

US EPA ARCHIVE DOCUMENT



Office of Technical & Customer Assistance

Quarterly Project Report

Project Title: *MS4 Construction Site Runoff Control Environmental Results Program*

Project Manager: Ronald Gagnon, P.E., Chief
Telephone: (401) 222-4700, Ext. 7500
Fax: (401) 222-3810
Email: ron.gagnon@dem.ri.gov

Reporting Period: **October 1, 2008 to December 31, 2008**

Project Description: The Construction Site Runoff Control minimum control measure is one of six measures that the operator of a Phase II regulated small municipal separate storm sewer system (MS4) is required to include in its stormwater management program to meet conditions of its Rhode Island Pollutant Discharge Elimination System (RIPDES) permit. The Department of Environmental Management (DEM) works with 34 Storm Water Coordinators to implement the requirements of the Phase II Final Rule. The DEM amended the RIPDES Regulations on February 5, 2003 to include the Phase II requirements for the MS4s. The regulations require MS4s to comply with six Minimum Control Measures. This grant proposal presents an ERP approach to self-certify compliance with, confirm compliance with, and measure compliance with the Construction Site Runoff Control Minimum Control Measure. DEM, working with the University of Rhode Island, will develop a mandatory self-certification program for construction site owners/operators using ERP tools for the use of BMPs to control erosion and sedimentation from construction sites greater than one acre.

Problem Statement - MS4s in Rhode Island:

This grant will address the specific problem of noncompliance with the requirements of the Rhode Island General Permit for Stormwater Associated with Construction Activity and local erosion and sediment control ordinances. The Stormwater Phase II Final Rule for Construction Site Runoff Control Minimum Control Measure (Specific link to EPA's Strategic Goal 2 – Clean and Safe Water) requires municipalities to develop Qualified Local Programs (QLPs) and perform inspections of 100% of construction activities greater than one acre within their jurisdiction. Diminishing resources at the federal, state and local levels is making it much more difficult for MS4 operators to implement compliance and inspection programs. This project will develop an ERP model as a means of satisfying the small MS4 General Permit requirements.

Project Activities Completed During Reporting Period:

- URI staff developed the attached spreadsheet that summarizes the inspection data conducted to date. DEM staff used the EPA *Results Analyzer – Confidence Interval Proportion* (Beta Version) to analyze the data and prepare the attached table that provides preliminary

baseline results. The preliminary data indicates an average compliance rate of 58% for the 17 indicators that have sufficient data for analysis with an average margin of error of 18%. It is clear that additional baseline inspections are needed to reduce the margin of error and to be able to perform statistical comparisons after the program is implemented.

- Based on the preliminary calculations conducted, I have the following Technical Assistance request: *Can the contractor that developed the Results Analyzer modify the spreadsheets so that they will automatically sum the number of inspections and positive findings for each indicator, map this information to the result analyzer cells, and have the results analyzer data automatically placed into a table that can produce bar charts and graphs?*

I think combining the two spreadsheets can provide a template for other states to use and would be a useful outcome of this project. The indicators/questions used for the sedimentation and erosion control are based on federal standards so they should be applicable to all states.

- As noted in the last quarterly report, the current economic downturn has resulted in much fewer construction projects and therefore significant difficulty in completing more baseline inspections. To address this issue, in the next quarter we will work on developing an inspector workshop for the local MS4 inspectors. The inspectors will be trained to use the project check list to conduct additional baseline inspections at facilities that have already been identified on the random list. The workshop will be completed before the spring to coincide with the start up of the constructions season so that the additional baseline inspections can be completed as soon as possible.
- Once baseline inspections are completed, a stakeholder group will be formed to discuss further development and implementation of the program. It is important to complete the baseline inspections before discussing the program with stakeholders so that the baseline results cannot be influenced by the expectation of more government inspections and oversight.

	DEM	URI
Total Allocated	\$75,400.00	\$115,000.00
Spent Previously	\$5,200.00	\$71,000.00
Spent this Quarter	\$2,500.00	\$10,642.00
Remaining	\$67,700.00	\$33,358.00

Major Activities Planned for Next Quarter:

- Develop inspector workshop.
- Continue base line inspections.
- Continue analysis of baseline inspection data.