



# Rhode Island Department of Environmental Management

## Office of Waste Management

### *2000-2001 Program Work Plan* December, 1999



**Underground Tanks**



**Superfund**



**Waste Facility Management**



**Brownfields and Site Remediation**

## **Rhode Island Department of Environmental Management**

### **Office of Waste Management 2000 Work Plan**

#### **I. Program Description:**

This document is a strategic plan for the Office of Waste Management for the 2000 and 2001 federal fiscal years that runs from October 1, 1999 to September 30, 2001. The formulation and drafting of this plan was undertaken, in part, to effectively develop a Performance Partnership Agreement with the U.S. Environmental Protection Agency for that time period. Perhaps more importantly though, this plan was developed to focus the actions and resources of the Office of Waste Management to meet its mission and goals as effectively as possible over the next twenty-four months. This plan incorporates the results of discussion and comment from the Department's stakeholder meeting(s).

The Office of Waste Management (OWM) was created as a result of the reorganization of the Department of Environmental Management in September of 1996 from the former Divisions of Site Remediation and Waste Management. Hazardous waste, solid waste and underground storage tank licensing, permitting and site remediation functions were consolidated within together to form this new Office. OWM is organized into four distinct, but inter-related sections. Those four sections are Waste Facility Management, Underground Storage Tank Management, Superfund and Department of Defense Site Management, and Site Remediation and Brownfields Revitalization. An organizational chart is shown in Figure 1.

In addition, other programs within DEM include sections that are integral to the management of waste materials in Rhode Island. DEM has consolidated and stream-lined compliance activities, including emergency response and enforcement programs, in a new Office of Compliance and Inspection. Furthermore, compliance assistance, customer service, and pollution prevention programs were consolidated in a second new office, the Office of Technical and Customer Assistance. Finally, residential and commercial waste recycling programs formerly housed in DEM's Office of Strategic Planning and Policy are scheduled to be transitioned into the Office of Waste Management in the coming year. Interoffice coordination between these four Offices is critical for effective waste management policy and regulation throughout the State.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
FY2000 WORKPLAN  
OFFICE OF WASTE MANAGEMENT

Waste Management Facilities and Site Clean Up in Rhode Island: Waste management facilities and the clean up of contaminated sites have impacts on virtually all Rhode Islanders. In a State where quality of life has such high value to residents, businesses and visitors, it is critical that wastes are managed appropriately and contaminated properties are cleaned up in a professional and responsible manner.

In Rhode Island 43 facilities are used for the management of solid or hazardous waste materials, 2300 facilities store oil or hazardous materials in underground storage tanks, and over 980 properties are known to be contaminated through leaks or spills of oil or chemicals. Many of these sites lie in areas where problems could, or do threaten surface water, ground water, and other sensitive environmental resources that the state is trying to protect and/or restore. Over 35% of our regulated sites lie within 500 feet of a surface water body. Spills and leaks at regulated facilities almost always threaten groundwater. Over 80% of the ground water in R.I. is classified as GAA or GA, which means the State is committed to protecting it for suitability as drinking water. Furthermore, Rhode Island is a small, but densely populated community, where over 67 percent of the sites regulated by the Office of Waste Management are located in densely populated urban and suburban neighborhoods. Given these challenges, OWM is committed to continuing its core program activities of protection with emphasis on reducing waste generation at the source, while integrating these and other activities into the Department's Watershed-Ecosystem based approach to environmental management.

This work plan is presented in a format that defines OWM's mission statement, major goals, and office highlights on major initiatives. That presentation is followed by a program-by-program breakdown of specific program "strategies" to meet "key objectives" which are linked to the goals and mission of the office as well as the goals and strategic priorities of the Department. In addition, the office has identified specific measures to be tracked to assess the environmental and programmatic benefits accomplished by these activities.

**II. Office Mission Statement:** The mission statement of the Office is:

*To promote source reduction and recycling of wastes, and to protect human health and the environment from spills and releases from licensed waste management operations, underground storage tank facilities, and contaminated sites.*

**III. Office Highlights:**

The following are major highlights and initiatives being implemented by the Office of Waste Management in support of the Department's goals:

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
FY2000 WORKPLAN  
OFFICE OF WASTE MANAGEMENT

- ◆ **Watershed and “Smart” Growth Strategies:** This year, the Office intends to coordinate and integrate its office efforts, where possible, into the department wide initiatives supporting watershed based environmental management and “smart” growth strategies. The watersheds along the Wood/Pawcatuck, and the Woonasquatucket Rivers have been identified by the Department to pilot this approach. Office activities will most likely include targeted site assessments, and coordinated site clean ups in these areas. In addition, Brownfield program activities will begin focusing where possible on regional, multi-site areas for clean up versus individual sites as part of the statewide effort of “smart growth” and protecting “greenways”.
- ◆ **Woonasquatucket River Revitalization:** For several years the Office of Waste Management and EPA have been conducting extensive investigative activities in the Woonasquatucket River watershed and we plan to continue and integrate these activities in the coming year as part of the department’s broader watershed based efforts. We have developed an effective working partnership with both the City of Providence and the Providence Plan to identify Brownfields sites and facilitate their return to beneficial use in the neighborhood. Our focus on this community began with the award of a Brownfields pilot grant in 1996. This partnership was recognized by EPA in 1998 when Providence was named one of sixteen Brownfields Showcase Communities in the United States. In 2000, we intend to continue work on the Lincoln Lace and Braid remediation project, the Riverside Mills site, and the Buttonhole golf course, as well as work closely with EPA on the investigation of the Centerdale Manor Restoration Project with the associated dioxin contamination issues in the river sediments.
- ◆ **Pawtuxet River Waste Site Investigation and Clean-up Project:** In 1998, we planned to institute a coordinated management strategy for the investigation of several contaminated sites along the Pawtuxet River which build on and expand the pro-active Brownfields pilot project currently ongoing in the Blackstone and Woonasquatucket River watersheds. Lack of funding stifled this initiative in 1998, however, in 1999 the communities took the lead and received a Brownfields demonstration pilot grant to begin the work. In 2000, we expect this project to continue and focus on identifying and managing sites in the Pawtuxet Valley communities of West Warwick and Coventry as well as potential involvement in parts of Cranston and Warwick.
- ◆ **Providence and Seekonk Rivers Project:** In 1998, with EPA’s assistance, significant amounts of environmental data were organized and evaluated for over 35 sites bordering the Providence and Seekonk Rivers. The Office is continuing its efforts to evaluate and develop a regional strategy for addressing these sites.
- ◆ **Proactive Approach to Rhode Island’s Historical Dumps and Landfills:** The Office has begun an effort to characterize and evaluate over 80 historical dumps and landfills located throughout the State. We hope to develop a clear program for municipalities and other parties to address their liabilities with respect to many of these uncontrolled sites.
- ◆ **1998 UST Upgrade Efforts:** The Office is following up on the completion of its extensive 10 year effort to have all underground storage tank systems in the state meet the 1998 federal standards of protection.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
FY2000 WORKPLAN  
OFFICE OF WASTE MANAGEMENT

- ◆
- ◆ **Improved Communication and Web Page Enhancements:** The Office continues its communication and outreach efforts with further enhancements to the Office web page. Additional fact sheets on contaminated site clean ups continue to be added, in addition to providing internet access to all rules, regulations, and department policies.
- ◆ **State Involvement with Regional and National Agenda Issues:** Office personnel continue to participate and represent RI's state perspective on national and regional waste issues. This involvement has helped identify and resolve inconsistencies in waste management practices with neighboring states, and has fostered a comprehensive regional approach to environmental issues of concern. This has included active involvement in the regional North East Waste Management Organization Association (NEWMOA), participation on several national task forces for CERCLA, Special Wastes, and National Communication efforts through the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), and continuing participation on EPA's national universal hazardous waste manifest workgroup.
- ◆ **Permit Streamlining:** A Department-wide permit streamlining effort is currently underway. Several specific recommendations were made by various contractors and stakeholders related to streamlining the Office of Waste Management's existing processes. As part of a study conducted by a Department consultant (Peat Marwick), most of those recommendations have already been implemented. The OWM intends to continue those efforts into 2000 with a particular effort related to further computerization and improved sharing of environmental data between DEM Offices.
- ◆ **Source Reduction and Recycling of Wastes:** The Office will be coordinating with the Office of Strategic Planning and Policy on the transition of these Department responsibilities into the Office of Waste Management. Based upon reallocated resources, the Office will coordinate Department efforts with the Rhode Island Resource Recovery Corporation (RIRRC) to ensure a coordinated state approach to waste management supporting the above principals.
- ◆ **Stakeholder Advisory Committee:** In 1999 the Site Remediation Program continued its stakeholder advisory committee, which contained a broad spectrum of members including members of the regulated community and the Department of Health. Significant progress was made on a number of program issues, most notably on the issue of arsenic contamination versus natural background levels. Many of the issues identified above will also be included in future stakeholder meetings.
- ◆ **RCRA State Program Authorization:** Make major revisions to state hazardous waste regulations to incorporate recent federal changes. The State's Hazardous Waste Regulations were last updated in April, 1992. The Office is committed to involving the regulated community during the regulation revisions through informal workshops.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
FY2000 WORKPLAN  
OFFICE OF WASTE MANAGEMENT

**IV. KEY OBJECTIVES AND STRATEGIES:**

In order to meet the Office **mission** and Department goals and strategic priorities, five general **key objectives** have been identified which are critical to planning program activities, setting program priorities, and undertaking initiatives and program enhancements:

- ◆ To promote waste source reduction and recycling,
- ◆ To contribute to watershed restoration and clean-up of underutilized contaminated sites to support “smart growth” strategies,
- ◆ To ensure the proper transportation, storage, treatment, management and disposal of generated solid waste, hazardous waste and medical waste,
- ◆ To ensure the proper management of underground storage tank systems, and
- ◆ To minimize or eliminate the impacts and risks to human health and the environment which result from releases of oil, chemicals or wastes.

Every activity undertaken by the Office of Waste Management must support one or more of these key objectives.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 1:</b> To promote waste source reduction and recycling		<b>Environmental Indicators:</b> Pollution prevention
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
<ul style="list-style-type: none"> <li>◆ Monitor the Quantity of Hazardous waste generated in the State.</li> <li>◆</li> <li>◆</li> </ul>	<ul style="list-style-type: none"> <li>◆ Analyze hazardous waste management through the biennial report system (BRS) to evaluate types and quantities of hazardous waste generated in RI for planning purposes. (OWM-WFMP, and EPA).</li> <li>◆</li> <li>◆ Also coordinate with EPA on national data management efforts including the WIN/Informed data management project to assure nationally consistent information base.</li> <li>• Participate in the review process to re-evaluate RCRA Info information management structure and proposed changes to the structure.</li> </ul>	<p><b>Hazardous Waste Reduction:</b></p> <ul style="list-style-type: none"> <li>• Change in hazardous waste generation per State reporting period.</li> <li>• Percent change in quantity of hazardous wastes generated containing EPA targeted “persistent, bioaccumulative, and toxic” (PBT) chemicals since 20XX. (by EPA per biennial report– final PBT target list to be determined by EPA).</li> </ul> <p><u>Primary Building Blocks:</u></p> <ul style="list-style-type: none"> <li>• Quantity of hazardous waste generated per reporting period.</li> <li>• State reporting period.</li> </ul> <p><u>Primary Building Blocks:</u></p> <ul style="list-style-type: none"> <li>• Quantity of hazardous wastes generated containing targeted PBT chemicals.</li> <li>• List of targeted PBT chemicals and targeted waste codes.(EPA)</li> </ul>
<p>Monitor the quantities and types of solid waste managed, disposed of, and recycled in Rhode Island.</p>	<p>Create and review annual survey report for solid waste management facilities.</p>	<p><b><u>Solid Waste Reduction.</u></b>          Changes in the quantity of solid waste disposed of per capita.</p> <p><b><u>Safe Solid Waste Management</u></b>          Percent of municipal solid waste (MSW) annually disposed of in landfills in compliance with 40 CFR Part 258 standards.          Change in percent of total solid waste managed by method per reporting period.</p> <p><u>Primary Building Blocks:</u></p> <ul style="list-style-type: none"> <li>• Total quantity of solid waste disposed.</li> <li>• State population.</li> </ul> <p><u>Primary Building Blocks:</u></p> <ul style="list-style-type: none"> <li>• Quantity MSW disposed per reporting period.</li> <li>• Quantity MSW disposed in landfills meeting liner and ground water monitoring requirements as described in 40 CFR Part 258 per reporting period.</li> </ul> <p><u>Primary Building Blocks:</u>          Total quantity of solid waste managed per reporting period by management method.</p>

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 1:</b> To promote waste source reduction and recycling		<b>Environmental Indicators:</b> Pollution prevention
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
	Evaluate applications for alternative uses of solid waste in accordance with the OWM's Policy Memo regarding Guidelines on Beneficial Use Determinations ("BUDs") for Source Segregated Solid Waste. This includes the use of certain solid waste materials as alternative sources of daily cover at licensed sanitary landfills.	# of applications received (2 anticipated) # of applications approved, denied, or withdrawn Quantity of solid waste material recycled or reused (by waste material type/classification and reuse type/classification).
	Coordinate with DEM Office of Strategic Planning and Policy (OSPP) on transition of duties for Waste Recycling and Source Reduction to OWM.	Draft plan for DEM senior management consideration regarding proposed transition of duties and resources to be completed jointly by OWM and Strategic Planning within 6 months
	Based upon resources reallocated to OWM, coordinate with Rhode Island Resource Recovery Corporation on implementation of program to increase state-wide source reduction and recycling efforts.	

<b>OBJECTIVE 2:</b> To contribute to watershed restoration and cleanup of underutilized sites to support "smart growth" strategies.		<b>Environmental Indicators</b>
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
Oversee the implementation and completion of site investigations where necessary at abandoned or under-utilized, contaminated sites. (OWM- Site Remediation)	<ul style="list-style-type: none"> <li>◆ Oversee site investigations</li> <li>◆ Oversee site clean up activities</li> </ul>	# of site investigations at abandoned or under-utilized, contaminated sites.
	Draft and enter Settlement Agreements to provide assurances to prospective purchasers and other parties who wish to reuse or redevelop contaminated sites that have undergone site response and clean-up activities. (OWM- Site Remediation)	# of settlement agreements completed.
Determine what actions are necessary to clean up sites and quantify costs, where possible, through Brownfields Site Assessments. (OWM- SFA)	<ul style="list-style-type: none"> <li>◆ Complete BSA at Pontiac Mills</li> <li>◆ Perform 3 additional BSAs</li> </ul>	# of Brownfield Site Assessments initiated. # of Brownfield Site Assessments completed.



RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 2:</b> To contribute to watershed restoration and cleanup of underutilized sites to support “smart growth” strategies.		<b>Environmental Indicators</b>
<b>ACTIVITIES</b>	<b>Performance Measures</b>	
<p><b>Enhancement:</b> Continue Brownfields Pilot Project (OWM- Site Remediation)</p> <p>◆</p>	<ul style="list-style-type: none"> <li>◆ Perform pre-remedial design investigations at the Riverside Mills and Lincoln Lace &amp; Braid pilot sites.</li> <li>◆ Amend Brownfields Pilot grant to extend grant period beyond May 31, 2000.</li> <li>◆ Expand the geographical scope of the Rhode Island Brownfields Pilot Project.</li> <li>◆ Use TAC contractor to perform field investigations, remedial design work, and report preparation where possible to maximize Program resources.</li> <li>◆ Perform Phase II site investigations.</li> <li>◆ Develop a generic "Brownfields Redevelopment Guide".</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cities/Towns</li> <li>▪ Total Assessed Value (\$)</li> <li>▪ Taxes Assessed (\$)</li> <li>▪ # of New Jobs</li> <li>▪ Estimated Annual Income Tax (\$)</li> <li>▪ Acres of Land Remediated and Reused</li> </ul>
<p><b>Enhancement:</b> Brownfields Economic Indicator Tracking and Coordination Plan- Continue to obtain the necessary economic information and continue to report such information. (OWM- Site Remediation)</p>	Maintenance of the Brownfields Economic Indicator Tracking	
<p><b>Enhancement:</b> Coordinate with OC&amp;I and Legal Services in Department’s efforts to establish an SEP Bank of potential projects.</p>		Preparation of list of potential Site Remediation projects.
<p><b>Enhancement:</b> Development of Natural Resource Damage Assessment guidance document for contaminated sites in RI. (Additional information, refer to two pilot watershed workplans being developed by other Offices).</p>		Status of guidance document.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 3:</b> To ensure the proper transportation, storage, management and disposal of solid waste, hazardous waste and medical waste.		<b>ENVIRONMENTAL INDICATORS</b>
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
Ensure proper transportation of hazardous, medical, and septage waste by permitted vehicles.	Evaluate and process approximately 2500 permit applications for hazardous, medical, and septage waste transporters. (OWM-WFMP)	Percent of inspected waste transporters (hazardous, septic, and medical) in significant compliance per reporting period. # of transporters permitted. # of transporters inspected. ( 12 inspections targeted ) # of transporters referred/issued NOV's.
Complete the permit applications of hazardous waste treatment, storage & disposal facilities (TSDf), and conduct annual inspections (OWM-WFMP, and EPA)	<ul style="list-style-type: none"> <li>▪ Complete review and approval of final closure of DOT facility per EPA consent agreement.</li> <li>▪ Oversee review and approval of closure @ 21<sup>st</sup> Cent.</li> <li>▪ Complete review and approval of Chempak WAP per EPA consent agreement.</li> <li>▪ Complete review and approval Chempak permit subject to public hearing requirements.</li> <li>▪ TSDf permit modifications as required.</li> </ul>	Status of application reviews. # of inspection completed (target- 2 full inspections).  <b>Safe Hazardous Waste Management</b> Percent of hazardous waste managed at inspected TSDf's operating in significant compliance per year.  <u>Primary Building Blocks:</u> <ul style="list-style-type: none"> <li>• Quantity of hazardous waste managed at each inspected TSDf per year.</li> <li>• TSDf's operating in significant compliance each year with no NOV outstanding.</li> <li>◆ Quantity of waste managed at TSDf during period on significant non-compliance (period of unresolved NOV).</li> </ul>
Ensure facilities comply with the latest standards of protectiveness by evaluating and processing annual applications for temporary hazardous waste storage and/or transfer areas. (OWM-WFMP)	<ul style="list-style-type: none"> <li>◆ Evaluate 5 temporary hazardous waste storage and/or transfer area applications.</li> <li>◆ Ensure consistency in the regulated community by conducting hazardous waste regulatory interpretations as requested and evaluating operations of permitted hazardous waste management activities (OWM-WFMP, and EPA).</li> </ul>	# of transfer facility applications received and reviewed (target – 5 anticipated). # of inspections completed (target- 5 anticipated). # of NOV's referred/issued for significant non-compliance.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 3:</b> To ensure the proper transportation, storage, management and disposal of solid waste, hazardous waste and medical waste.		<b>ENVIRONMENTAL INDICATORS</b>
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
<ul style="list-style-type: none"> <li>◆ Ensure proper disposal of hazardous waste through manifest tracking.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Track hazardous waste shipments through the manifest system to ensure proper disposal of hazardous waste.(OWM-WFMP).</li> </ul>	<p>100% of manifests are logged into system and available for multi-Office use. (approximately 90,000 manifests received annually)</p>
<ul style="list-style-type: none"> <li>◆ Maintain program authorizations from EPA (OWM-WFMP, and EPA).</li> <li>◆</li> </ul>	<ul style="list-style-type: none"> <li>◆ Current draft package to be submitted for EPA review by Oct. 15, 1999 including:               <ul style="list-style-type: none"> <li>◆ Universal Waste</li> <li>◆ Non-HSWA Cluster IV.</li> <li>◆ TC Rule</li> <li>◆</li> </ul> </li> <li>◆ Public hearing within 75 days of receipt of final EPA comments on draft package.</li> <li>◆ Future or next package submittal: Dept. to pursue authorization of rules through incorporation by reference through June 1999, with evaluation of “optional” federal rules, and rules most applicable to R.I. Dept. to hold preliminary informal stakeholder meetings on State specific rules (ie: used oil, SQG issues, etc.) and future proposed incorporations within 120 days of receipt of EPA final comments on package (universal waste, non-HSWA Cluster IV, and TC Rule) - target for submittal of draft package for EPA review Sept. 2000.</li> </ul>	<p>Status of program authorization.</p> <ul style="list-style-type: none"> <li>◆ Number of regulatory checklists submitted to EPA for approval</li> <li>◆ promulgated regulatory revisions</li> </ul>

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 3:</b> To ensure the proper transportation, storage, management and disposal of solid waste, hazardous waste and medical waste.		<b>ENVIRONMENTAL INDICATORS</b>
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
<ul style="list-style-type: none"> <li>◆ Ensure all Solid and Medical waste facilities comply with the latest standards of protectiveness by evaluating and processing solid/medical waste management facility license/registration applications (including renewals for existing facilities), and related approvals, including: (OWM-WFMP)</li> </ul>	<ul style="list-style-type: none"> <li>◆ Applications to be reviewed:</li> <li>◆ Landfills (4 in FY2000 , 1 in FY2001)</li> <li>◆ Transfer Stations (17 in FY2000, 2 in FY2001)</li> <li>◆ Construction and Demolition Debris Processing facilities (2 in FY2000, 0 in FY2001)</li> <li>◆ Composting facilities (13 in FY2000, 14 in FY2001)</li> <li>◆ Petroleum-Contaminated Soil Processing facilities (0 in FY2000, 1 in FY2001)</li> <li>◆ Beneficial use determinations for alternative uses of certain solid wastes including use as cover material (2 in FY2000, 2 in FY2001)</li> <li>◆ Permits for medical waste treatment storage and disposal facilities (2 in FY2000, 0 in FY2001)</li> <li>◆ Variances for medical waste transporters (10 in FY2000, 10 in FY2001)</li> <li>◆ Review alternative medical waste treatment technologies.</li> </ul>	<p># of applications received (by type).            # of applications approved, denied, or withdrawn (by type).</p>
<p>Oversee the operation of licensed solid waste management activities. (OWM-WFMP)</p>	<ul style="list-style-type: none"> <li>• Conduct routine inspections of licensed solid waste management activities (70 anticipated annually)</li> </ul>	<p>Percent of solid waste managed at well managed facilities per reporting period.  <u>Primary Building Blocks:</u></p> <ul style="list-style-type: none"> <li>• Quantity of solid waste managed per reporting period.</li> <li>• Quantity of solid waste managed at specific facilities.</li> <li>• # of violations per facility (NOVs).</li> <li>• # of inspections per facility.</li> <li>• Other State specific factors such as “is the facility causing degradation of ground water.”</li> </ul>

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 3:</b> To ensure the proper transportation, storage, management and disposal of solid waste, hazardous waste and medical waste.		<b>ENVIRONMENTAL INDICATORS</b>
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
Assessment of formerly closed or abandoned landfills (see also additional Enhancement entry under clean up of contaminated sites). (OWM)	◆	<u>Primary Building Blocks:</u> <ul style="list-style-type: none"> <li>• Number of active and inactive MSW landfills.</li> <li>• Number of landfills currently under investigation or remediation</li> </ul> Number of landfills where the required investigation and remediation has been completed. (This includes landfills which have completed the required investigation and remediation and are in long term monitoring only.) Percent of active and inactive landfills where the required corrective action has been completed and/or where releases to the environment are under control. (ie. The required investigation and remediation of the landfill is complete and the landfill is in long-term monitoring only.)
Provide accurate and timely information Make the transition from RICRIS to RCRA	<ul style="list-style-type: none"> <li>◆ Maintain manifest and transporter data bases</li> <li>◆ Complete 1999 Biennial Report and interface with EPA</li> <li>◆ Transferring data into RCRA database</li> <li>◆ Attend national training on RCRA information</li> </ul>	<ul style="list-style-type: none"> <li>◆ Ongoing</li> <li>• September 2000</li> <li>◆ Ongoing</li> <li>• Spring 2000</li> </ul>
<b>Enhancement:</b> Coordinate with DEM Office of Water Resources and other agencies on revising the sediment management policy for dredge projects, and streamlining the internal review process.		
<b>Enhancement:</b> Participate, as required, in Department efforts regarding lead abatement issues, including coordination with the RI Department of Health and municipalities.		
Finalize federal approval of State adoption of Sub-Title D requirements for landfills (EPA).		Status of Federal Approval.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 4:</b> To ensure the proper management of underground storage tank systems		<b>ENVIRONMENTAL INDICATORS</b>
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
<ul style="list-style-type: none"> <li>◆ Oversee proper registration of underground storage tank systems.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Maintain a registration program for approximately 3400 underground storage tanks (OWM-UST).               <ul style="list-style-type: none"> <li>▪ Continue to update UST access with information we have kept in the files (Precision test data, Overfill, Spill containment, Leak detection equipment).</li> <li>▪ Assist Kyran Associates (DEM computer consultant) with conversion of Access data base to new Department-wide system (OWM scheduled for December 2000)</li> </ul> </li> </ul>	<p>% of active UST's meeting corrosion protection requirements.</p> <p>% of active UST's meeting leak detection requirements.</p> <p><u>Primary Building Blocks:</u></p> <ul style="list-style-type: none"> <li>• Total # of UST's systems regulated under Subtitle I (active and closed)</li> <li>• # of permanently closed petroleum UST's regulated under Subtitle I.</li> <li>• Total # of hazardous Substance UST systems (active and closed).</li> <li>• # of UST systems equipped to meet the 1998 requirements for upgrading (do not include closed UST systems)</li> <li>◆ # of UST systems equipped to meet the requirements for leak detection.</li> </ul>

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 4:</b> To ensure the proper management of underground storage tank systems		<b>ENVIRONMENTAL INDICATORS</b>
<b>STRATEGIES</b>	<b>ACTIVITIES</b>	<b>Performance Measures</b>
Enforce spill containment , overfill and corrosion protection, and leak detection at all UST facilities.	<ul style="list-style-type: none"> <li>◆ Track and enforce against facilities that have past due fees.</li> <li>◆ Track and enforce against facilities that have abandoned UST's.</li> <li>◆ Track and refer for enforcement action facilities still non-compliant with the Dec. 1998 upgrade requirements</li> <li>◆ Review, approve, and inspect the installation and upgrade of UST systems. (OWM-UST)</li> <li>◆ License tank integrity testers and testing companies, and review submitted tank tests. (OWM-UST)</li> <li>◆ Inspect UST facilities for Compliance after appropriate EPA training. (OWM-UST) – The specific number of targeted inspections and compliance ppriority areas to be set at a joint EPA/DEM mid-year meeting.</li> <li>◆ Review the compliance status of UST facilities for UST Fund eligibility. (OWM-UST)</li> <li>◆ Review and approve tank closure applications. (OWM-UST)</li> </ul>	# of facilities that meet spill containment and overfill protection requirements. # of facilities that have paid fees. # of facilities that owe fees. % of known facilities non-compliant with the DEC. 1998 upgrades deadline, referred to OC & I for enforcement. # of abandoned UST's closed # of facilities that have submitted applications for new installations or upgrades. # of new installation inspections # of licensed testers, companies, and testing methods. # of tests submitted. # of failed tests reported. # of compliance inspections. # of compliant facilities. # of non-compliant facilities. Total # of compliance determinations received from the UST Fund Board. # of Positive referrals to board. # of negative referrals to board. # of closure applications reviewed.
Enhancement: <b>Revising and improving the UST Regulations.</b>		Status of revision efforts (all regulatory revisions require EPA review to ensure no effect on delegation)
Coordinate with DEM Management Services, to the extent required, to ensure continued state funding of the UST Program	Compare current UST registration fee structure to neighboring states	Refer findings to Management Services for state budget evaluation
	Attend EPA offered training for all UST field staff for UST compliance and leak detection inspections.	Training courses attended.
	<b>Enhancement:</b> Develop and distribute requirements for the submission of required test data for continuous leak detection and corrosion protection. (OWM-UST)	
	<b>Enhancement:</b> Implement the requirements for submission of test data for continuous leak detection and corrosion protection, and track submittals.	# of tests submitted # of failed tests submitted
EPA Strategies to be listed		

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

<b>OBJECTIVE 5:</b> To minimize or eliminate the impacts and risks to human health and the environment which result from releases of oil, chemicals or wastes.		<b>ENVIRONMENTAL INDICATORS</b>
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Oversee the closure and removal of underground storage tanks.(OWM-LUST)		# of UST removals/closures conducted.
	Oversee the cleanup of releases from leaking underground storage tanks (OWM-LUST).	<u>Primary Building Blocks:</u> <ul style="list-style-type: none"> <li>• # of confirmed releases.</li> <li>• # of cleanups initiated (RP lead and/or State lead with State \$).</li> <li>• # of cleanups initiated (State lead with TF \$).</li> <li>• # of cleanups completed (RP lead and/or State lead with State \$).</li> <li>• # of cleanups completed (State lead with TF \$).</li> <li>◆ # of emergency responses.</li> </ul>
	Compel, and oversee the implementation and completion of, site investigation where necessary at leaking underground storage tank sites. (OWM-LUST)	# of site investigations required and reviewed by program personnel. % increase in total # of LUST sites known from prior year. % of LUST sites that are active.
	Compel, and oversee the implementation and completion of, corrective action activities, which address on site and offsite impacts. (OWM-LUST)	# of Corrective Action Plans required and reviewed by program personnel. # of LUST sites closed. % of LUST sites cleaned up (NFA or in long term monitoring only).
	Monitor the removal and proper disposal of contaminated soil from leaking underground storage tank sites. (OWM-LUST)	# of facilities that had contaminated soil removal only.
	Coordinate referrals to OC&I for enforcement and facilitate information transfer between the program and OC&I. (OWM-LUST/UST)	# of referral's to OC&I for enforcement.
	<b>Enhancement:</b> Coordinate with the State Facilities Coordinator in the Department of Administration. (OWM-LUST) Log of all work completed by state facilities coordinator.	# of UST's closed.



RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

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<b>Enhancement:</b> Expanding and Improving Outreach. (OWM-LUST) <b>Enhancement:</b> Improved Communication and Coordination with Municipalities. (OWM-LUST)	Outreach documents created and sent to facility owners.	
	Status of improvements made with municipalities.	
Compel, and oversee the implementation and completion of site investigations where necessary at contaminated sites. (OWM- Site Remediation.)		% increase in total # of contaminated sites (non-LUST) known from prior year.  % of contaminated sites (non-LUST) undergoing investigation and clean up. <u>Primary Building Blocks:</u> <ul style="list-style-type: none"> <li>• # of State lead sites per reporting period.</li> <li>• # of sites where investigation initiated during reporting period.</li> <li>• of acres of contaminated property undergoing investigation or clean up in State Brownsfields program.</li> </ul>
Compel, and oversee the implementation and completion of, site response and clean-up activities where necessary at contaminated sites. (OWM- Site Remediation).  Coordinate with EPA's efforts on developing a strategy and ranking contaminated sites on the RCRA corrective action list for future follow up action.		Total Assessed Value (\$) Taxes Assessed (\$) # of New Jobs Estimated Annual Income Tax (\$) Acres of Land Remediated and Reused Status of sites on the EPA corrective action list. # of sites where clean up initiated during reporting period. # of Environmental Land Use Restrictions (ELURs). # of enforcement actions/referrals to OCI. # of acres of contaminated property cleaned up or in long term monitoring only (Brownsfields only).
	Monitor the condition of threatened or contaminated groundwater at or proximate to contaminated sites. (OWM- Site Remediation)	# of sites undergoing monitoring.
	Oversee the implementation and completion of site investigations where necessary at abandoned or under-utilized, contaminated sites. (OWM- Site Remediation)	# of site investigations at abandoned or under-utilized, contaminated sites.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

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	Oversee the initiation and completion of a Remedial Investigation (RI) at a potential NPL site, the Cranston Sanitary (Capuano) Landfill, under the Voluntary Cleanup Program. The completed RI shall include a summary of possible remedial alternatives for the landfill site.	Status of Remedial Investigation
	<p>Investigate and evaluate the suspected or confirmed contamination at sites in the Superfund program for consideration on the NPL. (OWM-SFA)</p> <ul style="list-style-type: none"> <li>◆ Secure additional grant funding and 3 additional FTEs to accomplish grant commitments and goals.</li> <li>◆ Assist EPA in conducting Superfund Site Assessment investigations at CERCLA sites by completing the following:               <ul style="list-style-type: none"> <li>▪ 1 Preliminary Assessment</li> <li>▪ 2 Site Inspections</li> <li>▪ 2 Site Inspection Prioritizations</li> <li>▪ 2 Expanded Site Inspections</li> <li>▪ 1 Brownfields Site Assessment</li> <li>▪ 1 Site Discovery</li> <li>▪ 2 Site Monitoring</li> </ul> </li> </ul> <p>Assist EPA in reviewing Superfund Site Assessment investigations conducted at CERCLA sites by EPAs START contractor.</p>	<p>Amount of additional grant funding secured.            # of additional FTEs secured.            # of investigations completed.</p> <p># of investigations reviewed</p>
	Monitor the condition of threatened or contaminated groundwater at or proximate to contaminated sites. Continue private well sampling at 25 high priority ESI Screening sites (OWM-SFA)	<p># of sites under Monitoring Program.            # of sites identified as high potential for groundwater/ private drinking water well contamination.            # of private wells monitored.</p>
Continue increased state-federal coordination and oversight at the 10 "Watch List" sites which have been identified as warranting special monitoring because they are particularly large and/or complex and are the subject of considerable public interest. (OWM-SFA)		Status of Watch List sites

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

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<b>EPA - RIDEM Voluntary Clean Up Program Memorandum of Agreement-</b>	Continue to use the MOA as an incentive to encourage more responsible parties associated with CERCLIS sites to enter either the State Site Remediation and Voluntary Clean Up Program or the Brownfields Program so that they may become designated within the MOA project and become archived from CERCLIS once the site has successfully come into compliance with the Remediation Regulations. (OWM- Site Remediation)	# of sites designated within MOA.  # of archived CERCLIS sites. # of Letters of Compliance. # of EPA Comfort letters. # of remedial actions at MOA sites initiated.  # of remedial actions at MOA sites completed.
<b>Enhancement:</b> Assess and evaluate potential impacts of old or abandoned landfills by focusing Superfund Site Assessment monies, and using the SMOA as incentive to encourage performing parties to remediate properties under the Remediation Regulations	This will include securing additional funding under the Multi-Site Cooperative Agreement grant with EPA and additional FTEs to carry out the program. The program will encompass approximately 100 landfills, of which 52 are municipally owned sites currently on CERCLA. OWM-SFA/OWM-WFMP)	Status of Landfill Site Assessment program. Amount of additional funding secured. # of additional FTEs secured. # of landfills participating in program.
<b>Enhancement:</b> Continue coordination with the regulated community through periodic Technical Sub-Committee meetings.	Meet quarterly to continue our discussions regarding the technical issues involved in site investigation and remediation. (OWM- Site Remediation)	# of meetings.
<b>Enhancement:</b> Risk Assessment Sub-Committee	Continue quarterly committee meetings with the ultimate long range goal of developing a guidance document which reflects this Section's expectations regarding risk assessment work plans and risk assessments themselves. (OWM- Site Remediation)	# of meetings.
<b>Enhancement:</b> Down-gradient Receptor Policy-	Continue to work with the Technical Sub-Committee to develop a guidance document or policy regarding down-gradient receptors by June 2000. (OWM- Site Remediation)	Final Down-gradient Receptor Policy.
<b>Enhancement:</b> Arsenic Evaluation-	The Department will continue to facilitate an active dialogue with RIDOH and the Technical Sub-committee to finalize an Arsenic policy by June 2000. (OWM- Site Remediation)	Final Arsenic management policy.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

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<p><b>Enhancement:</b> Complete enhancement process of the OWM VCP Program utilizing a three-tiered communication approach as follows:</p>	<p>Information management and communication:</p> <ul style="list-style-type: none"> <li>▪ database management</li> <li>▪ web page improvement</li> <li>▪ Fact Sheet development</li> <li>▪ Brownfields indicator tracking</li> <li>▪ Quarterly EPA report generation</li> <li>▪ Development of an Environmental Monitoring database</li> </ul> <p>Program Improvement and Sustainability:</p> <ul style="list-style-type: none"> <li>▪ Arsenic policy</li> <li>▪ Down-gradient receptor policy</li> <li>▪ Guidance for Risk Assessments</li> <li>▪ Develop a Cost Tracking/Cost Recovery Plan</li> </ul> <p>Outreach and Community Involvement:</p> <ul style="list-style-type: none"> <li>▪ Maintenance of web page.</li> <li>◆ Outreach meetings with economic development agencies and municipalities aimed at discussing the VCP.</li> </ul>	<p>Updated web page</p> <p># of Fact sheets for Brownfields sites</p> <p># Quarterly reports to EPA</p> <p>Design and Implementation of an Environmental Monitoring database</p> <p>Final Arsenic Policy Final Down-gradient receptor policy</p> <p>Draft guidance for Risk Assessments</p> <p>Draft Cost Tracking/Cost Recovery Plan</p> <p># of outreach meetings with economic development agencies and municipalities aimed at discussing the VCP.</p>
<p><b>Enhancement:</b> Evaluate implications of recent Federal changes in analytical testing procedure on State program.</p>	<p>Continue to compile relevant information regarding EPA Method 5035 to determine its role in our programs. (OWM)</p>	<p>Adoption of Analytical Method 5035.</p>
	<p>Oversee the implementation and completion of remedial investigations at NPL sites. (OWM-NPL/DOD)</p> <ul style="list-style-type: none"> <li>• Complete RI at West Kingston/URI Landfill</li> <li>• Complete RI at J.M. Mills Landfill</li> <li>• Initiate RI at 1 Federal Facility (NCBC Site 16)</li> <li>• Complete RI at 2 Federal Facilities (NETC Site 12, NCBC sites 1-4)</li> <li>• Complete ecological risk assessment at 1 Federal Facility (NETC site 9)</li> <li>• Initiate RI at 5 FUD sites (Charlestown NALF 2,4,6, American Shellfish, Keifer Park)</li> <li>◆ Complete RI at 2 Mobil sites (Main Separator, No. Ops SVE/AS)</li> </ul>	<p># of remedial investigations initiated at NPL sites.</p> <p># of remedial investigations completed at NPL sites.</p>

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

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Oversee the implementation and completion of remedial designs and remedial actions at NPL sites. (OWM-NPL/DOD)	<ul style="list-style-type: none"> <li>• Complete review of Remedial Design at 2 NPL operable units</li> <li>• Complete review of Remedial Action at 2 NPL operable units</li> <li>• Initiate Remedial Action at 5 Federal Facility operable units ( NCBC Site 7, NETC Site 1, 13 &amp; 19, NCBC EBS 21)</li> <li>• Initiate Remedial Action at 2 FUD operable units (Charlestown NALF Site 6, Devils Foot Rd. Dump)</li> <li>• Complete Remedial Action at 2 FUD operable units ( Hope Island, Mellville North)</li> <li>• Complete Remedial Action at 2 Mobil operable units (Main Separator, No. Ops SVE/AS)</li> <li>• Complete review of five human health risk assessments.</li> </ul>	<p># of Remedial Designs completed.</p> <p># of Remedial Actions on-going.</p> <p># of health risk assessments.</p>
	<p>Oversee the operation and maintenance of remedial actions at NPL sites. (OWM-NPL/DOD)</p> <ul style="list-style-type: none"> <li>• 8 NPL sites remaining in O&amp;M</li> <li>• 2 Federal Facilities entering O&amp;M (NCBC Site 7 &amp; 9)</li> <li>• 1 Federal Facilities remaining O&amp;M (NETC Site 1 Offshore)</li> <li>• 1 FUD operable unit entering O&amp;M (Camp Ave. Dump)</li> <li>◆ 8 Mobil operational units entering O&amp;M (No. Ops.Tank 66, No. Ops SVE/AS, PCS, So. Ops Free Product Recovery; So. Ops GW Plume, VF Cliffs, VF Tanks 22-24, VF Constructed Wetlands)</li> </ul>	<p># of NPL operable units in the O&amp;M phase.</p> <p># of NPL operable units entering the O&amp;M phase.</p>
	<p>Participate in the delisting of sites from NPL.          1 NPL site will be formally delisted from the NPL (Davis GSR) August 1999</p>	<p># of sites delisted from the NPL.</p>

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 FY2000 WORKPLAN  
 OFFICE OF WASTE MANAGEMENT

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<b>Enhancement:</b> Evaluate the natural resource damages from releases of oil or hazardous materials.	2 Settlements (Davis Liquid and Picillo) will be completed and a draft Department Policy on providing a consistent framework under which all NRDA's in RI are conducted will be evolving and on-going.	# of Settlements.  Status of Department Policy.
<b>Enhancement:</b> Coordinate with EPA with respect to undertaking the lead-agency role in the investigation of the WK/URI Landfill Site.	RIDEM is proposing to serve as the lead agency for overseeing a third-party financed remedial design and remedial action.	Begin the remedial investigation
<b>Enhancement:</b> Development of Natural Resource Damage Assessment guidance document for contaminated sites in RI		Status of guidance document.
	Develop Innovative uses for Scrap Tires Specification/Guidance for use of Chipped Tires for Landfill Drainage Layers	Status of guidance document.
	Coordinate with NEWMOA in the evaluation of Alternative Technologies.	
<b>EPA Strategies to be listed here.</b>		