

MS4 Construction Site Runoff Control Environmental Results Program

February 11, 2010

Ron Gagnon

ron.gagnon@dem.ri.gov

Small MS4 Operators

- Apply for NPDES permit coverage
- Develop a stormwater management program which includes the six minimum control measures
- Implement the stormwater management program using appropriate stormwater management controls, or best management practices (BMPs)
- Develop measurable goals for the program
- Evaluate the effectiveness of the program.

6 Minimum Control Measures

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- **Construction Site Runoff Control**
 - (Construction sites > 1 acre)
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

Applying to Construction Site Runoff Control

- EPA SIG Awarded in October 2007 – Work w/ URI Center for Pollution Prevention
- 3 Year Project
- Identifying Inventory – All Construction Projects > 1 acre
- Develop Environmental Results Program – Standard Check List, Training, Assistance, Measurement, Enforcement

Environmental Results Program

- What is ERP?
 - Compliance Assistance
 - Self-assessment and self-certification
 - Agency Inspections
 - Statistically based performance measurement (EBPI) to gage results and track performance changes

Typical ERP Cycle

1. **Inventory**
2. **Statistical Baseline Inspections**
3. Compliance Assistance
4. Self-Certification - RTCs
5. Targeted Follow-Up
6. Statistical Post-Certification Inspections
7. Informed Decision Making

Auto Body Example

- Industry Inventory, Significant Compliance Issues
- Work Book & Check List
- Base Line Inspections
- Training
- Post Certification Inspections
- Analyze Results

Example of a Measurable Result

MeCl Paint Stripping—RI Data

- ***Baseline Audits (n=40):*** 33% of shops used MeCl
- **ERP Launch:** On site technical assistance, workshops, fact sheets, certification workbook (Sec. 3.2, 7.5.4) advised shops to stop using MeCl
- ***Post Certification Audits (n=42):*** 5% used MeCl

28% Reduction in MeCl Use

= statistically significant
decrease ($P < .001$)

Sample EBPI Compliance – Baseline Results

- 33% Have Their SWPPPs on site
- 33% Conduct Inspections after Significant Rain Events
- 67% Made Provisions for Wind Erosion
- 35% Properly Maintain BMPs
- 39% Have Gravel Access Drives
- 79% Perform Good Housekeeping

Next Steps

- Stakeholder Group Discussions– Implementation
 - Required or voluntary?
 - Revise MS4 GP or other regulation?
 - Develop Training Workshops – How to use the Check List to conduct an inspection and Self-Assessment
 - Develop Inspection Strategy – DEM Inspectors, Local Inspectors, others
 - Self Certifications meet 100% inspection requirement?
 - Random Inspection Frequency?
 - Develop Compliance Policy for Enforcement