

This is our response to the comments received on the subject draft NPDES permit in accordance with our regulations.

RESPONSE TO COMMENTS
DRAFT NPDES PERMIT

Permit No.: OKS000201

Permittee: City of Tulsa

Public Works Department
200 Civic Center
Tulsa, Oklahoma 74103

Facility Name/Location: Tulsa Municipal Separate Storm
Sewer System

Tulsa, Oklahoma

Draft Permit Public Notice Date: October 9,1993

Response to Comments Prepared by: Monica L. Burrell

Issue No. 1

The city of Tulsa requested that the Public Works Department be responsible for the permit.

Response No. 1

EPA has changed the mailing address from the city of Tulsa Department of Stormwater Management to the city of Tulsa Public Works Department.

Issue No. 2

The city of Tulsa commented that they currently have eight (8) locations for collection of used motor vehicle fluids which are open 24 hours a day, 7 days a week. They also have plans to open more recycling centers in the future.

Response No. 2

EPA notes the City's comment and has determined that this meets the Pollution Prevention Requirements for the implementation of a program to collect used motor vehicle fluids.

Issue No. 3

In a comment aimed at permitting of municipal separate storm sewer systems in general, the city of Dallas, Texas requested that any requirement for a program to collect used motor vehicle fluids be flexible enough to allow for private entities to collect used motor vehicle fluids at their facilities.

Response No. 3

The Agency notes the comment by the city of Dallas and recommends that the City consider proposing such an alternative program as part of the Dallas Storm Water Management Program.

Issue No.4

The city of Tulsa, the city of Dallas and the city of Fort Worth have all commented on the expense and hazardous associated with household hazardous waste collection at individual residences.

Response No. 4

Household hazardous waste and used motor vehicle fluids are a fact of life in industrialized counties. "Used motor vehicle fluids" is pretty self-explanatory - the oil, antifreeze, and other fluids that must be changed periodically to keep our automobiles running efficiently. But household hazardous waste is somewhat more enigmatic. Many common products purchased for use in and around the home contain hazardous substances. The products become household hazardous wastes when the consumer needs to dispose the left-overs or residues. The average U.S. household generates more than 20 pounds of household hazardous waste per year. As much as 100 pounds can accumulate in the home, often stored in closets, storage sheds, or garages until the residents move or do an extensive cleanout. What we are talking about is the left-overs from products such as pesticides, herbicides, oil-based or lead paints, solvents, batteries, drain openers, etc. In fact, many household hazardous waste programs also collect many relatively benign materials such as latex paint. It is also important to note that many used motor vehicle fluids and household hazardous wastes can be reused or recycled, reducing the drain on natural resources for raw materials, reducing the extra pollution associated with

generating products from raw materials (versus reuse or recycling), and eliminating the need for disposal as a waste.

Virtually all municipalities provide, either directly or indirectly (e.g. through contractors), for residential collection of sanitary waste water, garbage, and storm water. These services have been historically regarded as an inherent function of municipal government. The word municipality itself comes from the latin *munus* - duty, service + *capere* - to take; or literally - "undertaker of duties." Therefore, it is only appropriate that municipalities take a leadership role in ensuring residents have the opportunity to properly dispose of household hazardous wastes and used motor vehicle fluids in an environmentally responsible manner. Public education can reduce the amount of waste material produced and inform residents regarding improper disposal methods. However, municipalities must then have a response to the question: "Where can I dispose of my household hazardous wastes and used motor vehicle fluids?"

According to King County Solid Waste Division, it is estimated that 15% to 20% of household hazardous wastes end up in storm drains or runoff ("Local Hazardous Waste Management Plan for Seattle-King County: Final Plan and Environmental Impact Statement for the management of Small Quantities of Hazardous Waste in the Seattle-King County Region" 1990). In addition EPA estimates that 40% (80 million gallons per year) of "Do-it-yourself oil changers" pour onto roads, driveways, or yards or into storm sewers ("How to Set Up a Local Program to Recycle Used Oil" EPA/530-SW-89-039A). Consequently, hundreds of municipalities across the nation have voluntarily developed household hazardous waste collection programs. In 1991, there were 802 household hazardous waste collection programs in the United States ("Household Hazardous Waste Management - A Manual for One-Day Collection Programs" EPA530-R-92-026).

According to the Texas Natural Resource Conservation Commission, in 1993, 27 municipalities had at least one household hazardous waste collection event (TNRCC database "Household Hazardous Waste Collection Event Numbers - Texas, 1986 - 1994). The cost of these events ranged from \$2500 to \$237,610 (types of materials accepted and participation varied). The average reported municipal cost per participant was \$187, with an average of 162.52 lbs. collected per participant. These events collected 584,073 lbs. of hazardous waste and 255,521 lbs. of hazardous paint. The events collected 6,481 gallons of paint, 17,063 gallons of waste oil, and 2,621 automotive batteries for recycling.

The city of Tulsa had a pilot household hazardous waste collection event in October, 1993. The two day event collected 14,515 lbs. of hazardous waste, 7,400 gallons of paint, 4,400 gallons of motor oil, 385 gallons of antifreeze, and 427 automobile batteries from 1,791 participants. The two day event cost \$150,000.00 which was approximately \$85.00 per participant.

Tulsa, Oklahoma; Austin, Fort Worth, Arlington, Houston, and Plano in Texas; and Baton Rouge, Louisiana are some examples of large and medium municipalities who have taken the initiative in

providing citizens with opportunities to recycle, reuse, or dispose of household hazardous waste and/or used motor vehicle fluids in an environmentally responsible manner. Without programs such as these, significant amounts of household hazardous wastes and used motor vehicle fluids would likely find their way into municipal separate storm sewer systems.

The Agency has accepted the city of Tulsa's proposal to implement biannual collection events at a centralized location located within five miles of most parts of the city. The City will have until August 1, 1996, to complete further evaluation of long term program options, and until August 1, 1997, to implement the selected program.

The long term program will include periodic collection events and should ensure a publicly available "drop-off" location (not necessarily owned or operated by the permittee) is available on a more regular basis and at hours where working people can to drop off waste (ie: occasional long weekday hours, or weekends). The long term program could incorporate programs, or program components, run by the private and/or public sectors (e.g. automobile parts, discount stores with auto-centers accepting used oil from do-it-yourself oil changers, etc.)

The permittee is encouraged to investigate opportunities to involve local businesses and community groups as a means to control costs and foster more public involvement (and education) in preventing pollution related to used motor vehicle fluids and household hazardous wastes. Wherever possible, EPA recommends coordination of reuse or recycling of materials as a means to reduce disposal costs. For example, used paint could be bulked and used by the City itself in anti-graffiti campaigns or painting city buildings - eliminating both the cost of disposal and reducing the materials costs for paint in such programs. Used oil contractors will often be take the used oil from collection events at no charge to the municipality (or depending on local markets, possibly even purchased from municipality). The city of Fort Worth, Texas recently used approximately 1500 lbs. of fertilizer turned in at a collection event on City parks. Used oil, antifreeze, certain solvents, non-lead paints. batteries, fertilizers, and pesticides are only some of the materials collected at household hazardous waste collection events that could be reused or recycled at no or minimal cost, reducing the disposal cost associated with the collection event dramatically.

In addition to reduction of the potential for used motor vehicle fluids and household hazardous wastes to be disposed of improperly, collection events serve as important opportunities to reinforce public education. More than just storm water could be, an is, affected by improper disposal of these materials. Without an emphasis on educating the public to reduce the amounts of used motor vehicle fluids and household hazardous wastes generated, and the proper means of disposing of residues, many of these materials would find their way into municipal landfills, municipal wastewater treatment plants, and municipal separate storm sewers.

Issue No. 5

The city of Tulsa and the city of Dallas all commented on the requirement to have structural controls for floatables. The primary issue raised was who would determine when structural controls were necessary for floatables?

Response No. 5

The city of Tulsa is subject to maximum extent practicable (MEP) measures and water quality. Water quality standards regarding floatables are found in each State's WQMPs. Section 402(p)(3)(B)(iii) clearly includes structural controls as a component of MEP. Region 6 would, however, expect most cities to first use pollution prevention measures, reserving structural controls for higher-priority watersheds (e.g. a "City Centerpiece" high visibility lake or stream or a beach or lake critical to tourism) or where source controls are ineffective. Consequently, EPA has determined that the City will be primarily responsible for determining whether structure controls are needed in a particular situation. The permittee should be able to evaluate the necessity of a floatables control structure after doing a floatable reduction assessment (e.g. estimation of material collected from portions of the municipal system's streams, channels, creeks, ditches or ponds).

The city of Tulsa will be conducting a study of floatable materials within the storm sewer system. Two stations for monitoring floatables will be established by May 1, 1995. The City will complete a study for targeting of structural controls, and develop schedules for implementation, by May 1, 1996.

Issue No. 6

In a comment aimed at permitting municipal separate storm sewer systems in general, the city of Fort Worth requested municipalities be allowed to use of either direct or indirect methods to estimate volumes of floatables discharged.

Response No. 6

The Agency notes the comment by the city of Fort Worth and recommends that the City propose an alternative floatables monitoring program as part of the Fort Worth Storm Water Management Program.

Issue No. 7

The city of Tulsa commented on the City's ability to control commercial and wholesale distributors and applicators of pesticides, herbicides and fertilizers.

Response No. 7

EPA realizes that the city of Tulsa may not have the authority to regulate commercial application of pesticides, herbicides and fertilizers. The State of Oklahoma has a regulatory program for commercial applicators. However, as part of the Storm Water Management Program regulatory requirements under 40 CFR 122.26(d)(2)(iv)(A)(6), cities must have a program to promote, publicize, and facilitate the proper use, application, and disposal of pesticides, herbicides, and fertilizers by the public and commercial and private applicators and distributors. Consequently, the city of Tulsa is required to have an internal policy/program for all city applicators to be properly trained. In addition, the City must have a policy for municipal employees and contractors to minimize use and insure application in accordance with labeling instructions. Minimizing the use of herbicides, pesticides, and fertilizers and insuring that when they are used they are used properly not only lowers the potential for pollutants entering storm water, but also can save money through more efficient chemical use. The City must also have an education program targeting all citizens on pesticide, herbicides and fertilizer.

Issue No. 8

In a comment aimed at permitting of municipal separate storm sewer systems in general, the city of Dallas questioned why the requirement of prevention of unpermitted discharges of sanitary sewer overflows into the storm sewer system is needed in a storm sewer system permit.

Response No. 8

The Clean Water Act Section 402(p)(3)(B)(ii) requires permits for municipal separate storm sewer systems to prohibit non-storm water discharges to municipal separate storm sewers. Untreated sanitary sewerage, even if diluted by storm water infiltrating the sanitary sewage collection system, would clearly be a non-storm water subject to the Congressional mandate. In addition to the prohibition on discharge of sanitary sewerage via the separate storm sewer system, the permittee must have a program to limit seepage from sanitary sewers into the storm water collection system.

Issue No. 9

The city of Tulsa commented on the importance of education programs in order to promote, publicize and facilitate the storm water management program.

Response No. 9

EPA agrees that education is a very important aspect of the storm water management program. The permittee is required to utilize various education mechanisms to help facilitate the storm water management program. The Storm Water Management Program regulations requires education

programs in several areas: under 40 CFR 122.26(d)(2)(iv)(B)(5) for disposal of used oil and household hazardous wastes, under 40 CFR 122.2(d)(2)(iv)(B)(6) for proper use of pesticides, herbicides, and fertilizers, and under 40 CFR 122.26(d)(2)(iv)(A)(6) for best management practices used by the permittee. The permit requires education programs in each of these areas.

Issue No. 10

The city of Tulsa requested a schedule to develop a program to identify, monitor and control pollutants in storm water discharges from Industrial and High Risk Runoff by July 1, 1995, and to implement the program by January 1, 1996.

Response No. 10

EPA has made necessary changes to Implementation and Augmentation of Storm Water Management Programs Schedule in Part III. Section A of the permit to reflect permittee's request.

Issue No. 11

The city of Dallas wanted to know whether the modifications list under Part II, G, require a public hearing.

Response No. 11

Public hearings are not automatically required for permit modifications. However, EPA would like to point out the fact that a major modification requires the permit to be public noticed, at which time any interested party may request a public hearing.

Issue No. 12

The city of Tulsa requested changes in compliance schedules for the implementation of the storm water management measures as follows: Complete screening of the municipal storm sewer system for illicit discharges and improper disposal from January 1, 1996, to January 1, 1997; complete evaluation of existing flood control structures from October 1, 1996, to complete evaluation of four existing flood control projects by October 1, 1996; and complete evaluations of 6 additional flood control structures by October 1, 1998.

Response No. 12

EPA has combined all evaluations of flood control structures into one category and all flood control structure must be evaluated by October 1, 1998.

Issue No. 13

In a comment aimed at permitting of municipal separate storm sewer systems in general, the city of Dallas requested EPA use the management plans submitted in regulated Cities' permit applications for development of the Storm Water Pollution Prevention and Management Program required by Part III.

Response No. 13

EPA notes the comment by the city of Dallas. In accordance with 40 CFR 122.26(d)(2)(iv), "(p)roposed programs will be considered by the Director when developing permit conditions to reduce pollutants to the maximum extent practicable." The Storm Water Management Program proposed by the city of Tulsa, modified as a result of the permit application review process, has been incorporated into the permit by reference. Full implementation of the Storm Water Management Program, along with augmentation required by schedules contained in Part III of the permit, are deemed to be compliance with Part II.A. of the permit.

Issue No. 14

The city of Tulsa requested that the monitoring frequency requirements under Part V of the permit be decreased.

Response No. 14

EPA has noted the permittee request. Part V.A. (representative monitoring) has been changed to incorporate a new monitoring frequency of three per year (once per season for the Tulsa area). Pursuant to the regulations found at 40 CFR 122.26(d)(2)(iii)(C), this should meet the permit requirement to report seasonal pollutant loadings and event mean concentration of a representative storm for any constituents detected in any sample. A Part V. A. 2. has been added to the permit which gives the permittee a option of developing and implementing a rapid bioassessment monitoring program to reduce the frequency of chemical monitoring required by the Representative Monitoring Program described in Part V.A.1.

Fecal coliform has been added to the required monitoring list. This parameter was included in the permittee's proposed monitoring program, but was omitted from the draft permit.

Monitoring seasons have been established as: July - October, November - February, and March - June based on climatological information provided by the permittee. One Discharge Monitoring Report, summarizing results from all storm events actually sampled, is required for each monitoring season. The Discharge Monitoring Reports will be submitted annually by October 15th, along with the permittee's Annual Report.

The overall goals of the representative monitoring program of the permit are: 1) estimation of quantities of pollutants discharged for the entire municipal separate storm sewer system on a seasonal and annual basis, and 2) providing permit accountability through a means to demonstrate improvement in storm water discharge quality. Recognizing that biological monitoring of receiving waters, or the separate storm sewer system itself, has the potential to offer important information on the effects of storm water discharges on the receiving water, Part V.A.2. (Representative Monitoring - Rapid Bioassessment Option) has been added to the final permit.

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 municipal separate storm sewer system 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 permittee(s) will be given the option of replacing a portion of the "chemical" monitoring required by the permit with a rapid bioassessment monitoring program. Upon approval by the Director, the permittee may replace the "chemical" monitoring for years 2, 3, and 5 with rapid bioassessment of at least two receiving waters plus a reference site. Should the permittee(s) elect to use the rapid bioassessment option, "chemical" monitoring of actual storm water discharges will still be required during years 1 and 4.

When determining the acceptability of any proposed rapid bioassessment program, the Director would refer to "Rapid Bioassessment Protocols for Use in Streams and Rivers - Benthic Macroinvertebrates and Fish" (EPA/440/4-89/001), "Macroinvertebrate Field and Laboratory

Methods for Evaluating the Biological Integrity of Surface Waters" (EPA/600/4-90/030), and other appropriate procedures developed by the State. If the permittee elects to pursue the rapid bioassessment option, the Agency expects the information collected through rapid bioassessments in years 2, 3, and 5, coupled with the "chemical" monitoring that would still be required in years 1 and 4, would be sufficient to meet the overall goals of the representative monitoring program.

Issue No. 15

The city of Tulsa has indicated that they will use its established Stream Monitoring Program to complete the wet weather field screening.

Response No. 15

EPA has noted the permittee comment.

Issue No. 16

The city of Tulsa and the city of Dallas commented on the due date for the submission of an annual report.

Response No. 16

The October 15, 1994, annual report submission date was agreed upon by the permittee. The fiscal year for the city of Tulsa is July 1 through June 30. The City has sufficient time to prepared and submit the annual report following the end of the City's fiscal year. Information has been added to Part V.C. to outline the responsibilities of each permittee in the preparation of the annual report. The modification was made to facilitate the possible addition of co-permittees at a later date. The Agency intends to allow similar flexibility in setting annual report dates in other municipal separate storm sewer system permits.

Significant Changes in the Final Permit

The following changes had been made to improve the clarity and organization of the permit:

1. Part VI.A. (Modification of the Permit) allows addition of permittees who own or operate a portion of the municipal separate storm sewer system. To simplify possible inclusion of co-permittees at a later date, references to "permittee" have been changed to "permittee(s)" throughout the permit. The following language has been added as Part I.C. (Permittee Responsibilities) to clarify the responsibilities of any co-permittees and does not change the basic requirements of the permit. Since the city of Tulsa is currently the only permittee, there is no immediate effect of these permit language changes.

Permittee Responsibilities.

1. Each permittee is responsible for:
 - a. Compliance with permit conditions relating to discharges from portions of the Municipal Separate Storm Sewer System where the permittee is the operator;
 - b. Storm Water Management Program implementation on portions of the Municipal Separate Storm Sewer System where the permittee is the operator;
 - c. Compliance with annual reporting requirements as specified in Part V.C.;
 - d. Collection of representative wet weather monitoring data required by Part V.A., according to such agreements as may be established between permittees; and
 - e. A plan of action to assume responsibility for implementation of storm water management and monitoring programs on their portions of the Municipal Separate Storm Sewer System should interjurisdictional agreements allocating responsibility between permittees be dissolved or in default. (See also Part II.G.4.)
2. Permittees are jointly responsible for permit compliance on portions of the Municipal Separate Storm Sewer System where operational or Storm Water Management Program implementation authority over portions of the Municipal Separate Storm Sewer System is shared or has been transferred from one permittee to another in accordance with legally binding agreements.

Item e. would require the permittees to either stick to their interjurisdictional agreements to share responsibility or assume total responsibility for permit compliance on their portions of the MS4. The alternate plan of action should include a planning process/schedule to develop their own programs in areas implemented by another permittee under an interjurisdictional agreement and possibly a plan for an interim effort, rather a complete standby program. (e.g. "If permittee X fails to sample, we will hire a contract lab to collect the required samples." or "If permittee Y fails to inspect priority industries in our jurisdiction during the year they were scheduled to be inspected, we will start doing the inspections ourself within 90 days.") Part of the standby plan could be including an advance notification clause for dissolving interjurisdictional agreements.

Where an entity transfers incomplete authority, or the "operating" entity does not have legal ability to fully implement all required management program components or permit conditions, the owner of that portion of the MS4 would be also be considered an operator. If an entity operating a portion of the SWMP for another chooses to cease providing this service, the owner would then be the operator and would need to ensure implementation of the SWMP.

2. Part I.A. (Permit Area) of the draft permit has been revised to clarify that the permit area does not extend to areas outside the corporate boundary of the city of Tulsa. The reference to areas "otherwise contributing to discharges from" the municipal separate storm sewer system has been deleted.
3. Part I.D. (Limitations on Coverage) has been combined with Part I.B (Authorized Discharges). The new Part I.B.2. covers discharges that are not authorized the permit and clarifies that the discharge of spills is not authorized. Where the discharge of spilled material (e.g. spill resulting from a traffic accident) is necessary to prevent loss of life, personal injury, or severe property damage, the permittee(s) have the responsibility to insure steps are taken to minimize the impact of such discharges. The permittee(s) may require the parties responsible for the spill to conduct, or pay for, the mitigation in accordance with applicable local ordinances or State laws.
4. Since all permittees are already listed on the cover page of the permit, Part I.C. (Permittee(s)) of the draft permit has been deleted.
5. Under the Clean Water Act, three basic criteria apply to permits issued for discharges from municipal separate storm sewer systems: an effective prohibition on non-storm water, a requirement to reduce pollutants to the maximum extent practicable, and any additional controls necessary to provide protection of State water quality standards. The Storm Water Management Program, taken as a whole, is expected to address each of these criteria primarily through Best Management Practices and pollution prevention. In order to clarify the expectations of the permit, Part I. of the final permit has been modified to include an item D. (Discharge Goals) as follows:

The following goals are established for discharges from the Municipal Separate Storm Sewer System:

1. No discharge of toxics in toxic amounts.
2. No discharge of pollutants in quantities that would cause a violation of State Water Quality Standards.
3. No discharge of floatable debris, oils, scum, foam, or grease in other than trace amounts.
4. No discharge of non-storm water from the municipal separate storm sewer system (except as provided in Part I.B.2.).
5. 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 system (unless authorized by the State in accordance with the State's Antidegradation Policy).

In implementing and evaluating the effectiveness of the Storm Water Management Program, the permittee(s) is required to aspire towards these basic water quality goals. The Agency realizes that demonstrating absolute 100% compliance with these goals 100% of the time at 100% of the storm sewer outfalls may be difficult within the term of this first permit for the municipal separate storm sewer system. However, in accordance with the statutory requirements of the Clean Water Act, the permit cannot authorize discharges that cause a violation of State Water Quality Standards.

6. The introductory paragraph of Part II (Storm Water Pollution Prevention & Management Programs) has been revised to improve clarity and consolidate permit language. The new paragraph is essentially a combination of the old introductory paragraph, the introductory paragraph of Part II.B. (Storm Water Management Program Requirements), and Part II.B.1 (Statutory Requirements) from the draft permit. As a result of this revision, Part II.B.1 (Statutory Requirements) has been omitted from the final permit.
7. To facilitate a single comprehensive Storm Water Management Program, Part II.A. (Pollution Prevention Requirements) and Part II.B. (Storm Water Management Program Requirements) have been combined. The pollution prevent requirements of the proposed permit have been incorporated with the new Part II.A. (Storm Water Management Program Requirements) as follows:

- a. pollution prevention requirements for new development and significant re-development are now included in Part II.A.2. (Areas of New Development and Significant Redevelopment);
 - b. pollution prevention requirements for collection of used motor vehicle fluids and household hazardous waste are now included in item d. of Part II.A.6. (Illicit Discharges and Improper Disposal);
 - c. pollution prevention requirements for control of floatables (e.g. floatable debris) are now included in item c. of Part II.A.6 (Illicit Discharges and Improper Disposal).
8. The proposed requirement for proper operation and maintenance of structural controls in the Storm Water Management Program has been revised to clarify that this requirement includes proper operation and maintenance of the separate storm sewer collection system itself.
9. The following changes have been made to the Illicit Discharges and Improper Disposal section of the Storm Water Management Program required by Part II of the draft permit:
- a. Part II.B.7.a. (effective prohibition on non-storm water) and Part II.B.7.b. (non-storm water discharges that may be allowed by the permittee(s)) have been combined as Part II.A.6.A. of the final permit. The list of "allowable" non-storm water discharges has been eliminated to avoid the impression that such discharges are automatically exempted from the prohibition on non-storm water.

In accordance with 40 CFR 122.26(d)(2)(iv)(B)(1), the permittee(s) is allowed to exempt from the effective prohibition on non-storm water certain non-storm water discharges, provided such discharges have not been identified by the permittee(s) as significant sources of pollutants to the municipal separate storm sewer system. The permittee(s) will be required to identify, in the Storm Water Management Program, any non-storm water discharges that the permittee(s) does not prohibit, along with any conditions (e.g. dechlorination of super-chlorinated water line flushings) placed on such non-storm water discharges to the municipal separate storm sewer system. A list of discharges that the permittee(s) may choose to exempt from the effective prohibition on non-storm water includes:

- i. water line flushing;
- ii. landscape irrigation;
- iii. diverted stream flows;
- iv. rising ground waters;

- v. uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers;
- vi. uncontaminated pumped ground water;
- vii. discharges from potable water sources;
- viii. foundation drains;
- ix. air conditioning condensate;
- x. irrigation water;
- xi. springs;
- xii. water from crawl space pumps;
- xiii. footing drains;
- xiv. lawn watering;
- xv. residential car washing (e.g. non-commercial car washing as defined by the permittee(s));
- xvi. flows from riparian habitats and wetlands;
- xvii. swimming pool discharges (e.g. discharges without significant amounts of chlorine);
- xviii. street wash waters (i.e. pavement wash waters where cleaning chemicals, such as detergents, are not used); and
- xix. discharges or flows from emergency fire fighting activities.

While information may not be available to indicate that a type of discharge listed above is a significant source of pollutants for a particular municipal separate storm sewer system, there could be a case where a particular discharger has not adequately controlled the quality of an otherwise allowable non-storm water discharge. While a type of non-storm water discharge may be generally exempted for the effective prohibition on non-storm water, the permittee(s) will be required to prohibit, on a case-by-case basis, any individual non-storm water discharge (or class of non-storm water discharges) that is determined to be contributing significant amounts of pollutants to the municipal separate storm sewer system.

- b. As indicated above, required program elements for control of floatables and for collection of used motor vehicle fluids and household hazardous wastes have been moved from Part II.A. (Pollution Prevention Measures) of the proposed permit to Part II.A.6. (Illicit Discharges and Improper Disposal) of the final permit.
- c. The proposed permit required the permittee(s) to implement a program to locate and eliminate illicit discharges and improper disposal. The final permit consolidates all references to dry weather screening and illicit discharge and improper disposal detection in Part II.A. (Storm Water Management Program) and clarifies that this program must include the following components: dry weather screening of the separate storm sewer system at least once per five years; follow-up activities, which may be

prioritized, to eliminate identified illicit discharges or improper disposal; and facility inspections to identify opportunities to prevent illicit discharges and improper disposal into separate storm sewers.

- d. The permittee(s) are required to require the elimination of illicit discharges and improper disposal practices as expeditiously as reasonable practicable. Where an identified illicit discharge or improper disposal cannot be eliminated within thirty days (vice seven in the draft permit), the permittee(s) must require an expeditious schedule for removal of the discharge.
10. The requirement for the permittee(s) to monitor industrial and high risk runoff has been moved to Part II.A.11.c. (Industrial and High Risk Runoff Monitoring Programs). To provide consistency with the approach adopted for the Agency's NPDES general permits for discharges of storm water associated with industrial activity, and reduce the burden on the private sector, an opportunity to accept a certification of "no exposure" in lieu of monitoring has been included:

Part II.A.11.c.2: Alternative Certification: In lieu of monitoring, the permittee(s) may accept a certification from a facility that raw and waste materials, final and intermediate products, by-products, material handling equipment or activities, industrial machinery or operations, or significant materials from past industrial activity are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Where the permittee(s) accept a "no exposure" certification, the permittee(s) shall conduct at least one site inspection of the facility.
 11. The "Industrial and High Risk Runoff" component of the Storm Water Management Program has been revised to clarify that the following are parts of this program:
 - a. priorities and procedures for inspections and establishing and implementing control measures for such discharges;
 - b. a monitoring program (described in Part II.A.11.c.); and
 - c. a list of industrial storm water sources discharging to the Municipal Separate Storm Sewer System shall be maintained and update as necessary.
 12. Site planning procedures for construction sites have been removed from the Construction Site Runoff component of the Storm Water Management Plan. This aspect is addressed in Part II.A.2. (Areas of New Development and Significant Redevelopment) in the final permit.

13. The Dry Weather and Wet Weather Screening requirements of Part V of the draft permit have been combined with Industrial and High Risk Runoff Monitoring as Part II.B.11. (Monitoring Programs) of the final permit. The Wet Weather Screening program has been revised to clarify that the municipal separate storm sewer system must be screened at least once during the permit term. These monitoring programs are primarily for the purpose of identifying problems within the municipal separate storm sewer system, as opposed to compliance monitoring and characterization of discharges from the municipal separate storm sewer system. Permittees are encouraged to include biological test methods as an investigative tool in their dry and/or wet weather screening programs.

EPA-approved test methods (40 CFR Part 136) are not required for either the wet-weather or dry-weather screening efforts. However, under the final permit samples taken to confirm a particular discharger is the source of an illicit discharge or a source of significant pollutants should conform to the requirements of 40 CFR Part 136. Use of the "Part 136" methods would be important in the defensibility of test results in any legal action against the discharger to the municipal separate storm sewer system. The same level of accuracy and defensibility is not required in screening the entire storm sewer system for the possible presence of illicit discharges, improper disposal practices, or unacceptable levels of pollutants and adds an unnecessary cost burden on the permittee(s).

14. To reduce redundancy and improve clarity, Part II.A.10 (public education), item d. has been deleted. In the draft permit, the permittee was specifically required to publicize best management practices (including product substitution) used by the permittee that could be used by residents or businesses to reduce the potential for used vehicle fluids and toxic materials to enter storm water. The basic public education program could include distribution of such information, and a separate permit requirement was deemed to add unnecessary complexity and confusion to the permit.
15. Specific elements of the annual program review at Part II.H.1. of the proposed permit have been consolidated with Part V.C. (Annual Report) in the final permit.
16. Part II.G.2. (Storm Water Program Update) has been expanded to include paragraph d., which addresses updates to the Storm Water Management Program required by activities contained in Part III. (Schedules for Implementation and Compliance). Such updates may be requested at any time following completion of an interim task or final deadline. Unless denied by the Director within 60 days, the requested updates are deemed approved and may be implemented by the permittee(s).
17. Part II.G.2. (Storm Water Program Update) has been modified to require that any requests to update the Storm Water Management Program include a certification that all co-permittees

were given an opportunity to comment on the proposed updates. This change was necessary to insure a permittee cannot unilaterally update portions of the Storm Water Management Program affecting a co-permittee.

18. Part II.G.3. (updates to the storm water management program required by the Director) has been revised to indicate all changes required by the Director will be made in accordance with the permit modification provisions of 40 CFR 124.5, 122.62, or as appropriate 122.63. Any major updates required by the Director would thus allow the permittee opportunity to use the administrative procedures applicable to permit modifications.
19. Since the permit is being modified to allow for future inclusion of co-permittees, Part II.G.4. (Transfer of Ownership, Operational Authority, or Responsibility for Storm Water Management Program Implementation) has been added to the final permit:

Transfer of Ownership, Operational Authority, or Responsibility for Storm Water Management Program Implementation: The permittee(s) shall implement the Storm Water Management Program on all new areas added to their portion of the municipal separate storm sewer system (or for which they become responsible for implementation of storm water quality controls) as expeditiously as practicable, but not later than three years from addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately.

Prior to land annexation, the permittee(s) shall include a schedule for extending the Storm Water Management Program to the annexed areas in the Storm Water Management Program. At least 30 days prior to transfer of operational authority or responsibility for Storm Water Management Program implementation, all parties shall prepare a schedule for transfer of responsibility for Storm Water Management Program implementation on the affected portions of the Municipal Separate Storm Sewer System.

20. Part II.H. (Retention of Storm Water Management Program Records) has been added to the final permit to clarify that the Storm Water Management Program shall be retained for at least three years after coverage under the permit terminates.
21. Since proposed Pollution Prevention Measures have been incorporated in the Storm Water Management Program requirements, Part III.A. (Implementation of Pollution Prevention Measures) and Part III.B. (Implementation of Storm Water Management Programs) have been combined into a single Part III.A. (Implementation and Augmentation of Storm Water Management Programs(s)).

22. Part III.C. has been added to clarify that the permittee(s) must report on compliance (or non-compliance) with interim milestones or final deadlines contained in a schedule in Part III. within 14 days of a due date.

23. The monitoring Tables of Part V.A. have been revised to clarify information required to be reported, sample type, and monitoring frequency.

24. The overall goals of the representative monitoring program of the permit are: 1) estimation of quantities of pollutants discharged for the entire municipal separate storm sewer system on a seasonal and annual basis, and 2) providing permit accountability through a means to demonstrate improvement in storm water discharge quality.

Recognizing that biological monitoring of receiving waters, or the separate storm sewer system itself, has the potential to offer important information on the effects of storm water discharges on the receiving water, Part V.A.2. (Representative Monitoring - Rapid Bioassessment Option) has been added to the final permit.

The rapid bioassessment monitoring option would likely consist of instream sampling, not done during storm flows, so it will not be directly representative of any one discharge. However, instream monitoring does provide information on the longer-term effects of storm water discharges from the municipal separate storm sewer system. The methodology basically compares environmental indicators (e.g. species diversity, whether the species present are relatively sensitive or resistant to pollution, etc.) to a reference site to gather a weight of evidence on whether a monitored site has been degraded (and to what extent) by discharges for the separate storm sewer system. The very nature of urbanization (e.g. increased impervious cover, increased pollutant sources, habitat alteration, stream channelization for flood control, etc.) virtually guarantees that there will be degradation of urban waterbodies. Comparison of results from the same sites over time would, however, give an indication of improvement in storm water quality. Representative "Chemical" monitoring of discharges would be retained, but at a reduced frequency.

25. The floatables monitoring program required in the draft permit has been moved to Part V.B. (Floatables Monitoring).

26. Part V.A.6. (Seasonal Loadings and Event Mean Concentrations) has been added to clarify that estimates of seasonal loadings and event mean concentrations for parameters required under the representative monitoring program must be submitted along with the annual report for the fourth year of the permit. The requirement to collect such information was included in Part V.A. (Storm Event Discharges) of the proposed permit.

27. Part V.A.5 (sampling waiver) of the draft permit has been omitted. The proposed waiver would have allowed the permittee to submit, in lieu of monitoring data, reasons why no storm events during the monitoring period were samplable due adverse climatological reasons. This provision has been deemed an unnecessary addition to the complexity of the permit since the permittee can always provide supporting information along with the required Discharge Monitoring Reports.

The criteria for a samplable storm event at Part V.A.4. have been relaxed by providing two waivers for the requirement for 72 hours since the previous measurable (greater than 0.1 inch) storm event: 1) the previous measurable storm event now refers to an event that actually resulted in a discharge from the monitored outfall, and 2) the 72 hour period is waived where the permittee documents that less than 72 hours is representative of storm events for that locality. It is therefore unlikely that no storm events during a monitoring period would result in a samplable event. If no "samplable" discharges occurred, the permittee should report "no discharge" on the Discharge Monitoring Report for that monitoring period and include supporting information.

The permittee should take appropriate safety precautions regarding monitoring events, which could include the use of automatic samplers, so with proper preplanning almost any storm event could be safely sampled. Any truly catastrophic storm event (e.g. hurricane or 100-year flood) would be unlikely to meet the "representative" criteria for samplable events and shouldn't be sampled anyway.

28. The annual reporting requirement in Part II. (storm water management program) of the proposed permit have been integrated with Part V.C. (Annual Report) of the final permit.
29. Part V.E. (Reporting: Where and When to Submit) has been clarified to indicate that dry and wet weather screening results are not covered by this section. Part F. (Additional Notification) has been incorporated into this section. The reporting period for monitoring results has been established as July 1 - June 30. The first reporting period must include information from all three monitoring seasons, but may actually cover less than twelve calendar months.
30. Part VI.I. (Certification) has been combined with Part H. (Signatory Requirements).
31. Part VI.N. (Requiring an Individual Permit) has been added to cover instances where the Director may need to remove a co-permittee from this permit and require an individual permit. A co-permittee may also request an individual permit under this section. This change was necessary to support the possibility of incorporating co-permittees into this permit at a future date.

32. Part VI.S. (Inspection and Entry) has been modified to include sampling or monitoring for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act. This requirement is contained in 40 CFR 122.41(i)(4) (Conditions Applicable to All Permits), but was inadvertently omitted from the draft permit.
33. Part VI.U. (Additional Monitoring by the Permittee) has been added to include the 40 CFR 122.41(l)(4) requirement that all additional monitoring done by the permittee in accordance with 40 CFR 136 test methodologies be included in calculations and reporting of discharge monitoring results. This regulatory requirement was inadvertently omitted from the proposed permit.
34. Part VII.B. (Termination of Coverage for a Single Permittee) has been added to address terminating permit coverage for a single permittee without affecting coverage for any remaining co-permittees.
35. Miscellaneous minor language changes have been made throughout the permit to simplify and improve the clarity the final permit.

**Summary of the City of Tulsa's
Storm Water Management Program
June 23,1994**

The Storm Water Management Program submitted by the applicants with the Part 2 application was required by federal regulations (40 CFR 122.26(d)(2)(iv)) to contain program elements for each of the items in Table A. The regulations authorize separate proposed programs for co-applicants, and imposition of controls for different areas of the Municipal Separate Storm Sewer System on a watershed, jurisdiction, or individual outfall basis.

Due to differences in climate, age, 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 applicants. The standard of reducing the pollutants to the maximum extent practicable, is therefore applied to the Storm Water Management Program as a whole, rather than to each individual program element. The EPA believes this approach is in accordance with Clean Water Act Section 402(p)(3)(B) and the intent of Congress.

The applicant(s) submitted a proposed Storm Water Management Program in Part 2 of the application. The EPA utilized the document "Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges From Municipal Separate Storm Sewer Systems" (EPA 833-B-92-002) in the Storm Water Management Programs review to help evaluate the completeness and appropriateness of program elements. As required by 40 CFR 122.26(d)(2)(iv), the Agency has considered the applicant's proposed storm water management program in development of permit conditions to reduce pollutants in the discharge to the maximum extent practicable and effectively prohibit the discharge of non-storm water to the municipal separate storm sewer system.

Table A - Storm Water Management Program Elements

REQUIRED PROGRAM ELEMENT	PERMIT SECTION	REGULATORY REFERENCES
Operation and maintenance of structural controls	Part II.A.1	40 CFR 122.26(d)(2)(iv)(A)(1)
Control of discharges from areas of new development and significant redevelopment	Part II.A.2	40 CFR 122.26(d)(2)(iv)(A)(2)
Operation and maintenance of public streets, roads, and highways	Part II.A.3	40 CFR 122.26(d)(2)(iv)(A)(3)
Ensuring flood control projects consider water quality impacts	Part II.A.4	40 CFR 122.26(d)(2)(iv)(A)(4)
Control of pollutants related to application of pesticides, herbicides, and fertilizers	Parts II.A.5 & II.A.10.c	40 CFR 122.26(d)(2)(iv)(A)(6)
Detection and removal of illicit discharges and prevention of improper disposal into the storm sewer	Parts II.A.6, II.A.10.a, II.A.10.b, & II.A.11.a.	40 CFR 122.26(d)(2)(iv)(B)(1) (also effective prohibition on non-storm water at Clean Water Act §402(p)(3)(B)(ii))
Prevention, containment, and response to spills that may discharge into the Municipal Separate Storm Sewer System	Part II.A.7	40 CFR 122.26(d)(2)(iv)(B)(4)

Identification, monitoring, and control of discharges from municipal landfills; 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 Municipal Separate Storm Sewer System	Parts II.A.8 & II.A.11.c	40 CFR 122.26(d)(2)(iv)(C)
Control of pollutants in construction site runoff	Part II.A.9	40 CFR 122.26(d)(2)(iv)(D)
Public Education	Part II.A.10	40 CFR 122.26(d)(2)(iv)(A)(6), (iv)(B)(5), (iv)(B)(6)
Monitoring	Part II.A.11 & Part III	40 CFR 122.26(d)(2)(iv)(B)(2), (iii), (iv)(A), (iv)(C)(2)

a. Permit Conditions for the Storm Water Management Program(s). A summary of the Storm Water Management Program, including enhancements required by the permitting agency, follows:

i. Structural Controls and Storm Water Collection System Operation:

Requirement. The Municipal Separate Storm Sewer System and any storm water structural controls shall be operated in manner to reduce the discharge of pollutants to the Maximum Extent Practicable.

Applicants' Program. The storm water facility and maintenance program is divided into two sections: 1) Surface drainage/Vegetation Maintenance (SD/VM) section; and 2) the Underground Collection System (UCS) section. The focus of SD/VM is the maintenance of all above ground storm drainage facilities lined and unlined channels, creeks, and detention ponds. Sd/VM will maintenance these structures such as that the function is not impaired by vegetation growth, excess buildup of sediment, or other structure defects. Mowing of channels and detention basis will occur on a bimonthly basis during the growing season - April through October. Inspection of side slopes for erosion will be performed during mowing activities. In addition vegetation management, channels and detention basins will be periodically inspected for sediment build up. The minimum rate of sediment removal will be no less than once per year unless inspections warrant otherwise. The UCS section is responsible for the maintenance of the below ground drainage facilities such as: storm drainage pipes, catch basins and inlets, and storm water pump stations. The UCS maintenance program includes: locating and repairing cross connections and illicit connections. At a minimum, 2,000 inlets will be visually inspected and cleaned as necessary each year. Storm inlets will be repaired on an as needed basis, approximately expected repairs to over 1,00 inlets each year. Ten miles of pipe will be cleaned a year. The six storm water pump station will be inspected, and cleaned at least twice a year. These pump stations will be structurally repaired as needed.

ii. Areas of New Development and Significant Redevelopment:

Requirement. 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. The goals of such controls shall be:

- (1) New development - limiting increases in the discharge of pollutants in storm water as a result of development, and
- (2) Re-development - reducing the discharge of pollutants in storm water.

Applicants' Program. The city of Tulsa have until February 1, 1995, to adopt and implement the Draft Storm Water Management Criteria Manual (Criteria Manual). The Criteria manual details the City's approach to controlling storm water associated with developments.

iii. Roadways:

Requirement. 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.

Applicants' Program. The City will sweep Arterial streets swept eight times a year, with emphasis on sweeping after deicing material is no longer required as a result of snow or ice event, and sweep residential streets four times a year. In addition to removing litter from streets and removing deicing material from bridges as soon as feasible.

iv. Flood Control Projects:

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

Applicants' Program. The City will perform a project design review of all future major flood control projects. The project review will utilize criteria derived from the design considerations included in the City's Stormwater Management criteria Manual. The City has developed procedures for assuring that existing structural flood control devices have been evaluated to determine whether retrofitting the device will provide additional pollutant removal from storm water. The City will have until October 1, 1998, to evaluate eighteen existing major structural controls.

v. Pesticide, Herbicide, and Fertilizer Application:

Requirement. 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 right of ways, parks, and other municipal property. Permittees with jurisdiction over lands not directly owned by that entity (e.g. incorporated city) shall

implement programs to reduce the discharge of pollutants related to application and distribution of pesticides, herbicides, and fertilizers.

Applicants' Program. The City will require City pesticide applicators to be licensed under the Oklahoma Pesticide Applicators Law. In addition, all contract pesticide applicators working for the City will be required to be licensed and subject to all of the regulations in the pesticide application law. The City will mail bi-annual educational information on pesticide and fertilizer usage utility customers.

vi. Illicit Discharges and Improper Disposal:

An ongoing program to detect and eliminate (or require the discharger to the Municipal Separate Storm Sewer System to eliminate) illicit discharges and improper disposal into the storm sewer.

Requirement. (a) Non-storm water discharges to the Municipal Separate Storm Sewer System shall be effectively prohibited. However, the permittee may allow, in accordance with 40 CFR 122.26(d)(2)(iv)(B)(1), certain non-storm water discharges to the Municipal Separate Storm Sewer System. The Storm Water Management Program shall identify any non-storm water discharges allowed under this paragraph, along with any conditions placed on allowing such discharges to the Municipal Separate Storm Sewer System.

Applicants' Program. The City utilizes several ordinances to effectively prohibit illicit discharges to the municipal separate storm sewer system. Title 11-A Chapter 3 - Watershed Development Regulations gives the City the right to inspect proposed construction plans and newly constructed facilities connections to and use of storm drainage system. The Solid Waste Disposal and Containment, Chapter 7 Title 11-B, prohibits illegal dumping of materials into the storm sewer system. Violation of ordinance carries a fine ranging from twenty dollars (\$20.00) to three hundred dollars (\$300.00) for each day violation continues or repeated. Title 24, Chapter 1, Nuisance Ordinance restricts discharge into the storm drainage system from any untreated sewage, sewage solids, process wastewater, refuse, explosive or combustible liquid, solid or gas, oils, grease, industrial waste or other polluted waters.

Requirement. (b) 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 Municipal Separate Storm Sewer System. Each permittee shall limit the infiltration of seepage from sanitary sewers into the Municipal Separate Storm Sewer System.

Applicants' Program. The City's storm sewer investigation program involves a combination of ongoing, site-specific, corrective action projects plus the identification of new problem areas through routine, preventive maintenance efforts or other detection sources (Mayor's Action Center hotline, Tulsa Area Emergency Management Agency, Tulsa City/County Health Department, Oklahoma water Resource Board, etc.). Current storm sewer rehabilitation activity performed by the Underground Collections System section include approximately 53,000 feet of conduit cleaning, more than 21,000 feet of in-pipe TV camera, and a total of 100 point repairs. The City will continue operation and maintenance program on both the storm sewers and sanitary sewers. Maintenance will consist of cleaning, inspection, point repairs, and engineering.

Requirement. (c) The permittee(s) shall ensure the implementation of a program to reduce the discharge of floatables (e.g. litter and other human-generated solid refuse). The floatables control program shall include source controls and, where necessary, structural controls.

Applicants' Program. The city of Tulsa will have until May 1, 1995, to install two floatable monitoring locations for removal of floatable material in discharges to or from the Municipal separate storm sewer system. The City will also have to complete the study for targeting structural controls and develop schedule for implementation.

Requirement. (d) The discharge or disposal of used motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, and animal wastes into the Municipal Separate Storm Sewer System 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. Such programs shall be readily available to all private residents and shall be publicized and promoted on a regular basis.

Applicants' Program. The City will continue to support the programs currently operated by the Metropolitan Environmental Trust (M.e.t.) and provide additional funding for its expanded toxic materials management program. M.e.t. is responsible for the Recycling Depots, which accepts used motor oil, used oil filters, batteries (lead-acid, alkaline and carbon zinc), and antifreeze. All depots are accessible to the public 24 hours per day, 7 days a week. The depots have staffed attendants for only 8 hours per day. The City will also have collection events two times per year to collect household hazardous waste material until August 1, 1997, when a program which includes periodic collection events and ensures a publicly available drop off location (s) that provides for occasional long weekday hours, or weekend operations is implemented.

Requirement. (e) A program to locate and eliminate illicit discharges and improper disposal into the Municipal Separate Storm Sewer System shall be implemented. This program shall include dry weather screening activities to locate portions of the Municipal Separate Storm Sewer System 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 Municipal Separate Storm Sewer System 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.

Applicants' Program. The City will perform monthly stream monitoring to indicate when and where field screening investigation should be conducted to inspect for potential illicit connections. The monthly stream sampling program will collect ambient instream samples for laboratory analytical testing from 16 water quality sampling points. dry weather field screening will be conducted as determine necessary, when monthly stream monitoring results are indicative of potential upgradient illicit connections or improper disposal practices. The City will also perform ongoing complaint/investigation as a result of reports in on the 24-hour Mayor's Action Center hotline. All complaint/investigation responses are reviewed, documented and filed for future reference.

vii. Spill Prevention and Response:

Requirement. A program to prevent, contain, and respond to spills that may discharge into the Municipal Separate Storm Sewer System 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.

Applicants' Program. The Tulsa Area Emergency Management Agency (TAEMA) coordinates all emergency response, including hazardous and toxic spills. Other City and county departments such as police, fire, and special fire department hazardous material (HAZMAT) teams provide support as required during emergencies. The director of TAEMA is responsible for coordinating containment and cleanup, in addition to monitoring spill situation from beginning to end and details and implements evacuation procedures if required. All spills, regardless of size, are to be emulsified, vacuumed, neutralized, or removed with an absorbent or adsorbent material. The Public Works Department is to be notified in the case of any spill, pollutant, or hazardous material which enters or threatens to enter the sanitary or separate storm sewer system. If waterways are affected, the Oklahoma Water Resources Board is also notified.

viii. Industrial & High Risk Runoff:

A program to identify and control pollutants in storm water discharges to the Municipal Separate Storm Sewer System 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 Municipal Separate Storm Sewer System shall be implemented. The program shall include:

Requirement. (a) priorities and procedures for inspections and establishing and implementing control measures.

Applicants' Program. The City will inspect all operating and closed municipal landfills, all treatment, storage, and disposal facilities for municipal wastes, Hazardous waste treatment, storage and disposal facilities, and industrial facilities regulated under SARA Title III, Section 313 once per permit term.

Requirement. (b) A monitoring program for facilities identified under this section.

Applicants' Program. All facilities listed in (a) above will be required to submit their monitoring results which is required under the NPDES General Storm Water Permit to the City on annual basis. Industrial facilities that the City determine are contributing a substantial pollutant load to the municipal storm sewer will be required to comply with an inspection, monitoring, and reporting schedule develop specifically for the industry.

ix. Construction Site Runoff:

Requirement. A program to reduce the discharge of pollutants from constructions 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 Municipal Separate Storm Sewer System 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.

Applicants' Program. The city of Tulsa Stormwater Management Criteria Manual, Chapter 1500, addresses erosion and sedimentation control for construction related activities. A final erosion control plan must be submitted and approved prior to construction. The erosion control plan submittal consists of two parts: an erosion and sedimentation control report and detail drawings. The City also require construction sites covered under the NPDES General Permit for Storm Water Discharge from construction activity to submit the City a copy of the NOI. Storm water pollution prevention plans are reviewed. If a deficiency exists and corrective action is required, the owner and/or operator will have 48 hours in which to correct deficiency. Otherwise the City will revoke the Watershed Development Permit and halt construction activities. The City will also provide handouts to site operators/contractors which will outline the general requirements of the Criteria Manual and highlight construction and maintenance requirements for acceptable structural best management controls.

x. Public Education:

A public education program with the following elements shall be implemented:

Requirement. (a) a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or improper disposal of materials into the Municipal Separate Storm Sewer System;

Applicants' Program. The City will bi-annual send information about flood hazardous to property owners, on how to recognize illicit dumping into the storm sewers and navigable waters, on reporting such occurrences to the Mayor's Action Center (918) 596-2100.

Requirement. (b) a program to promote, publicize, and facilitate the proper management and disposal of used oil and household hazardous wastes.

Applicants' Program. The City will provide: speeches to civic clubs and professional organizations, radio talk shows, a recycling directory which includes a list of businesses that accept lead-acid batteries, public announcements, an environmental information line with recorded information on recycling and reuse, various brochures and flyers to the public, Newspaper announcements of collection events and newspaper coverage of event results, and elementary school education curriculum employing material borrowed from EPA publications. The City also supports the Metropolitan Environmental Trust provides the public with information and disposal options for waste.

Requirement. (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.

Applicants' Program. The City will mail bi-annual education information to utility customers on pesticide, herbicide, and fertilizer application. the information will also include information about the Oklahoma State University Extension Service's "Master Gardeners" program, and the Soil Conservation Service's information and data on soil types and fertilizer requirements throughout Tulsa.