

US EPA ARCHIVE DOCUMENT

**District of Columbia
Municipal Separate Storm Sewer System Audit**

**Report I
Deficiencies**

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EPA Region 3
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REPORT I –DEFICIENCIES

A. Introduction

Background

The District of Columbia was issued NPDES Permit No. DC0000221 on August 19, 2004. A permit amendment was issued on March 14, 2006 and the permit and this amendment are effective until August 18, 2009.

The District of Columbia is served by both combined sewers and an MS4. The MS4 serves approximately two thirds of the City, which is the area subject to the NPDES MS4 permit. Just prior to the audit, the District Department of Environment (DDOE) assumed responsibility for the storm water program.

MS4 Audit

At the request of U.S. Environmental Protection Agency (EPA) Region 3 and EPA’s Office of Water, a municipal separate storm sewer system (MS4) audit was conducted on February 20 – 22, 2007 in the District of Columbia (District). The audit consisted of both a programmatic, in-office review and an in-field verification of program implementation. The purpose of the audit was to determine compliance with the District’s NPDES permit which incorporates by reference the requirements of the District’s storm water management plan (SWMP) and two TMDL Implementation Plans (Rock Creek and Anacostia River).

The audit team included John Kosco and Christy Williams, Tetra Tech, Inc.; Chuck Schadel, EPA Region 3; and Jenny Molloy and Rachel Herbert from EPA Headquarters, Office of Wastewater Management. The MS4 audit was conducted according to the following schedule:

Tuesday, Feb. 20th	Wednesday, Feb 21st	Thursday, Feb. 22nd
<ul style="list-style-type: none">• Audit Kick-off Meeting & Program Management Overview• Commercial, Residential, and Federal/District Govt. Areas & Municipal Maintenance Activities• Industrial & Hazardous Waste Facilities	<ul style="list-style-type: none">• Development Review & Construction (Public/Private/Flood Control)• Illicit Discharge & Dry/Wet Weather Monitoring Modeling and TMDL Implementation	<ul style="list-style-type: none">• Development Review & Construction (cont)• Program Assessment, Reporting & Agency/Public Education• Out brief conference

Audit Findings

This report summarizes the findings of the MS4 audit organized by the individual components described in the District’s NPDES permit and SWMP. Each report section contains a summary of the permit requirement, a brief description of the relevant details observed during the audit for each SWMP component and a summary of the findings associated with each component. The findings describe any deficiencies identified during

the audit. A photo log from site visits to a municipal maintenance facility and a construction site inspection is also included as Attachment A.

The following areas were not evaluated in detail as part of this audit:

- Wet-weather monitoring program and monitoring program details (e.g., sample locations, types, frequency, parameters)
- Other NPDES permits issued to the District (e.g., industrial or construction NPDES storm water permits)
- Fiscal resources required or expended to implement the program
- Legal authority

B. Storm Water Management Program

1. Program Management (Permit Parts III.A and III.B)

PERMIT REQUIREMENT

Part III.A of the permit requires the District to submit a written Annual Report, a Discharge Monitoring Report, and an Implementation Plan each year. These reports are to be based on the upgraded and amended Storm Water Management Plan dated October 19, 2002. An upgraded SWMP and MS4 permit application is required 6 months prior to the expiration date of the permit (or February 2009). Part III.B outlines the 12 management plan components and incorporates the District's SWMP by reference.

PROGRAM INFORMATION

The District's Storm Water Management Plan (SWMP), dated October 19, 2002, addresses legal authority, source identification, characterization data, and 12 management plan components. The SWMP also includes sections on assessment of controls and fiscal analysis. The SWMP was updated with a second document titled "Addendum – Upgraded Storm Water Management Plan" on December 30, 2004.

The SWMP describes programs and activities to comply with the NPDES permit, however, the SWMP does not clearly identify quantifiable measurable goals for each activity or component. The Implementation Plan includes performance standards for the permit activities; however, many of these performance standards are not measurable.

Program Deficiencies

At the time of the audit:

- (1) the SWMP had not been updated to reflect the December 2004 addendum.*
- (2) the SWMP had unspecific, non-quantifiable, non-measurable goals.*

2. Management Plan for Commercial, Residential, and Government Areas (Permit Part III.B.1)

PERMIT REQUIREMENT

Part III.B.1 of the permit requires the District to “reduce the discharge of pollutants from commercial, Federal and District government owned/operated facilities, and residential areas into the District’s MS4.” The District is also required to “continue current practices of road, street, and highway maintenance as described in the SWMP and evaluate low impact development practices for inclusion with either new or retrofitted District and/or Federal highway construction projects.” The permit specifies that this program shall consist of a mix of program activities addressing trash, debris and other storm water pollutants, including but not limited to:

- Programs that encourage the use of functional landscape at new parking lots and/or new development;
- Low impact development practices;
- A coordinated catch basin cleaning and street-sweeping strategy that optimizes reduction of storm water pollutants;
- Coordination with solid waste program to include leaf collections;
- Preventive maintenance inspections for all storm water management facilities;
- Development and implementation of a rain leader disconnection program;
- Public education that includes collecting pet feces and environmentally-friendly fertilizing and landscaping techniques;
- Modeling of storm water impacts;
- Development of a simple method for measuring the performance of these activities; and
- Strengthening the erosion control program for new construction.

PROGRAM INFORMATION

Functional Landscaping and Low Impact Development

The District encourages developers to incorporate functional landscape techniques in their site development plans through training sessions. The District also encourages LID practices through demonstration projects, including the construction of green roofs.

Catch Basin Cleaning and Street Sweeping

WASA cleans approximately 25,000 catch basins annually and coordinates this activity with street sweeping. Two-thirds of the catch basins are located within the MS4 area. In addition, WASA responds to citizen complaints of blockages and flooding and performs additional cleaning as necessary. Currently, WASA does not document volumes or characterize material per location in the District. A pilot program has been approved in Ward 7 of the Anacostia MS4 area to determine whether more frequent cleaning of catch basins would result in greater loading reduction to the MS4. In addition, the material in the catch basin will be sampled and characterized to better ascertain the types of pollutants being captured and therefore, reduced through the cleaning of the catch basins.

Leaf Collections

DPW collects leaves from early November through early January of each year. In 2006-2007, over 7,000 tons of leaves were collected. A brochure that clearly describes when leaf collection will occur in each Ward was produced and distributed. The District also collects Christmas trees (over 90 tons collected in January 2007).

Storm Water Management Facility Inspections

During FY 2005, the District inspected approximately 150 SWMP facilities for maintenance. A Declaration of Covenant for SWM is required for residential and business property owners. The covenant states that the owner must provide a schedule for maintenance, inspect the device periodically, and be responsible for any maintenance.

Rain Leader Disconnection Program

The District's Construction Codes require all roof drainage to be discharged to the MS4 or combined sewer. Rain leaders can be disconnected from the MS4, but a permit is required. In FY 2005, only two rain leaders were disconnected.

Pet Owner and Residential Landscaping Education

See Section I.11 of this report for a description of the Public Education component of the District's SWMP.

District and Federal Facilities Program

The District and the US General Services Administration (GSA) have signed a consent agreement that requires GSA-contracted work to comply with the same erosion and sediment control requirements as private projects within the District. This ensures consistent application of storm water requirements within the District to both Federal and private projects.

DDOT W St. Maintenance Facility

The audit team conducted a site visit to the DDOT W St. Maintenance Facility. This facility housed a significant number of vehicles, including DDOT vehicles involved in snow removal. A number of water quality problems were identified at the site, as illustrated in the photo log in Appendix A, including:

- An open container of an unidentified substance, possibly solvent, was left exposed to storm water runoff
- Gas cans and unlabeled barrels were left exposed
- A detention basin required cleaning and maintenance
- Sediment accumulation was observed in the storm drain inlets

The facility had a Baysaver unit to treat the majority of runoff from the site. However, basic good housekeeping practices did not appear to be followed at the site. DDOT stated that a SWPPP for the facility was under development.

Program Deficiencies

At the time of the audit:

- (1) the District had not addressed the water quality problems (identified above) at the W Street Maintenance Facility.*

- (2) *the District had not developed SWPPPs for all major municipal facilities with the potential to impact the MS4, and had not conducted regular storm water inspections at those facilities.*
- (3) *the District had not developed training for municipal maintenance staff on appropriate practices and controls to prevent storm water pollution.*

3. Management Plan for Industrial Facilities (Permit Part III.B.2)

PERMIT REQUIREMENT

Part III.B.2 of the permit requires the District to maintain and update an industrial facilities database; perform or provide on-site assistance/inspections and outreach focused on the development of storm water pollution prevention plans (SWPPPs) and NPDES permit compliance; and implement procedures to investigate facilities suspected of contributing pollutants to the MS4.

The industrial facilities specifically referenced in this part include, but are not limited to:

- Private Solid Waste Transfer Stations
- Hazardous Waste Treatment, Disposal, and/or Recovery Plants
- Industrial Facilities Subject to SARA or EPCRA Title III
- Industrial Facilities with NPDES permits
- Industrial Facilities with a Discharge to the MS4

In addition, the permit requires the District to prevent, contain, and respond to spills that may discharge to the MS4.

PROGRAM INFORMATION

The Water Quality Division of the DDOE currently inspects facilities such as waste transfer facilities, laundries, automotive facilities and other industrial facilities determined to be a potential source of pollutants through a review of operating licenses. Each facility is inspected approximately once every two years and the facilities to be inspected are prioritized by watershed. Inspection standard operating procedures have been developed as well as inspection forms (i.e. general inspection form, auto repair shop inspection form, car wash inspection form, laundry facility inspection form, spill inspection form). According to staff interviewed, most deficiencies noted during inspections are rectified through informal means and verbal instructions. Operators are typically given 14 days to comply and a reinspection is conducted. The Water Quality Division issued one Notice of Violation (NOV) and four Notices of Inspection (NOI) during the reporting period for the 2006 Annual Report.

Inspections also serve as compliance assistance, however, no outreach materials are currently being distributed by inspection staff. In 2004, staff distributed a guidance document to automotive facilities in Hickey Run (Ward 5) as a part of a pilot project (Environmental Education for the Compliance of Automotive Repair Shops – EE-CARS), however, these materials are out of print. See Section B.12 of this report for requirements regarding education of industrial facility operators.

In addition to the inspections conducted by Water Quality Division staff, the Hazardous Waste Division regulates approximately 600 hazardous waste generators. This includes the inspection of large quantity generators once every two years (20 facilities), small quantity generators once every three years (120 facilities), and the occasional inspection of conditionally exempt facilities based on complaints or other issues (400 facilities). All conditionally exempt facilities also must complete a self-certification form annually and the information contained on the form may trigger an inspection as well. Hazardous waste staff routinely inspect for hazardous materials storage on the exterior of buildings, however, if the materials are not considered hazardous waste (or used oil), inspectors are not currently requiring any action by facility operators. Hazardous waste inspection staff communicate with Water Quality Division staff about spills at facilities; however, inspectors have not been educated about storm water BMPs or provided an official protocol for handling non-hazardous waste storm water issues unrelated to spills (i.e. source control, pollution prevention). Hazardous waste inspection findings are currently not incorporated into the Water Quality Division industrial database or formally communicated to the DDOE storm water coordinator. Hazardous waste inspection staff were unaware of MS4 permit or SWMP requirements. See Section B.7 of this report for recommendations and requirements specific to the inspection of hazardous waste facilities.

The audit team did not review inspections conducted by other District departments and agencies such as the waste water treatment plant's pretreatment program, code enforcement, the Department of Health's restaurant inspection program, or the District's Clean City Program. The District stated that these inspectors did not include storm water-specific issues in their inspections.

The District is not currently inspecting NPDES permitted facilities. According to District staff, NPDES facilities were last inspected by District staff in 2004. The District is getting assistance from USEPA Region III in order to complete the inspections in 2007 and train new DDOE staff to perform the inspections in the future. In addition, the NPDES permitted facilities listed in the 2006 Annual Report do not include facilities covered by EPA's Multi-Sector General Permit.

The District has developed an Access database of industrial facilities that contains approximately 500 facilities. More facility information is available (up to 1,000 facilities according to the 2006 Annual Report), but it has not been imported into the database from hard copy sources and other existing databases due to the transfer of duties to the DDOE. The database includes facilities inspected by the Water Quality Division, CERCLA, NPDES individual permitted facilities, and hazardous waste generators. The database has been developed to allow inspection findings to be entered, but to date, this information has not been imported.

The facility database is tied to a geographic information system (GIS) application that includes outfall information and locations. In addition, the "sewersheds" have been mapped into the database as well. The database is used to locate sources of illicit discharges or to track where spills might discharge into the MS4 system. See Section

B.10 of this report for more information about how the database is utilized for the detection and elimination of illicit discharges.

Program Deficiencies

At the time of the audit:

- (1) the District had not updated its industrial facility database. Part III.B.2 of the permit requires the District to “maintain and update the industrial facilities database.” The industrial facility list in the 2006 Annual Report did not include facilities under EPA’s Multi-Sector General Permit. The existing industrial facility database did not include all NPDES permitted facilities (general and individual permits), and did not include all industrial facilities with a discharge to the MS4 based on standard industrial classification (SIC) number or some other method of characterizing the industrial “universe” in the District with a potential for pollutant discharge;*
- (1) Part III.B.2 of the permit requires the District to “continue to perform or provide on-site assistance/inspections and outreach focused on the development of storm water pollution prevention plans and NPDES permit compliance.” As described above, the District was not inspecting NPDES permitted facilities.*
- (2) the District had not prioritized the existing facilities according to potential storm water impact (i.e. pollutants of concern at the facility, “sewershed,” watershed, location, past compliance history, etc.) to best determine the frequency of inspections necessary to minimize pollutant discharge to the MEP.*
- (3) the District had not assessed District agencies or departments currently inspecting industrial facilities to determine if a storm water component could be incorporated into their inspections in order to best utilize existing resources.*
- (4) the District had not developed a formal mechanism to communicate with hazardous waste inspection staff in order to incorporate and utilize hazardous waste inspection findings into the industrial and illicit discharge detection and elimination program; and,*
- (5) the District did not track relevant hazardous waste inspection activities in the Water Quality geodatabase.*

4. Management Plan for Construction Sites (Permit Part III.B.3)

PERMIT REQUIREMENT

Part III.B.3 of the permit requires the District to implement a program “to address discharges of pollutants from construction sites.” This includes review and approval of erosion and sediment control plans, inspection and enforcement procedures and regular construction site inspections, enforcement procedures, and educational measures for construction site operators.

The permit also requires operation and maintenance of public streets, roads, and highways to reduce the discharge of pollutants. Also, the District is required to establish procedures that address spill prevention, material management practices, and good housekeeping measures at all equipment and maintenance shops that support maintenance activities.

PROGRAM INFORMATION

Review and Approval of Erosion Control Plans

The District reviews between 2,000 and 2,500 plans each year, the majority of which are minor projects. An erosion and sediment control plan is required for any land disturbance greater than 50 square feet, and the District has developed an Erosion and Sediment Control Plan Review Checklist to ensure that all required elements are included on the plans. The District also requires a copy of the project's SWPPP and proof of EPA's receipt of the completed NOI form before the project plan is approved.

Post-Construction Requirements

To address post-construction, the District issued a *Storm Water Management Guidebook* in April 2003 that includes requirements to reduce peak discharges, meet pollutant reduction goals, and pass extreme floods. The Guidebook describes performance criteria for various structural BMPs, but does not describe in detail potential site design and source control measures that could be included on storm water plans to prevent storm water contamination (for example, disconnect impervious surfaces, stencil storm drains, properly design trash storage areas to prevent storm water contamination, etc.). A storm water plan is required for any project greater than 5,000 square feet.

For permanent storm water management facilities, the District requires a "Declaration of Covenants" to be completed and signed by the property owner that requires the facility to be maintained and also requires a maintenance schedule to be submitted. The covenant is recorded with the owner's deed with the District.

Inspection and Enforcement

District staff conducted over 7,000 inspections at construction sites in 2006 and issued over 400 enforcement actions. The audit team accompanied District inspectors on inspections of three different sites and found the inspectors to be knowledgeable and thorough. A photolog of the problems identified at one construction site are included in Appendix A. The District's inspector identified these problems during the inspection and required all issues to be addressed.

Education of Construction Site Operators

For project disturbing greater than one acre and subject to EPA's construction general permit, the District distributes a fact sheet describing EPA's requirements and how to apply for EPA's permit. The District's primary guidance to construction site operators is the *Erosion & Sediment Control Handbook*. This handbook is a comprehensive inventory of erosion and sediment control practices, but it does not address other pollutants at construction sites such as concrete waste, fuel/oil, trash and debris, sanitary waste, pesticides/fertilizers, and other storm water pollutants that may be present. The District is in the process of updating the *Handbook* to address these other pollutants. The primary education of construction site operators is conducted during site inspections. The District also distributes copies of their Storm Water Management Guidebook, the Erosion and Sediment Control Handbook, and a video on maintaining sand filters to operators.

Program Deficiencies

At the time of the audit:

- (1) the District did not address other pollutants at construction sites in its Erosion and Sediment Control Handbook. These pollutants include, at a minimum, concrete waste, fuel/oil, trash and debris, sanitary waste, and pesticides/fertilizers.*
- (2) the District did not address site design and source control measures in the Storm Water Management Guidebook.*

5. Flood Control Projects (Permit Part III.B.4)

PERMIT REQUIREMENT

Part III.B.4 of the permit requires the District to assess the potential impacts on water quality for all flood management projects and the feasibility of retrofitting existing flood control devices. The District is required to review all development proposed in flood plains, and collect data on the percentage of impervious surface area located in flood plain boundaries for all proposed development.

PROGRAM INFORMATION

The District has only three primary flood control devices – a levee and two weir dams. No retrofitting is currently envisioned by the District. The District also reviews all development plans in flood plains and collects data on the percentage of impervious area located in flood plain boundaries.

Program Deficiencies: None.

6. Monitor and Control of Pollutants from Municipal Landfills or Other Municipal Waste Facilities (Permit Part III.B.5)

PERMIT REQUIREMENT

Part III.B.5 of the permit requires the District to “implement a program to identify measures to evaluate, inspect, enforce, and monitor to reduce pollutants in storm water discharges from facilities that handle municipal waste,” including sewage sludge, solid waste transfer stations, maintenance and storage yards for waste transportation fleets and equipment, publicly owned treatment works, and sludge application and/or disposal sites which are not covered by an NPDES permit.

PROGRAM INFORMATION

The District does not operate any solid waste disposal sites within the District, but does operate two solid waste transfer stations. The audit team visited the Benning Road transfer station, where most activities occurred under cover and the majority of the site drained to retrofitted water quality inlets and a bioretention area.

Program Deficiencies: None.

7. Control of Pollutants from Hazardous Waste Sites (Permit Part III.B.6.)

PERMIT REQUIREMENT

Part III.B.6 of the permit requires the District to implement procedures that provide for monitoring and controlling pollutants in storm water discharges to the MS4 from hazardous waste recovery, treatment, storage, and disposal facilities; facilities subject to Section 313 of the Emergency Planning and Right to Know Act; and any other industrial facilities that either the permittee or the Regional Administrator determine is contributing a substantial pollutant loading to the MS4.

PROGRAM INFORMATION

See Section B.3 of this report for a description of the methods used to control pollutants from hazardous waste sites in the District.

Program Deficiencies: None.

8. Pesticide, Herbicide, and Fertilizer Application (Permit Part III.B.7)

PERMIT REQUIREMENT

Part III.B.7 of the permit requires the District to control the application of pesticides, fertilizers, and the use of other toxic substances according to procedures in the SWMP. In addition, the District is required to complete a screening characterization to determine the sources of pesticides, herbicides, and fertilizers that contaminate storm water runoff.

PROGRAM INFORMATION

The District trains certified applicators in the safe use and handling of pesticides. The Annual Report does not list the amounts of pesticides applied by District agencies for that year. For pesticides applied on private property, the District provides educational materials such as pamphlets on lawn care, nutrient management and IPM. The District also conducts screening for the presence of pesticides, herbicides and fertilizers in surface waters.

Program Deficiencies: None.

9. Deicing and Snow Removal Activities (Permit Parts III.B.8 and III.B.9)

PERMIT REQUIREMENT

Part III.B.8 of the permit requires the District to continue to evaluate the use, application and removal of chemical deicers, salt, sand, and/or sand/deicer mixtures in an effort to minimize the impacts of these materials on water quality. Part III.B.9 of the permit requires the District to implement a program and operating plan to ensure excessive quantities of snow and ice control materials do not enter the District's waterbodies. The District is required to avoid snow dumping in areas adjacent to water bodies, wetlands, and areas drinking water wells except during a declared Snow Emergency.

PROGRAM INFORMATION

The District's snow removal program for District streets is described at <http://ddot.dc.gov/ddot/cwp/view,a,1256,q,564154.asp>. The District stated during the

audit that snow is not dumped near or into waterways except as necessitated by extreme emergencies. The District also described a study comparing deicing products (included as Appendix Q of the District’s SWMP) which recommends Iceban as a viable alternative to sodium-chloride salt.

Program Deficiencies: None.

10. Management Plan to Detect/Remove Illicit Discharges (Permit Part III.B.10)

PERMIT REQUIREMENT

Part III.B.10 of the permit requires that the District implement a program to detect illicit discharges and prevent improper disposal into they MS4 through programs to:

- Reduce floatables through source and structural controls,
- Collect and dispose of used motor vehicle fluids and household hazardous waste (HHW),
- Reduce the discharge of pet waste,
- Inspect outfalls during dry weather in target areas,
- Perform visual inspections in target areas,
- Issue fines for illicit discharges,
- Track the detection and elimination of illicit discharges, and
- Prevent, contain, and respond to spills (to include appropriate training for spill response staff).

PROGRAM INFORMATION

The District operates two skimmer boats on a daily basis to remove floatable debris from the Potomac and Anacostia Rivers. In addition, the District works with several local groups (e.g. Anacostia River Society) to conduct river clean up events each year. A law has been passed which authorizes a \$500 reward for public reporting of illegal dumping and signs with the phone number to report are posted around the District. In addition, the District coordinates with local business groups (e.g. Capital Hill merchants) to perform litter clean ups in certain neighborhoods. The District’s Environmental Task Force also works to eliminate dumping activities by riding along with sanitation workers and installing cameras at remote dumping locations to try and catch people who dump trash. In addition, the DPW Solid Waste Education and Enforcement Program (SWEEP) investigates illegal dumping, poor trash containerization, and sanitation violations.

The District conducts two HHW collection events per year. No permanent location exists in the District, but staff indicated that they hoped to establish one in the future. In addition, the storm water ordinance in the District requires that all used oil must be protected by secondary containment and Water Quality Division and Hazardous Waste Division inspection staff enforce this code.

See Section B.12 of this report for a discussion of educational efforts conducted to reduce the discharge of pet waste.

Both the Water Quality Division of DDOE and WASA conduct inspections of outfalls during dry weather. More than 1000 outfalls have been mapped and entered into the

geodatabase maintained by the Water Quality Division. Each has been inspected the previous two years during the mapping process and tested for the presence of chlorine to determine if there was a cross connection with the sanitary sewer system. The Water Quality Division routinely inspects outfalls based on priority sewersheds or illicit discharges. Many of the outfalls have year round base flow (i.e. groundwater or piped streams). Staff has been trained regarding indicators of an illicit discharge. A SOP has been developed to assist staff in determining whether a cross-connection of the sanitary system exists. If an illicit discharge is detected, this information is entered into a spreadsheet, however, the information is not currently being tracked in the geodatabase maintained by the Water Quality Division. In addition, the District does not record any information when no illicit discharges are detected, therefore, no exact records exist regarding which outfalls have been inspected.

WASA field staff also performs inspections during routine cleaning. Evidence of illicit discharges or unusual materials are reported to the DDOE, however, the incidents and follow up are not entered into the Water Quality geodatabase (Section I.2.).

The Water Quality Divisions staff also responds to citizen or in-agency complaints of suspicious discharges. There is no dedicated call-in number, but residents can submit a complaint through the District-wide complaint number or on-line. The incidents are not assigned a case number and the incidents are not tracked in the Water Quality geodatabase (see Section B.3). No outreach materials exist specifically with regard to the identification and reporting of illicit discharges. See Section B.12 for more information on the District public education program component.

Reports of illicit discharges and the enforcement response are tracked in a spreadsheet, however, no case number is assigned and no formal SOP exists with regard to documenting the investigation and elimination of the discharge.

The District's Emergency Management Agency (EMA) responds to spills in the District. If the material reaches a catch basin or waterbody, the DDOE is notified, however, the DDOE storm water staff currently do not document spill response activities undertaken by the EMA. In addition, spill response facilitated by DDOE staff is not tracked in the Water Quality Division's geodatabase (see Section I.6.).

Staff interviewed were unable to describe spill response training or procedures for other District departments (i.e. DDOT, DPW).

Program Deficiencies

At the time of the audit:

- (1) the District was not actively tracking all outfall inspections and illicit discharge response activities.*
- (2) the District had not established a formal mechanism for tracking the enforcement response and conclusion of illicit discharge investigations.*

11. Enforcement Plan (Permit Part III.B.11)

PERMIT REQUIREMENT

Part III.B.11 requires the District to implement an enforcement plan for carrying out the objectives of the SWMP and assess the effectiveness of the enforcement program in the annual report.

PROGRAM INFORMATION

The District has developed a draft *Enforcement and Compliance Manual*. The Manual describes how enforcement actions, such as violation notices, notices of infraction, and stop work orders are issued and adjudicated. In the 2006 Annual Report, the District includes a list of violations and enforcement actions and also discusses the effectiveness of the enforcement program.

Program Deficiencies

At the time of the audit:

- (1) *the draft Enforcement and Compliance Manual has not been finalized.*

12. Public Education (Permit Part III.B.12)

PERMIT REQUIREMENT

Part III.B.12 of the permit requires the District to implement a public education program which addresses the following topics:

- Household hazardous waste disposal and used oil recycling
- Pesticide and fertilizer education for residents
- Industrial facility storm water management and pollution prevention
- Construction site storm water management

PROGRAM INFORMATION

As referenced in Section B.10., the District conducts two HHW collection events per year and the DDOE also distributes information about HHW and used oil recycling at the environmental events during the year. In addition, in 2006, the DPW developed a calendar (*A Guide to the Services that Keep DC Clean, Healthy and Beautiful*) which informed citizens about HHW disposal and “E-cycling”, the proper disposal of old electronics. The District conducts special events to collect obsolete electronics as well.

Section B.8 describes the District’s program to properly apply pesticides and fertilizer as well as educate commercial applicators of proper techniques. The District also distributes information to residents about proper landscaping practices and integrated pest management. Flyers are distributed at events during the year. In addition, the District has obtained a pollution prevention grant and will be developing a video to train community gardeners and garden clubs about proper gardening techniques. An awareness survey will be conducted before and after to determine the level of behavior change.

As indicated in Section B.3 the District does not currently distribute educational materials specifically targeted to industrial facility operators. Efforts have been conducted in the

past to educate the operators of automotive facilities, but currently outreach materials are not being distributed.

In addition, Part I.B.1 of the permit requires that the District conduct pet owner education in order to reduce bacterial loading. The District has developed a flyer educating residents about the law requiring pet waste cleanup, the fine, and the storm water and health impacts. The flyer was sent to approximately 3,000 residents who had registered their pets.

The DDOE has begun to develop a storm water public education and outreach Website, however, it was not complete at the time of the audit.

The District also conducts many valuable watershed awareness and storm water related outreach programs for youth and teachers in the District such as teacher training, the science fair Storm Water Awareness Award, outdoor classrooms, and field days. Other general storm water awareness programs are conducted as well such as a “find your watershed/sewershed” Webpage, storm drain stenciling, public meetings during which environmental issues are addressed, and the green roofs campaign. In addition, the District is starting the development of a new initiative, “Green Yards, Clean Streams,” which will educate homeowners about low impact development BMPs.

Program Deficiency

At the time of the audit:

- 1) *the District had not developed and distributed outreach materials to industrial facilities. The District had not developed an industrial facility outreach program as required in the 4th paragraph of Part III.B.12 of the permit. The District is required to inform industries about storm water permitting, pollution prevention plans, and the requirement that industries develop structural and non-structural control systems pursuant to regulations at 40 CFR 122.26(d)(2)(iv)(C) and (iv)(A)(5). As described above, the District did not distribute storm water outreach materials to industrial facility operators.*
- 2) *the DDOE storm water Website, under development at the time of the audit, did not include outreach information targeted at residents (i.e. HHW, landscaping tips, and pet waste information), industrial operators and construction contractors.*

C. Monitoring (Permit Part IV)

PERMIT REQUIREMENT

Part IV of the permit requires that the District perform storm event and dry weather sampling as well as wet weather screening.

PROGRAM INFORMATION

The District samples a total of 26 locations in three subwatersheds. The watersheds are rotated each year. The sampling data is submitted in the discharge monitoring report (DMR) and is or will be used to model loadings per the TMDL implementation plans (depending on the watershed).

The dry weather sampling and wet weather screening is performed by the Watershed Protection Division and is described in Section B.10 of this report.

Potential Deficiencies: None. (NOTE: EPA has previously sent the District an administrative order regarding their monitoring program).

D. Storm Water Model (Permit Part V)

PERMIT REQUIREMENT

Part V of the permit requires that that District develop a GIS storm water model.

PROGRAM INFORMATION

As previously described, the District has developed a geodatabase and mapping tool with numerous layers such as outfalls, waterbodies, industrial facilities, land use, zoning, impervious cover, and catch basins. The District is continuing to work to use this geodatabase to model the estimated pollutant loads from the District's watershed in order assess storm water controls and implement required TMDLs.

Potential Deficiencies: None.

E. TMDL WLA Implementation Plans & Compliance Monitoring (Permit Parts VI and IX.B)

PERMIT REQUIREMENT

Part VI of the permit outlines implementation requirements for the Hickey Run TMDL. Part IX.B of the permit requires that the District develop TMDL implementation plans for the Potomac and Anacostia River TMDLs.

PROGRAM INFORMATION

The BMP required in the permit has been planned and the District is currently working with the U.S. Department of Agriculture to secure the site and install the multi-purpose BMP and monitoring locations.

The implementation plans have been developed and were submitted to and approved by EPA. No trends have been observed through the limited monitoring data available and implementation of BMPs outlined in the plans has not begun.

Potential Deficiencies: None.