

Water Pollution  
Control  
Facilities (WPCF)  
Permit

Class V Stormwater  
Underground  
Injection Control  
Systems

DEQ Permit  
Number  
102830

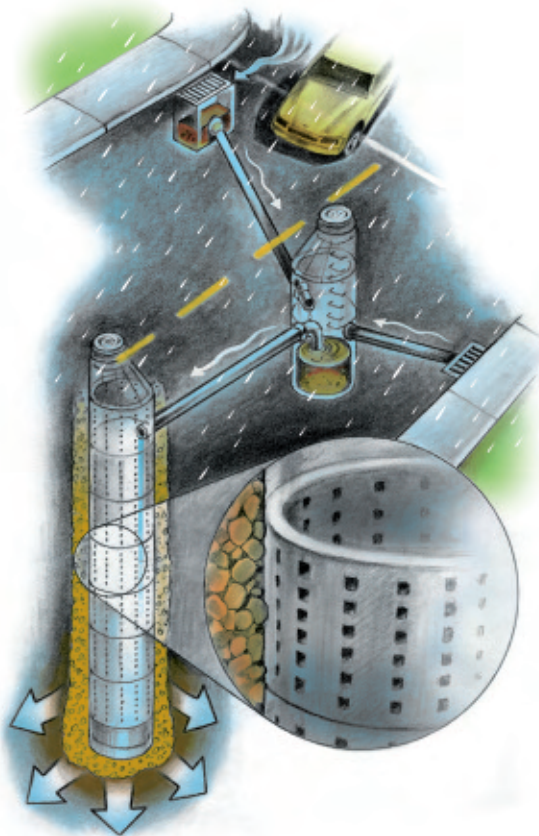
# Final Stormwater Discharge Monitoring Plan

CONSISTS OF

## Sampling and Analysis Plan

AND

## Quality Assurance Project Plan



Prepared by



ENVIRONMENTAL SERVICES  
CITY OF PORTLAND  
working for clean rivers

August 2006

**City of Portland, Oregon**

**Water Pollution Control Facilities (WPCF) Permit For  
Class V Stormwater Underground Injection Control Systems**

**DEQ Permit Number: 102830**

# **Stormwater Discharge Monitoring Plan**

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**Final**

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**City of Portland, Bureau of Environmental Services**

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# Stormwater Discharge Monitoring Plan

The Oregon Department of Environmental Quality (DEQ) issued a Water Pollution Control Facilities (WPCF) permit (Permit Number 102830) to the City of Portland in June 2005. The Stormwater Discharge Monitoring Plan (SDMP) is a mandatory element of the permit (*Schedule B (2)(a)*) and it intended to demonstrate that the quality of stormwater discharged into City-owned (*i.e.*, public) Underground Injection Control structures (UICs) meets permit conditions and protects groundwater quality. The permit requires the City to monitor the quality of stormwater from representative City owned (UICs) throughout the life of the permit (10 years permit).

The Stormwater Discharge Monitoring Plan (SDMP) consists of a Sampling and Analysis Plan<sup>1</sup> (SAP) and a Quality Assurance Project Plan<sup>2</sup> (QAPP). The SAP and QAPP were prepared as stand-alone documents. However, the documents are integrally linked and together provide the elements for the comprehensive SDMP required by the WPCF permit. Information obtained through the implementation of the SAP and QAPP will consist of verified environmental data or information of known and acceptable quality and generated in a scientifically defensible manner as required.

The SAP includes the stormwater discharge monitoring sample design, as well as the procedures and protocols for field-sampling activities. The intent of the SAP is to ensure data collected is of known quality and can be used to demonstrate permit compliance. Specifically the SAP includes the following:

- **UIC Sample Design Plan** – describes the basis for development of a statistically valid UIC monitoring network (*i.e.*, sample population) that is representative of the City-owned public UIC system. The monitoring network was stratified in accordance with the two permit required traffic volume populations.
- **Field Sampling Procedures** – describes the field procedures and protocols for collecting stormwater samples and performing the permit required laboratory analyses. Standard operating procedures (SOPs) for routine field sampling procedures and field sampling forms are provided.
- **Project Health and Safety Plan (HASP)** – provides the health and safety protocols to be implemented during stormwater monitoring. The HASP was prepared in accordance with Oregon Occupational Safety and Health Administration (OSHA) regulations and the policies of the City of Portland.
- **Maps** – area and UIC specific maps showing UIC sampling locations are included.

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<sup>1</sup> City of Portland, 2006. Sampling and Analyses Plan – Stormwater Underground Injection Control System Monitoring. August 2006. Final.

<sup>2</sup> City of Portland, 2006. Quality Assurance Project Plan – Stormwater Underground Injection Control System Monitoring. August 2006. Final.

The QAPP establishes the minimum quality assurance standards and measures to be followed during sample collection activities and laboratory analyses. This will ensure that data of acceptable quality are obtained and project-specific data quality objectives are met. The QAPP also presents the method for calculating the annual mean stormwater concentration for comparison to the permit Maximum Allowable Discharge Limits (MADLs) as required by the WPCF permit.

The draft SAP (July 2005) and draft QAPP (July 2005) were made available for public review and comment by DEQ in accordance with OAR 340-045-0055. In addition, DEQ and the U.S. Environmental Protection Agency (EPA) reviewed draft versions of the SAP and QAPP, including Version 1 of both documents submitted in February 2006. Both the SAP and QAPP were revised to address and integrate DEQ, EPA, and public comments.