

**Oil Spill Prevention, Administration and Response
(OSPAR) Fund**

**Annual Report
FY 2003**



Crane Barge Lighter II, Providence River

Rhode Island Department of Environmental Management
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Introduction

The Oil Spill Prevention Administration and Response (OSPAR) Fund, RIGL Chapter 46-12.7, was created in 1996 (modifying a prior statute adopted in 1990) in the aftermath of the environmentally devastating North Cape oil spill. The fund was created, and is continually supported, by the assessment a \$0.05 per barrel fee on petroleum products received at marine terminals in Rhode Island. The purpose of OSPAR is multi-faceted. It provides funds to promptly respond, contain and remediate oil spills. OSPAR funds are also utilized to maintain a state of emergency response readiness through responder training and equipment acquisition. The fund further provides, in the event of a significant release, funding for emergency loans to workers affected by a spill as well as damage compensation of claims that cannot otherwise be compensated by responsible parties or the federal government. The funds and the operations conducted in accordance with the statute are managed by the Rhode Island Department of Environmental Management (DEM).

Section 46-12.7-7 of the statute requires the DEM Director to submit an annual report to the legislature on the OSPAR Fund. This report summarizes the status and use of the fund for FY 2003.

Revenues & Expenditures – FY2003

The OSPAR account started FY 2003 with a balance forward of \$8,427,766. During FY 2003, the \$0.05 per barrel fee resulted in the collection of \$2,711,167 after the seven percent cost recovery. OSPAR also received \$158,232.50 as reimbursement for expenditures from the North Cape Oil Spill Restoration project and \$40,300 in fines from the North Cape Oil Spill Lobster Restoration program. Personnel and operating expenditures for FY2003 totaled \$788,372. Other expenditures, including \$395,645 for the PORTS Navigational system in Narragansett Bay and a \$250,000 transfer from the OSPAR account to the Rhode Island Coastal Resources Management Council (CRMC) for coastal habitat restoration, totaled \$759,023. In addition, \$3,200,000 was transferred from the OSPAR account to the CRMC for the Providence River Dredging Project. (A final transfer of \$4,100,000 for the dredging project will take place in FY2004.) A more detailed review of all expenditures is provided below.

Activities – FY2003

Summary

During FY2003, the oil spill that had the greatest impact on Rhode Island occurred in Massachusetts. The barge *Bouchard 120* ran aground releasing an estimated 98,000 gallons of number 6 heating oil near the entrance of Buzzards Bay. The Buzzards Bay area of Cape Cod was devastated by the spill. In Rhode Island, beaches and wildlife, as far west as the town of Narragansett and Block Island were affected.

With regard to pre-spill preparedness, the OSPAR Fund was used in FY2003 to cover personnel and operating expenses, the PORTS Program, the development of an All-Hazard response plan, and a comprehensive natural resources database for Narragansett Bay. Several training

initiatives were undertaken during FY03. A master price agreement was developed to provide hazwoper and other specialized oil spill training. Multiple vendors were selected to provide a broad array of training opportunities. Training courses in incident command and radio protocols were conducted. The department also issued a request for proposals for scientific support services to provide the department with additional scientific support during an oil spill response and to assist in any subsequent damage assessment activities.

Personnel costs assigned to the OSPAR Fund included the following: DEM's Emergency Response Team (full salaries of Environmental Response Coordinator, partial salaries of four other team members, and full salary of an Executive Assistant assigned to the OSPAR program); DEM's GIS Supervisor (partial); and staff from DEM's Office of Waste Management engaged in oil-related investigation and remediation activities (partial); and staff from DEM's Office of Technical and Customer Assistance, Division of Fish & Wildlife, and Office of Water Resources responsible for carrying out DEM's responsibilities related to the Providence River Dredging Project (partial). These salary and benefit costs totaled \$536,583. (See detailed breakdown below.)

Operating costs covered by the OSPAR Fund included the following: vehicle maintenance and lease costs (\$172,816); emergency response equipment (\$16,354); vessel equipment maintenance and storage (\$26,891); training and travel (\$4,693); and other miscellaneous equipment and supply costs (\$30,535). These operating expenses totaled \$251,789. (See detailed breakdown below.)

OSPAR Funds were also utilized to provide continued support for the Narragansett Bay Physical Oceanographic Real-Time System (PORTS). The PORTS system provides continuous, real-time tide, current, and weather information to pilots to ensure safe navigation of oil barges and other large ships that transit Narragansett Bay. Funding was also utilized to upgrade the navigational equipment supplied to the Narragansett Bay Pilots Association. These programmatic costs totaled \$395,645.

OSPAR Funds, totaling \$42,046, were also used to continue the development and maintenance of a comprehensive statewide GIS application for natural resource damage assessment (URI/Narragansett Bay National Estuarine Research Reserve Cooperative Project).

OSPAR Funds, totaling \$14,643, were also used to fund a shellfish transplant project in the Providence River, undertaken in advance of, and in association with, the Providence River Dredging Project.

The DEM Emergency Response Team, an all hazard response program that incorporates the oil spill prevention and response functions, maintained a high level of response with respect to oil spills, hazardous material incidents, domestic preparedness, and other state emergencies in FY2003. There were 873 emergency response investigations undertaken by the team during the fiscal year, a 13 percent increase in response activities compared to FY2002. Seventy three percent of response activities were related to oil spills. The actions of the Emergency Response program resulted in removal from the environment of 39,270 gallons of oil, 784 tons of oil spill

debris, 18,100 gallons of hazardous waste, 305 tons of hazardous waste, and 260 pounds of mercury.

Expenditure Breakdown

Personnel

Environmental/Emergency Response \$411,339

Full salaries and benefits of DEM's Environmental Response Coordinator and partial support for four other members of DEM's Emergency Response Team. All five personnel serve as first responders and are principally responsible for administering the OSPAR Program both in terms of pre-spill readiness and post-spill response. An Executive Assistant is also assigned to the OSPAR program.

Dredging Project Oversight \$18,333

Partial salaries and benefits for personnel from DEM's Office of Technical and Customer Assistance, Division of Water Resources, and Division of Fish and Wildlife.

Geographic Information System (GIS) \$35,261

Partial support of salary and benefits of DEM's GIS Supervisor. This individual is responsible for maintaining a comprehensive internet mapping application for planning, assessment and response to oil spills or other environmental emergencies in RI marine waters. This individual is also responsible for developing and maintaining a complete data inventory on an internal network capable of supporting responders during an oil spill or other environmental emergency. In the event of a spill, the GIS Supervisor coordinates the collection and dissemination of locational data documenting extent of spill, fish kills, etc. In the aftermath of a spill, support is also provided for natural resource damage assessments to aid in the collection of damages from responsible parties.

Division of Waste Management \$71,650

Partial support of salary and benefits of two DEM employees in the Department's Office of Waste Management. Both individuals are routinely engaged in oil-related investigation and remediation activities, which during FY03 included: Merva site, Arco/Amoco site, Chevron site, Getty terminal, Getty pipeline, Mobil site, Unocol site, several sites along Allens Ave. in Providence,

Riverside Mills cleanup in Providence, and Mobil pipeline leak in Cumberland.

\$563,583

Operating

Vehicle Maintenance & Readiness	\$165,645
Safety Equip. – Emergency Response	\$16,354
Training & Travel	\$4,693
Emergency Response Vehicle Leases	\$7,171
Vessel Maintenance, and Storage	\$10,858
Cell phones, pagers	\$8,690
Computers/Printers	\$8,098
Supplies: Office, Scientific, Miscellaneous	\$13,257
Printing	\$1,090
Outboard Motor and Trailer	\$15,933

\$251,789

Navigation Aids

Narragansett Bay PORTS **\$250,000**

See overview of PORTS Program later in this report.

Navigational computer upgrade **\$145,645**

Update and exchange ten older navigation systems used by the Narragansett Bay Pilots

\$395,645

Other

Natural Resource Data Base for Narragansett Bay **\$42,046**

Under this URI/Narragansett Bay National Estuarine Research Reserve cooperative project, monitoring data pertaining to a range of natural resources – fisheries, wildlife, other biological parameters – from throughout Narragansett Bay is being gathered and incorporated into a comprehensive computerized data base. In the event of a spill, the data base can be quickly accessed to determine the type of resources likely to be found in a given area at a given time of year. With this information, scientists can initiate targeted sampling, ahead of a spill, to gauge baseline information on natural resources that might be impacted by the spill, thereby facilitating more accurate damage

assessment analyses.

Development of a All Hazard Emergency Response Plan \$56,689

The Coastal Institute at the University of Rhode Island was contracted to develop an all hazard emergency response plan for the DEM.

Habitat Restoration \$250,000

In June 2002, the RI General Assembly enacted legislation (*RIGL 46-23.1*) that established a coastal and estuarine habitat restoration program administered by the Coastal Resources Management Council (CRMC). The bill provided \$250,000 in OSPAR funding. The new program aims to restore degraded coastal and estuarine habitats. The \$250,000 in seed funding helped to leverage additional federal funding for similar restoration projects

Shellfish Transplant \$14,643

Shellfish resources in the Providence River that would have been lost due to dredging operations were transplanted to protected areas of the Bay. This project was carried out in advance of, and in association with, the dredging project.

\$363,378

TOTAL **\$1,547,395**

Post-Spill Clean-Up Activities

Barge Bouchard 120: Buzzards Bay Massachusetts

On the evening of April 27, 2003, the tugboat *Evening Tide* was towing the fuel barge *Bouchard 120* from Philadelphia PA to the Mirant Power Generating facility located in Sandwich MA, at the east end of the Cape Cod Canal. The barge contained 4.1 million gallons of Number 6 fuel oil. Number 6 fuel oil is a heavy, black viscous, residual oil. As the tug and barge approached Buzzards Bay en route to the canal, the barge grounded, resulting in a 12-foot by 2-foot gash and a release of an estimated 98,000 gallons of number 6 fuel oil. Initial information provide to RIDEM by the Unified Command indicated that the release would not impact Rhode Island. However, field observations by DEM personnel on April 28th revealed the presence of oil-impacted birds in Westport MA, just across the RI border. Subsequent information placed the vessel casualty off Gooseberry Point, which is only 5 miles from the Massachusetts/Rhode Island border (10 miles closer to RI than was initially reported). Based on the field observations made

in the Westport area the Department began preparing for potential impacts in RI. DEM personnel were sent to the spill command center on Cape Cod. Field teams were assembled to survey beaches for oil and any adverse impacts; wildlife recovery/transport teams were also assembled. The southwest wind conditions during the early stages of the spill were favorable to protecting the RI coastline. However, oiled birds were found in Rhode Island waters and on the southeastern beaches. Tar balls also began coming ashore in the Little Compton area. As the weather pattern changed to a northeast wind, tar balls were found on beaches as far west as Narragansett Beach. Tar balls and oiled birds were also found on Block Island. Cleanup and removal of the tar balls, as well as bird recovery and impact assessment, continued for four weeks. The DEM expenditures in response to the *Bouchard 120* oil spill were approximately \$78,000, of which \$46,000 was for the use of DEM oil response vessels and \$32,000 was personnel costs. The total cost of cleaning up the *Bouchard 120* spill is estimated to be in excess of \$32 million. That significant amount clearly demonstrates the severity of the spill and how fortunate it was for the state that the spill did not occur in RI. It also demonstrates the need and the utility of the OSPAR program to respond to these events

Other Oil Spill Response Activities

The DEM emergency response team responded to over 630 oil spills during FY2003. The amount of oil products and oil spill debris managed during these response activities is estimated to be 39,200 gallons of oil and 780 tons of oil spill debris. The circumstances causing these releases and the impacts generated were varied.

A number of spills related to releases from resident oil storage tanks. In March 2003, the Department investigated a report of oil on Keach Pond. The department determined that the oil was emanating from a homeowner's french drain. A failure in the oil line allowed oil to enter the drain system and be carried to the pond. Over 1,800 gallons of oil and water recovered. What made this project challenging was the pond was covered with ice, which made the cleanup particularly challenging. Oil had to be collected by sawing recovery trenches into the ice.

Other spills in FY03 involved releases from industrial and commercial facilities. A release from the Osram Sylvania facility in Central Falls coated the Blackstone River for several miles with number 6 heating oil. Determining the source of the oil was difficult. There was no obvious point of entry into the river. Oil was discovered in the sewer system leaving the plant. It was also determined that a steam heating coil, used to preheat the oil, had failed. Oil was escaping from the tank into the steam line and discharging through an abandoned steam condensate discharge pipe. The pipe was located in the center of the river at a depth of six feet. Upon determination that Osram Sylvania was the source of the oil spill, the company immediately assumed responsibility for the spill and all associated remedial costs.

Oil spills in Narragansett Bay as a result of vessel casualties also occurred in FY2003. The most significant involved the capsizing of the 90-foot crane-barge Lighter II in the Warren River. Not only did the barge contain fuel for the crane, but the location of the wreck was initially thought to be an endangerment to the Bristol County Water Authority's 24-inch water main that crosses the river bottom. In addition, the crane boom extended into the navigation channel. Initially there was concern that the owner of the barge would not be able to effect the salvage. The

Department prepared a salvage plan for the barge to insure that any threat to the waterline could be mitigated. While the owner arranged for salvage, the Department closely monitored for any movement of the barge towards the waterline. Had this occurred, the Department would have initiated the salvage plan prepared by its response contractor. Fortunately, the weather remained stable and the responsible party, after several attempts, was able to recover the vessel. Several months later the department again responded to an incident involving the Lighter II. The vessel was partially submerged in the Providence River. Fortunately, the barge could be salvaged before it sank completely.

PORTS Program

OSPAR continues to support the Narragansett Bay Physical Oceanographic Real-Time System (PORTS) that began operation in June 2000. PORTS, which is operated by the National Oceanic and Atmospheric Administration (NOAA), is comprised of five monitoring stations located in Narragansett Bay that monitor stage of the tide, currents, and weather. This data is reported every six minutes to a central receiving computer, which processes the information. Real-time information regarding tides, current and weather can be accessed by telephone at 401-849-8236 and 1-888-301-9983 or on the internet at www.coops.nos.noaa.gov/nbports/nbport. NOAA continuously monitors the in-water sensors and conducts data validation. This 24/7 quality control allows NOAA to guarantee the accuracy of the data. As a result, the state-licensed pilots who guide the largest vessels into port in Narragansett Bay are able to make decisions on vessel movements with real-time information. Accurate information to make navigational decisions is extremely critical because it is not unusual for a vessel to have less than three feet of clearance between its keel and the bottom of the channel.

State-licensed pilots can directly access PORTS information while in transit using the STARLINK portable navigation system originally purchased with OSPAR Funds and further upgraded in FY2003. The systems have wireless capability that allows the acquisition of real-time data from PORTS as well as real weather information from the National Weather Service. The navigation systems are extremely sophisticated, utilizing a Differential Global Positioning System that accurately and safely determines the position of a vessel being piloted through the bay. The system uses the U.S. Department of Defense Global Positioning System and the Canadian Coast Guard network of differential radio beacons to provide accurate navigation information in conjunction with accurately surveyed maritime charts provided by the U.S. Army Corps of Engineers.

Emergency Response Preparedness

In FY2003 the trend continued to use emergency response assets and personnel to address the issue of Homeland Security. To meet this challenge, it has become necessary to allocate a greater percentage of the Department's limited emergency response resources to terrorism response and domestic preparedness. The five-member Emergency Response team is an integral part of the state's terrorism preparedness and consequence response plan. The team provides on-scene, first-responder capabilities, as well as incident management, as part of the state emergency operations center (EOC). The response team in conjunction with the Fire Marshall's Office provide the only

state-agency, first-responder asset relative to threats or attacks associated with weapons of mass destruction.

While the above-described activity does not relate to oil spill incidents per se, the OSPAR Program has become an integral component of the State's overall disaster response readiness program, with many of the same individuals serving in overlapping capacities. The integration of oil spill response readiness and environmental emergency response generally has led to significant enhancements in both efficiency and effectiveness. However, the agency is rapidly reaching the point where the demands put upon the Emergency Response team will be greater than that which can be supported by the current level of staffing

Outlook & Projections

The Department will continue to upgrade and maintain its oil spill response capabilities in FY04. The FY04 outlook includes some additional provisions, which are described below. Aside from these additional provisions, projected OSPAR-related expenditures during FY04 are expected to be similar to FY03. Considering these factors, and barring any major spills and associated response needs, the balance of the Fund is projected to be approximately \$3.7 million at the close of FY04.

Several new procedures and plans are being developed in FY2004. These include a Fisheries Closure/Opening Protocol that is designed to provide a written procedure for managing fisheries during and following an oil spill. The lessons learned during the North Cape spill and most recently during the Bouchard 120 spill clearly demonstrate that advanced planning is a necessity to minimize the disruption of fisheries activities following a major oil spill. In addition, a continuity of operation plan (COOP) will be drafted, which will provide guidance to the Department in the event that there is an incident that disrupts the ability of the agency to provide services. The emergency response program is also writing an emergency support function (ESF) that will become an annex to the overall state emergency response plan. Lastly, work continues with the URI Coastal Resource Institute on the development and integration of a scientific response plan for oil spills and other emergencies.

Providence River Dredging – \$4.1 Million Appropriation

With the FY 2003 budget, the RI General Assembly committed OSPAR Funds to meet the costs of the state's share of the Providence River and Harbor Maintenance Dredging Project. Accordingly, \$3.2 million was drawn from the Fund in FY03, with the balance of \$4.1 million to be drawn in FY04. When the dredging project is completed, 6 million cubic yards of material will be dredged, and a seven-mile stretch of the Providence River Channel will be returned to its federally authorized dimensions of 40 feet of depth and 600 feet of width, helping to ensure safe passage of ships, including those delivering oil, into and out of the Port of Providence.

Contact Information

For further information regarding this report, the activities of the emergency response team or OSPAR, contact Michael Mulhare, RIDEM Environmental Response Administrator, at 401-222-4700 extension 7124 or at mmulhare@dem.state.ri.us.

