

Stormwater System Maintenance

Trainer's Guide

The Rhode Island Storm Water Phase II Education and Outreach Project

Stormwater System Maintenance Trainer's Guide

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Obtaining Copies

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Trainer's Guide Table of Contents

INTRODUCTION

HOW TO USE THIS GUIDE

PLANNING YOUR EMPLOYEE TRAINING

TRAINING MODULES (TABS 1-4 IN THE BINDER)

1. Refresh Your Perspective on the Storm Drain System and Introduction to the Workshop Series
 - Training Overview
 - PowerPoint Presentation: Refresh Your Perspective on the Storm Drain System and Introduction to the Workshop Series
 - Script

2. Enhanced Systems
 - Training Overview
 - PowerPoint Presentation: Enhanced Systems
 - Script
 - Resources:
 - BMP Maintenance Quick Maintenance Recommendations (Guide)
 - Pond Inspection Checklist

3. Typical Roadway Drainage
 - Training Overview
 - PowerPoint Presentation: Typical Roadway Drainage
 - Script
 - Resources:
 - Door Hanger
 - Mapping and IDDE references

4. Minimizing the Pollutant Load
 - Training Overview
 - PowerPoint Presentation: Minimizing the Pollutant Load
 - Script

Trainer's Guide Table of Contents (Continued)

TRAINER'S RESOURCES FOR WORKSHOP ORGANIZATION AND PUBLICITY (TAB 5 IN THE BINDER)

- Sample workshop flyer - Sample notice of the employee training program to be distributed to employees 2-4 weeks before the program.
- Training record - Sample form for recording employee attendance at training sessions. Should be provided to MS4 coordinator for Phase II permit progress reporting.
- Sample workshop evaluation form- Sample workshop evaluation form. Ask employees to complete an evaluation after each module is completed. The evaluation provides feedback to the trainer on training effectiveness and potential changes needed. Employee recommendations may be used to improve pollution control practices and to prioritize facility improvements.

ADDITIONAL TRAINER'S RESOURCES (TAB 6 IN THE BINDER)

- RIDOT Database
 - RIDOT Forms - Inspection and Maintenance Checklists for: Catch Basins, Manholes and Inlets, and Swales
 - RIDOT Database – Access database for keeping track of inspection of BMPs. Works in conjunction with RIDOT forms.
 - ReadMe file – Basic information on files included in RIDOT database folder as well as contact information for RIDOT database.
 - RIDOT Database Instructions – Instructions for using the RIDOT BMP database

CD CONTENTS TABLE (IN THE ENVELOPE WITH THE CD)

INTRODUCTION

This trainer's guide contains a complete four-session training program for employees who work on stormwater systems owned and maintained by Rhode Island municipalities, the RI Department of Transportation, and other institutions regulated under the Phase II storm water program.

This guide is designed for use by facility supervisors in training staff about proper operation and maintenance practices associated with stormwater systems. Our objective is to assist municipalities in meeting requirements of the Phase II permit program, specifically minimum measures for public education and outreach, and pollution prevention and good housekeeping in municipal operations.

This package includes all presentation materials needed to train employees. It contains step-by-step instructions on how to plan and organize the training, with sample materials and suggestions on customizing these for the local facility. It also provides inspection report templates and other resources to assist facility operators in meeting stormwater system inspection and reporting requirements of the Phase II permit program.

HOW TO USE THIS GUIDE

Trainer's Resources for workshop organization and publicity (TAB 5 IN THE BINDER)

This section provides sample notices, evaluation and record keeping templates that are useful in advertising the program, tracking participation and evaluating results. The documents are designed as samples and templates to be customized to suit the supervisor's needs. Taking advantage of these documents will raise awareness of the program among both employees and other municipal officials, and aid in organizing employee training records and results.

Training Modules (TABS 1-4 IN THE BINDER)

Outline of the Four Modules

Four employee training modules make up the series "Stormwater System Maintenance." The modules are designed to be delivered one at a time, approximately once a week. The topic and objectives for each session are summarized below.

Module Contents

Each of the four modules contains the following materials:

1. Training overview - This session plan provides instructions for organizing and conducting the session. It includes objectives for each session, list of materials needed, preparation required, sample agenda, and handouts to be provided.
2. Power Point presentation – Contains the actual training presentation. Suggested talking points for each slide are included in "notes view."
3. Script - Provides talking points for each slide in a separate word document.
4. Resources - Provides additional information for the trainer's use, specific to each module topic. Contents and number of resources vary by module.

Module 1 - Refresh Your Perspective on the Storm Drain System

This first module begins with a review of the relationships between land use, runoff and water quality. Discussion includes information on how storm system maintenance is connected to the requirements to the MS4 General Permit. This module concludes with an introduction to the training series topics.

Module 2 - Enhanced Systems

This module focuses on structures designed specifically to reduce pollutant runoff and/or runoff volumes. The value of an up-to-date inventory of these structures as well as Best Management Practices, or BMPs, are discussed. Elements of both routine and non-routine inspections and maintenance as well as record keeping are focused on.

Module 3 – Typical Roadway Drainage

The good housekeeping requirements for some of the physical components of a traditional or typical stormwater system are discussed. The focus of this section is on where stormwater enters and leaves the MS4 system.

Module 4 – Minimizing the Pollutant Load

The last Stormwater System Good Housekeeping module looks at some of the things we can do to keep pollutants from entering or re-entering the storm drain system. The module looks at the MS4 General Permit Good Housekeeping goals for sweeping, reducing floatables, and managing wastes.

Additional Trainer's Resources (TAB 6 IN THE BINDER)

Supporting documents to aid in implementing the Storm Water Pollution Prevention Plan are provided in this section, including: the RIDOT Stormwater Database and associated inspection forms. This database was presented at the Training the Trainer workshop on April 29th, 2008 at the Univ. of Rhode Island. Resources provided in this section are intended for the supervisor's use and to share with employees as needed.

PLANNING YOUR EMPLOYEE TRAINING

Each training session consists of a PowerPoint presentation. Most sessions should take between 20 - 45 minutes to complete, and possibly a little longer depending on discussion. One exception is session 1, which should take only 10 – 15 minutes to complete. It is suggested that modules 1 and 2 be presented on the same date. To conduct the training, you will need a computer with PowerPoint software, a computer projector, and session modules in original Word or PowerPoint file formats obtained from the training CD or downloaded from the web. Notes for each slide are provided in the presentation (notes view) and in a separate script.

The modules are designed to be presented individually, once every week or two, so time away from regular duties is minimal. But this training is part of each employee's basic duties, so its importance should not be underemphasized. Likewise, active employee participation and input in each session should be strongly encouraged. Discussion centered on specific conditions at your facility will help reinforce each lesson. And you may find that someone else just may have a better idea on how to get a job done that will result in improved stormwater management at your facility. Employees can go through the modules themselves if they miss a training session, but we strongly recommend that you take out the projector even for a small group.

Each module includes a training overview with instructions for organizing and conducting the session, and suggestions for customizing the presentations and exercises. This includes the estimated amount of time to run through the slides. It lists any materials to be collected, preparation required, and handouts to be provided. In some cases additional resources are provided for the trainer's benefit; these resources do not need to be distributed.

If need be, you can cover more than one module a day, but they're designed to build on one another, so please start with Module 1 and proceed through to Module 5 in order. And, yes, all employees should take the training! All staff that spend any time on stormwater system maintenance should recognize where stormwater may pick up pollutants as it flows, and where it may end up, so all eyes can be looking for potential problems and better ways of maintaining a clean and safe municipal stormwater system.

Do feel free to modify the presentations to suit issues and conditions at your facility. If you modify the materials please let us know so we can share your improvements with other facility supervisors. Any questions or suggestions about this guide may be directed to the following individuals.

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