PROJECT NARRATIVE

I. **Project Title** – MS4 Construction Site Runoff Control Environmental Results Program

II. **Project Applicant** – Rhode Island Department of Environmental Management
State Project Manager – Ronald Gagnon, P.E., Chief; Office of Technical and Customer Assistance; 235 Promenade Street; Providence, RI 02906 Phone: 401 222-6822, extension 7500; Fax: 401 222-3810; email: ron.gagnon@dem.ri.gov

III. **Total Project Cost** - $262,040

IV. **Project Period** – October 1, 2007 to September 30, 2010

V. **Narrative Elements**

A. **Project Overview** - 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.

The self-certification check list will include a number of yes/no questions to provide a "snap shot" of the compliance status at the time of the inspection. Examples of possible questions include: "Are perimeter controls and sediment barriers adequately installed and maintained?" and "Are storm drain inlets properly maintained?" Other questions will be developed based on applicable sedimentation and erosion control requirements noted in the (draft) Rhode Island Stormwater Design and Installation Standards Manual, and the Rhode Island Soil Erosions and Sediment Control Handbook. Other sources will include the Rhode Island Coastal Resources Management Council guides developed under their review as well as the construction management measures set out in Section 6217 of the Coastal Non-Point Source Control Program.

GOALS AND OBJECTIVES

Resources & Partners	Activities	Outputs	Customers	Short Term Goals	Intermediate Term Goals	Long-Term Goals
Personnel: OTCA RIPDES URI Stakeholders Municipalities	Develop Checklist Develop and submit QAPP Estimate Universe Determine baseline sample Conduct baseline inspections Develop Stakeholder Group Develop Training Workshops for self-certifiers and SW Coordinators Distribute self-certs, provide tech assistance via phone consultations, emails Develop inspection strategy Conduct random inspections Conduct analysis RTC follow-up Random post certification inspections Develop Compliance Policy for enforcement	Checklist QAPP Universe Baseline sample list and number Compliance data Stakeholders meeting reports checklist Workshops Facilities complete & submit certs and RTCs Inspection Policy w/Stormwater Coordinators Compliance data Enforcement Compliance Report RTC verification data Policy Enforcement	# of Storm Water Coordinators participating in the program # (%) of Permitees participating in the program	Improve the quality of inspections by an increase in the # of Storm Water Coordinators trained (# attending the training work shops) to conduct inspections Increase in the number (%) of Permitees and site work contractors with increased knowledge and skills as a result of attending the training work shops, (# attending), completing the self-certifications (# of self-certifications received),and requesting technical assistance during the self-certification period (# of phone calls, emails)	Increase in the number (%) of BMPs at construction sites used to control sedimentation and erosion properly installed and maintained. Increase in the number (%) of storm drain inlets at construction sites properly protected Increase in the number (%) of washout facilities (e.g. paint, stucco, concrete) at construction sites that are clearly marked, controlled, and maintained.	Measured improvement in surface water quality at water bodies that do not now meet water quality criteria Measured improvement (% decrease) in the number of violations issued for non compliance with storm water control requirements

	with RTC follow up Conduct analysis Develop Compliance Policy for enforcement Final Report	Compliance Report with RTC verification data Policy & Enforcement Final Report	EPA			

External Influences:
State and Federal budget deficits.

Key Activities and Milestones

Task Name	Task Description	Outputs Expected	Start Date	End Date
Develop Compliance Check List	DEM, working with the University of Rhode Island, will develop a compliance check list based on the General Permit conditions for the use of BMPs to control erosion and sedimentation along with other requirements of the General Permit. The Check List will be modeled on the check lists successfully developed by this partnership for the Auto Body and Auto Salvage sectors. The check list will include a self-certification	Self-certification check list modeled after the EPA SWPPP Inspection Report (Version 1.0, January 9, 2007). Return-to-Compliance Forms are also included	October 1, 2007	March 31, 2008

	partnership to determine compliance status with the check list parameters. A specific number of EBPIs will be selected based on the EPA Measurable Goals Guidance for Phase II Small MS4s and the results of the base line inspections.	in compliance with each EBPI		
Develop Stakeholder Group	DEM and URI will solicit a number of past Notifiers, contractors, consultants, representatives from non-governmental organizations, and other interested parties for interest in joining a stakeholder group to review, comment, and advise on issues concerning this program. One stakeholder group meeting will be held to discuss the draft check list. The remaining meetings will be held after baseline inspections are completed to ensure that no bias is introduced. We would schedule from two to four	Reports from each meeting will be written and provided to EPA.	May 1, 2008	July 31, 2009

	design and implementation and the training under development by the collaborative arrangement among URI, DEM and the Department of Transportation to provide training and information tailored to municipalities. The training will be coordinated so that the URI, DOT collaborative will focus on training municipalities and the ERP training will focus on industry.			
Distribute Self-Certifications	DEM will distribute the final Check List with certification statements to all persons that submit a Notice of Intent for coverage under the General Permit. DEM will also provide check lists and certification statements to the Storm Water Coordinators for distribution to Notifiers in their respective MS4s. DEM will offer technical assistance in the form of phone call consultations,	Completed Self-certifications and Return-to Compliance Plans	February 1, 2009	July 31, 2009

	familiar with the program through the public stake holder process			
Determine number of Random Samples and conduct Random and Targeted Post-certification Inspections These Inspections Include RTC Verification	The EPA Results Analyzer will be used to determine the number of random samples. DEM and the Storm Water Coordinators will conduct the random inspections and a select number of targeted inspections using the check list. All data will be gathered by DEM for statistical analysis.	A report indicating performance with the selected EBPIs, number and types of RTCs, % of all sites submitting RTCs, and compliance with RTCs will be generated.	August 1, 2009	January 31, 2010
Develop Compliance Policy for Enforcement	DEM and the Storm Water Coordinators will develop a compliance policy for enforcement to ensure that referrals are made using consistent information and actions are taken on a consistent basis. The policy will identify the coordination between local and state responsibilities.	Enforcement Compliance Policy	November 1, 2010	January 31, 2010
Project Reports	Quarterly and Final Project Reports	Quarterly and Final Project Reports	January 31, 2008	September 30, 2010

Environmental Outputs – The main project outputs will include a self-certification check list for the use of BMPs to control erosion and sedimentation, a report indicating

- Establish procedures for the receipt and consideration of information submitted by the public; and
- Determine the appropriate BMPs and measurable goals for the minimum control measure.[1]

This proposal 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 constructions 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. The ERP approach will allow the DEM and the MS4 operators to work together to conduct a significant number of inspections (currently under state rule all construction sites must be inspected, the self-certification will be used to meet this requirement) to measure compliance with the selected EBPIs, target compliance actions that will achieve maximum benefit, respond more efficiently to public complaints and concerns, and develop reports that indicate documented improvements with (or troubles with) compliance. This strategic innovation will enable a more efficient use of limited resources and produce measurable environmental results.

OBJECTIVES AND PUBLIC BENEFIT

The major objective for this project is to protect and improve surface water quality through the development of a cost-effective inspection process based on the Environmental Results Program. The program allows efficient use of scarce inspectors to ensure compliance with environmental regulations. The public will benefit from improved water quality.

TRANSFERABILITY

The ERP developed for this sector will be easily transferred to other states for their use. The Check List will be based on federal requirements for the development of Storm Water Pollution Prevention Plans (SWPPPS) required by the Clean Water Act and the EPA Construction General Permit (The Rhode Island General Permit has consistent requirements with the EPA General Permit) that all states must be incompliance with. The Inspection Policy and Enforcement Policy will be useful to other states implementing a storm water program with their MS4s and demonstrate how to coordinate state and local programs (Qualified Local Programs). It is expected that other QLPs will not be

[1] EPA Fact Sheet 2.6, Stormwater Phase II Final Rule, Construction Site Runoff Control Minimum Control Measure, January 2000 (revised December 2005).

VIII. **Budget Summary (3 years)**

State: Rhode Island

Agency: Department of Environmental Management (DEM)
Office of Technical & Customer Assistance

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Project Title: MS4 Construction Site Runoff Control Environmental Results Program

	Total Project Costs	**Proposed State Leverage Funds**	**EPA Funding**
Staff Salaries and Benefits			
DEM Staff	$105,000.00	$45,000.00	$60,000.00
Travel			
Training, conferences, meetings	$10,000.00		$10,000.00
Equipment			
Computer equipment, digital camera	$5,000.00		$5,000.00
Supplies	$400.00		$400.00
Sub-contracts			
University of Rhode Island	$133,240.00	*$18,240.00	$115,000.00
Total Direct Costs	$253,640.00		$190,400.00
Indirect Costs (16.00% of above)	9,600.00		$9,600.00
TOTAL:	**$263,240.00**	**$63,240.00**	**$200,000.00**

- Waived overhead difference on URI contract [44% - 25%] (25% URI overhead to be used, normal overhead rate is 44%)

Ms. Chatterton holds a double major in Physics and Geology from Boston University and a MS in Civil and Environmental Engineering from the University of Rhode Island.

Eugene Park, PhD, Associate Research Professor, URI

Eugene Park, PhD is an Associate Research Professor in the Chemical Engineering Department at the University of Rhode Island. He has also been Co-Director of the URI Center for Pollution Prevention since 1993. With undergraduate and Master's degrees from Dartmouth College, Park received his PhD from URI in 1993. Research interests include membrane separation and biological trickling filtration. He has been involved in many new environmental initiatives like ERP for auto body, lead paint removal contractors, and dry cleaners. The URI Center has provided technical assistance to over 400 RI businesses since 1989. Park received the EPA Individual Environment Merit Award in 1998. Since 1997, he has also been involved in international collaboration projects with Korea, Thailand, and Central America.

Publications: Enander, Gagnon, Park et al., "Environmental Health Practice: Statistically Based Performance Measurement", American Journal of Public Health, May 2007, Vol 97, No. 5