowed to discharge to the MS4 and reasons for these determinations by October 15, 1995.

*Each permittee shall prevent (or require the operator of the sanitary sewer to eliminate) unpermitted discharges of dry and wet weather overflows from sanitary sewers into the MS4. Each permittee shall limit the infiltration of seepage from sanitary sewers into the MS4.*

Oklahoma City currently implements a program for maintenance of the sanitary sewer system. The City is required to update the SWMP to include a program for limiting seepage from sanitary sewers into separate storm sewers by October 15, 1995. Neither OTA nor ODOT operate any sanitary sewers.

*The discharge of floatables (e.g.: litter and other human generated solid refuse) into the MS4 shall be reduced.*

The permittees have litter control programs. The permit requires permittees to implement a floatables control education program by July 1, 1995, install two floatables monitoring stations by July 1, 1995, and complete a study for targeting of floatables controls and a schedule for implementation by July 1, 1997.

*The discharge or disposal of used motor vehicle fluids, household hazardous wastes,*

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

Oklahoma City plans to implement a public education program aimed at proper management and disposal of household hazardous waste and used motor fluids. Semi-annually, the City will be having a collection event for household hazardous wastes and by July 1, 1997, will be completing a study on alternatives for a long term plan which will also include opportunities for dropoff of certain materials on a more frequent basis.

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

*A program to locate and eliminate illicit discharges and improper disposal into the MS4 shall be implemented. 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 shall establish priorities and schedules for screening (described in **Part II.A. 11.a and b.**) the entire MS4 at least once per five years. Facility inspections may be carried out in conjunction with other permittee programs (e.g. pretreatment inspections of industrial users, health inspections, fire inspections, etc.), but must include random inspections for facilities not normally visited by the permittee.*

Oklahoma City will conduct an on-going system wide dry weather screening program for the MS4, with at least 20% of the system screened each year. ODOT and OTA would be included in this program. Oklahoma City will also be inspecting industrial and commercial facilities.

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

By October 15, 1995, the permittee(s) must update the SWMP to include follow-up activities, with priorities and schedules, for suspected illicit discharges, and expeditious elimination of identified sources of such discharges.

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

Oklahoma City currently implements a spill response program as part of general public protection. ODOT and OTA also participate in spill response on their roadway rights of way. The permit requires incorporation of spill response procedures as part of the SWMP by October 1, 1995.

***h. Industrial & High Risk Runoff:*** *A program to identify and control pollutants in storm water discharges to the MS4 from municipal landfills; other treatment, storage, or disposal facilities for municipal waste (e.g. transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal and recovery facilities and facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge the permittee determines are contributing a substantial pollutant loading to the MS4 shall be implemented. The program shall include inspections, a monitoring program (described in **Part II.A. 11.c**), and a list of industrial storm water sources discharging to the MS4 shall be maintained and update as necessary.*

Oklahoma City will be implementing a storm water permitting program for high risk runoff, complete with enforcement and inspection programs. The permit contains compliance schedules for the implementation of this program by July 1, 1996. ODOT and OTA are not expected to have any high risk facilities discharging into their storm sewers that are not addressed under the Oklahoma City

program.

***i. Construction Site Runoff:*** A program to reduce the discharge of pollutants from construction sites shall be implemented. This program shall include: requirements for the use and maintenance of appropriate structural and nonstructural control measures to reduce pollutants discharged to the MS4 from construction sites; inspection of construction sites and enforcement of control measures requirements; appropriate education and training measures for construction site operators; and notification of appropriate building permit applicants of their potential responsibilities under the NPDES permitting program for construction site runoff.

Oklahoma City has already begun education efforts aimed at both City personnel and the regulated community. A formalized construction site runoff pollution prevention program, including permitting of construction site operators, is under development. The program will be fully implemented by July 1, 1998.

OTA and ODOT are already subject to Federal storm water permitting requirements for construction sites disturbing over five acres. Incorporation of a comprehensive program for controlling runoff from roadway projects during construction would follow the same schedule proposed for Oklahoma City, but would not delay ongoing activities.

***j. Public Education:*** A public education program with the following elements shall be implemented: (a) a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or improper disposal of materials into the MS4; (b) a program to promote, publicize, and facilitate the proper management and disposal of used oil and household hazardous wastes; and (c) a program to promote, publicize, and facilitate the proper use, application, and disposal of pesticides, herbicides, and fertilizers by public, commercial, and private applicators and distributors.

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

***k. Monitoring Programs:*** The following monitoring programs shall be implemented in addition to the monitoring required by Part V. of the permit:

*Dry Weather Screening Program;* Discussed above under Illicit Discharges and Improper Disposal.

*Wet Weather Screening Program;* Oklahoma City anticipates using a simple biological indicator for screening the relative quality of storm water from different portions of the MS4. This program will be developed by July 1, 1995.

*Industrial and High Risk Runoff Monitoring Program.* Oklahoma City will develop an Industrial and High Risk Monitoring Program. The program will be completed by July 1, 1995, with screening of the entire system by July 1, 1999.

**13. STORM WATER MANAGEMENT PROGRAM COMPLIANCE.** Compliance with Part II.A will be accomplished by the implementation of and compliance with the described activities of the various elements of the permittees' SWMP, as modified by compliance schedules contained in the Part III. Permittees must fully implement the SWMP, except as indicated Part III, within **90** days from permit issuance. At the end of the 90 days all the required support and initiation procedures for Program elements should be established, and the elements' activities performed as described and scheduled.

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

**14. ROLES AND RESPONSIBILITIES OF PERMITTEES.** The regulation 40 CFR 122.26(d)(2)(vii) requires permittees to describe the roles and responsibilities of each entity applying for the permit to ensure effective coordination. Interagency Agreements are the means by which the permittees propose to implement the SWMP and monitoring program. Each of the permittees plan to implement their individual programs on the portion of the system which they own and operate. Permittees are accountable for understanding their role and responsibilities regarding permit conditions.

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

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

**17. TYPE AND QUANTITY OF POLLUTANT PARAMETERS DISCHARGED.** Table B is a summary of some of the permittees' application representative monitoring data.

**Table B - Representative Monitoring Data**

Parameter (pounds/year)	Annual Loading Estimates from Permit Application MS4 and Major Watershed Totals				
	System Annual Loading	Deer Creek	Deep Fork	North Canadian	South Canadian
Biochemical Oxygen Demand (BOD <sub>5</sub> )	113,563	12,100	36,800	47,700	17,000
Chemical Oxygen Demand (COD)	777,853	114,000	192,000	319,000	153,000
Total Suspended Solids (TSS)	694,337	42,000	220,000	378,000	54,900
Dissolved Solids	19,200,000	3,000,000	3,410,000	6,710,000	6,100,000
Nitrate + Nitrite	24,148	2,280	3,260	13,700	4,930
Ammonia + Organic Nitrogen (TKN)	36,515	4,830	8,810	13,500	9,380
Total Phosphorus	8442	943	1,270	3,860	2,380
Total Cadmium	16.1	2.4	3.6	6.4	3.7
Total Copper	276.5	26.7	54.1	138.6	57
Total Lead	715.6	68.4	132.5	378	136.6
Total Zinc	1683.0	198.1	401	820	263.5
Oil & Grease	1,340,000	116,500	156,000	579,000	485,000
Total Thallium	117.9	31.7	41.2	64.4	40.6
Total Mercury	7.4	0.7	0.9	5.0	0.9

The permittees sampled five locations which were selected to provide representative data on the quality and quantity of discharges from the Oklahoma City MS4 as a whole. Parameters sampled included conventional, non-conventional, organic toxics, and other toxic pollutants. The EPA reviewed this information during the permitting process. Monitoring data was intended to be used by the permittees to assist in their determination of appropriate storm water management practices. EPA used the data to review the application and to determine pollutants of concern discharging from the MS4 that should be monitored during the permit term.

## **18. MONITORING AND REPORTING.**

**a. Reports Required:** Permittees are required (40 CFR 122.42(c)(1)) to contribute to the preparation of an annual system-wide report including status of implementing the SWMP; proposed changes to the SWMPs; revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application; a summary of the data, including monitoring data, that is accumulated throughout the reporting year; annual expenditures and the budget for the year following each annual report; a summary describing the number and nature of enforcement actions, inspections, and public education programs; and identification of water quality improvements or degradation. The permittees are required to do annual evaluations on the effectiveness of the SWMP, and institute or propose modifications necessary to meet the overall permit standard of reducing the discharge of pollutants to the maximum extent

practicable. In order to allow the orderly collection of budgetary and monitoring data it was determined to allow the annual report due date to relate to the permittees' annual fiscal year and monitoring seasons. Oklahoma City's fiscal year and first dry season ends on **June 31st**, the annual report is due **October 15th**. Copies of these reports will be available to the public.

**b. Monitoring:** The permittees are required (40 CFR 122.26(d)(2)(iii)(C) and (D)) to monitor the MS4 to provide data necessary to assess the effectiveness and adequacy of SWMP control measures; estimate annual cumulative pollutant loadings from the MS4; estimate event mean concentrations and seasonal pollutants in discharges from major outfalls; identify and prioritize portions of the MS4 requiring additional controls, and identify water quality improvements or degradation. The permittees are responsible for conducting any additional monitoring necessary to accurately characterize the quality and quantity of pollutants discharged from the MS4.

Due to the variability of storm water discharges, the cost of the monitoring program needs to be balanced with the monitoring objectives and the more important goal of actually implementing controls that will directly effect the quality of the storm water discharged. However, the municipalities must realize that the EPA will have to make future permitting decisions based on the monitoring data collected during the permit term. The public will also be looking for evidence of pollutant reductions. Where the required permit term monitoring proves insufficient to show pollutant reductions, the EPA may be forced to resort to limitations in the next permit. Two types of monitoring are required by the permit: storm event representative monitoring and floatables monitoring.

**i. Representative monitoring.** The monitoring of the discharge of representative outfalls during actual storm events will provide information on the quality of runoff from the MS4, a basis for estimating annual pollutant loads, and a mechanism to evaluate reductions in pollutants discharged from the MS4. Results from the monitoring program will be submitted annually on Discharge Monitoring Reports.

**(1) Requirements:** The permittees are required to monitor for the parameters listed in Table V.A.1.a of the permit throughout the permit term. Monitoring will be conducted at the five monitoring locations indicated in Table V.A.1.b. of the permit.

**(a) Parameters:** The EPA established permit parameter monitoring requirements based on the information available regarding storm water discharges and potential impacts of these discharges. The basic parameter list allows satisfaction of the regulatory requirement [40 CFR 122.26(d)(2)(iii)] to provide estimates of pollutant loadings for each major outfall. Total mercury for all outfalls, total thallium for outfalls 001 and 005, and priority pollutants listed at 40 CFR 122, Appendix D, Table II for outfalls 002, 004, and 005 were added based on review of application monitoring results that indicate the need for additional information.

The monitoring of Diazinon is required due to the EPA's experience with other MS4 and POTW treatment plant discharge monitoring data. It was not included in the application monitoring requirements and therefore it was not indicated if Diazinon is a problem for the Oklahoma City MS4 but it is reasonable to assume that it is present in the MS4's discharge. Diazinon will serve as an indicator of the effectiveness of public education programs designed to reduce pollution from pesticides, fertilizer, and herbicide use.

**(b) Frequency:** The frequency of annual monitoring is based on monitoring at least one representative storm event per season. The four seasons in the Oklahoma City area are as follows: July - October, November - February, and March - June. The permittees are to monitor once per season. Monitoring frequency is based on permit year, not a calendar year. The first complete calendar year monitoring could be less than the stated frequency.

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

While rapid bioassessments do not directly measure the quality of storm water discharges, they can be an important (and cost effective) tool in tracking trends in water quality. The permittees will be given the option of replacing a portion of the parameter representative monitoring required by the permit with a rapid bioassessment monitoring program. Upon approval by the EPA, the permittees may replace the representative monitoring for years 2, 3, and 5 with rapid bioassessment of at least two receiving waters plus a reference site. Representative monitoring of actual storm water discharges will still be required during years 1 and 4.

**ii. Floatables Monitoring.** Installation of two floatables monitoring stations will be accomplished to

investigate trends in water quality issues related to manmade debris and floatables. The comparison of yearly monitoring results should allow the permittees and the EPA to assess the impact of the SWMP elements as they relate to the reduction and elimination of floatables discharge from the MS4.

## 19. PERMIT MODIFICATIONS.

**a. Reopener Clause:** The EPA may reopen and require modifications to the permit (including the SWMP) based on the following factors: changes in the State's Water Quality Management Plan and State or Federal requirements; adding permittees; SWMP changes impacting compliance with permit requirements; other modifications deemed necessary by the EPA to adhere to the requirements of the Act. Implementation of the SWMP is expected to result in the protection of water quality standards. The permit does, however, contain a reopener clause should new information indicate the discharges from the MS4 are causing, or significantly contributing to, a violation of the State's water quality standards.

**b. Other changes:** The EPA has attempted to develop permit language to clarify the permit requirements concerning possible changes to the SWMP, permittees status, and other changes.

*i. Terminated Permittees:* The process for terminating coverage for an existing permittee shall adhere to the regulations 40 CFR 122.64. A notice of intent to terminate will be issued in accordance with draft permit procedures.

*ii. SWMP Changes:* The SWMP is intended as a functioning mechanism for the permittees' use. Therefore minor changes and adjustments to the various SWMP elements are expected. Incorporating this form of document into an NPDES permit has some inherent conflicts. The regulatory rules concerning permit changes and modifications do not easily translate to the minor changes that will be necessary to occur to the various elements during the permit term. The changes may be necessary to more successfully adhere to the goals of the permit. The EPA has determined that these minor changes that are specifically described in the permit shall not be considered permit modifications as defined in the regulations. Part II.G.2. of the permit describes the allowable procedure for the permittees to perform additions and minor changes to the SWMP. This section in no way implies that the permittees are allowed to impact or change elements that directly relate to permit conditions for the SWMP. Any changes requested by the permittees shall be reviewed by the EPA. The EPA has 60 days to respond to the permittees and inform them if the suggested changes will impact or change the SWMP's compliance with a permit requirement and therefore are either disallowed or requires a formal permit modification procedure.

*iii. Additions:* The EPA's intent is to allow the permittees to annex lands and accept the transfer of operational authority over portions of the MS4 without mandating a permit modification. Implementation of appropriate SWMP elements for these additions (annexed land or transferred authority) is required. Upon notification of the additions in the Annual Report the EPA may require a modification to the permit based on the new information.

*iv. Monitoring outfalls:* The permit is issued on a system-wide basis in accordance with Section 402(p)(3)(i) of the Act and authorizes discharges from all portions of the MS4 owner or operated by the permittees. Since all outfalls are authorized, changes in monitoring locations, other than those with specific numeric effluent limitations, shall be considered minor modifications to the permit and will be made in accordance with the procedures at 40 CFR 122.63.

**20. CONSIDERATIONS UNDER FEDERAL LAW.** The discharge which is being controlled by the terms of this permit is the result of natural precipitation, and as such would continue to be discharged regardless of the federal action represented here. The terms of this permit do require that the municipalities minimize or reduce to the maximum extent practicable the pollutants in the storm water runoff from the municipality. We believe therefore that this permit will not effect any listed endangered or threatened species, and/or critical habitat.

Based on the information provided to date no sites listed or eligible for listing in the National Historic Register will be effected by proposed activities to reduce pollutants in the permittees' natural runoff. The applications for this permit were forwarded to the Oklahoma State Historical Preservation Officer (SHPO) for comment. No comments were received. Standard permit condition Part VI.U. in the draft permit requires the permittees to provide information to the SHPO thirty days prior to commencing earth disturbing activities. Only activities meeting all of the following criteria are subject to this permit condition: 1) is a permittee conducted activity for implementing permit requirements; 2) excavation and/or construction; and 3) disturbance of previously undisturbed land. Assuming they meet the criteria listed above some examples of activities subject to the permit condition include, but are not limited to: retention/detention basin construction; storm drain line construction; infiltration basin construction; dredging; and stabilization projects (e.g., retaining walls, gabions). The requirement to submit information on plans for future earth disturbing is not intended for activities such as: maintenance; and private development construction projects.

**21. STATE CERTIFICATION OF THE DRAFT PERMIT.** Concurrently with Public Notice of today's draft permit, the EPA is formally requesting State Certification of the permit, as required by Section 401(a)(1) of the Act, and 40 CFR 124.53.

The final permit will contain any condition required by the State as a condition for Certification.