2004 Year in Review: Emergency Management — Prevention, Preparedness and Response

EPA-550-R-05-001

April 2005

EPA

Office of Emergency Management

2004 Annual Report

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Office of Emergency Management (OEM) Mission Statement

To ensure that this Nation is better prepared for environmental emergencies, the Environmental Protection Agency's (EPA) Office of Emergency Management (OEM) works with other EPA partners, federal agencies, state and local response agencies, and industry to prevent accidents, as well as to maintain superior response capabilities. OEM's overall mission is to provide national leadership to prevent, prepare for, and respond to health and environmental emergencies. This is facilitated through partnerships, joint strategy development, technology development and deployment, and training and exercises.

Message from Deborah Y. Dietrich, Director
Office of Emergency Management
Office of Solid Waste and Emergency Response

This is the first annual report detailing emergency management activities in EPA Headquarters and Regional Offices. Together with our colleagues in the Regional Offices and our many partners in federal, State and local governments and the private sector, I believe that we are making significant progress in preventing accidents, preparing for those events that we cannot yet prevent and responding to environmental emergencies, both accidental and those caused by terrorism.

In 2004, the Office of Emergency Management (OEM) was created in Washington D.C. to integrate the functions of the former Chemical Emergency Preparedness and Prevention Office (CEPPO), the Oil Spill Prevention Program, and the Superfund Emergency Response Program. Under this reorganization, we have embarked on a more integrated approach to all aspects of the chemical and oil safety program — prevention, preparedness and response— and hope to achieve even greater efficiency and effectiveness through these efforts.

It has been a busy year with numerous Homeland Security efforts including participation in development of the National Response Plan (NRP) and implementation of the National Incident Management System (NIMS), amendments to the Risk Management Program (RMP) rule, resubmission of Risk Management Plans, introduction of new regulatory approaches for the Spill Prevention, Control and Countermeasures (SPCC) regulation, and continuing implementation of priorities under EPA's National Approach to Response.

I am very proud to share this report on some of our accomplishments during 2004. I look forward to continuing collaborative efforts to finding new approaches and measuring the results of our efforts in 2005.

Section I — Who We Are

2004 was a year of continued change and transformation for OEM. The year started with the development and submission of the reorganization package. The reorganization plan was approved on September 5, 2004 and the Office officially adopted its new name and began the transition to its new structure.

Prior to the establishment of OEM, various components of emergency planning, accident and spill prevention, and emergency response were fragmented within OSWER. The reorganization serves to: integrate the responsibilities of the former offices (Chemical Emergency Preparedness and Prevention Office [CEPPO], the Oil Spill Prevention Program, and the Superfund Emergency Response Program); improve internal coordination on issues related to prevention of, preparedness for, and response to oil and hazardous substance emergencies; and emphasize program evaluation initiatives. Under the reorganization, a new organizational structure emerged based on function, requiring a realignment of work load and positions. Consolidation of emergency planning, accident and spill prevention, and emergency response into one office is expected to support overall emergency management in Headquarters and Regional Offices in an efficient and effective manner (refer to page 4 for OEM organzation chart and regional counterparts chart).

About OEM's Divisions

Regulation and Policy Development Division (RPDD)

RPDD is OEM's policy and technical arm. RPDD develops policy, technical approaches and regulations required by various environmental, safety and accident prevention, preparedness, and response statutes. RPDD also coordinates with other EPA offices and federal and state programs to resolve technical and policy issues. RPDD has lead responsibility for regulatory training and coordinates with EPA's Office of Research and Development (ORD) on scientific developments.

National Planning and Preparedness Division (NPPD)

NPPD is responsible for ensuring national EPA readiness to respond to incidents involving hazardous chemicals, oil, and biological and radiological contamination resulting from terrorist attacks or accidents. NPPD works closely with EPA's Office of Homeland Security and coordinates with other federal, state/tribal, local and international organizations.

Program Operations and Coordination Division (POCD)

POCD provides coordination and oversight for all OEM operational programs. Regional Coordinators provide programmatic expertise, policy interpretation, response strategies and general support to the regional offices. POCD personnel provide a 24/7 watch officer service, serve as regional points of contact for expertise and support, and serve as advocates for regional needs.

Evaluation and Communication Division (ECD)

ECD coordinates strategic planning, program evaluation and communication. For example, ECD coordinates OEM work planning, develops lessons learned from exercises and incidents, coordinates outreach and keeps the OEM website up-to-date. ECD works with the other Divisions to assure that OEM addresses planning, evaluation, and communication to the maximum extent possible.

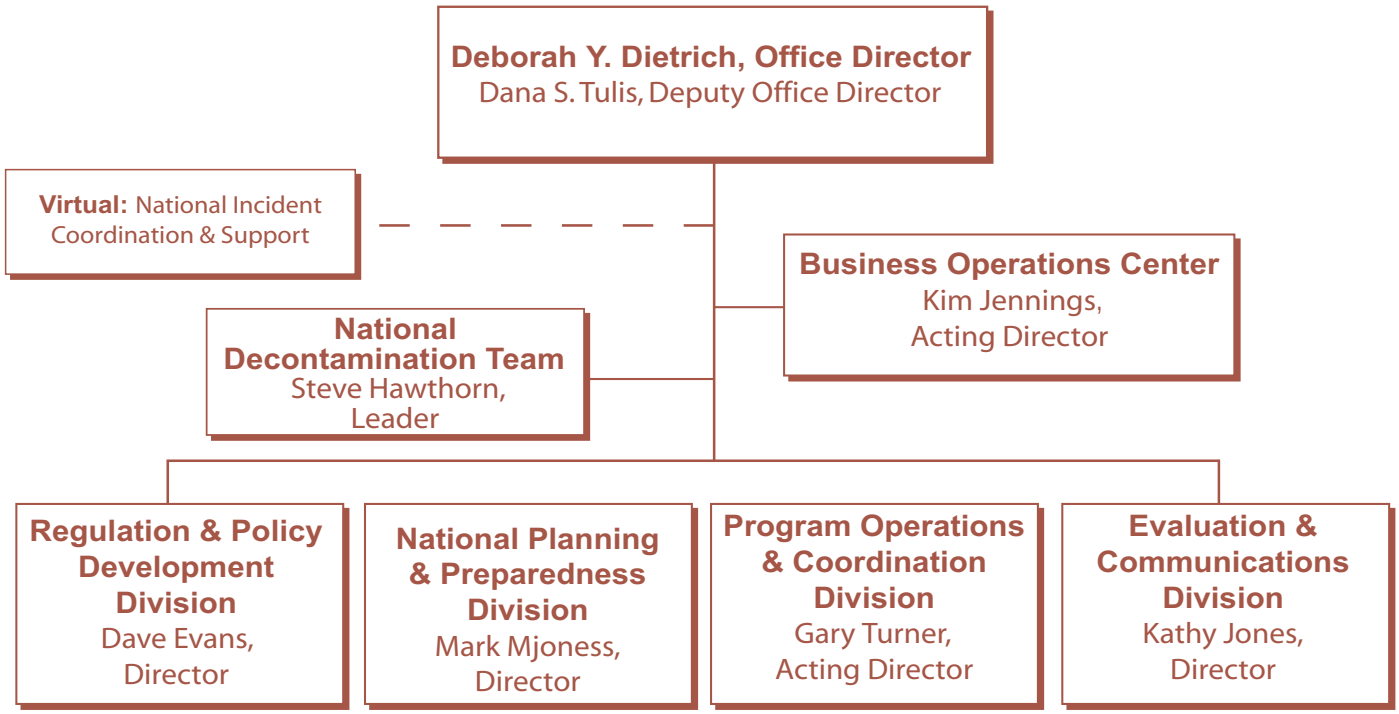
Business Operations Center (BOC)

BOC is responsible for program and resource management functions including budgetary planning, human resources, contracts and grants, accountability, and the Emergency Operations Center (EOC). BOC directs the formulation and execution of annual budgets, coordinating activities across OEM. BOC develops annual operating plans, issues regional guidance and resources, conducts resource analysis, and manages OEM's financial integrity program.

National Decontamination Team (NDT)

The NDT is located in Cincinnati, OH. NDT is a new team that will provide expertise and support to On-Scene Coordinators (OSCs) on decontamination of buildings or other structures in the event of an incident involving releases of radiological, biological or chemical contaminants.

Office of Emergency Management Organization Chart



Regional Counterparts

	Program Component: Removal		Program Component: CEPP		Program Component: Oil	
	Division Director	Removal Manager	Division Director	CEPP Coordinator	Division Director	Oil Manager
Region 1	Susan Studlien	Art Johnson	Stephen S. Perkins	Ray Dinardo	Susan Studlien	Steve Novick
Region 2	William McCabe	Bruce Sprague, Richard Salkie	William McCabe	John Higgins	William McCabe	Doug Kodama
Region 3	Abe Ferdas	Dennis Carney	Abe Ferdas	Gerald Heston	Abe Ferdas	Fran Burns / Charlie Kleeman
Region 4	Winston Smith	Shane Hitchcock	Beverly Bannister	Victor Weeks	Winston Smith	Anita Davis
Region 5	Richard C. Karl	Linda Nachowicz	Richard C. Karl	Mark Horwitz	Richard C. Karl	Beverly Kush
Region 6	Sam Coleman	Ragan Broyles	Sam Coleman	Chris Ruhl	Sam Coleman	James Mullins
Region 7	Cecilia Tapia	Scott Hayes, Ken Buchholz	William Spratlin	Mark Smith	William Spratlin	Stanley Walker
Region 8	Max Dodson	Doug Skie	Max Dodson	Barbara Benoy	Max Dodson	Martha Wolf
Region 9	Keith Takata	Dan Meer	Keith Takata	Kay Lawrence	Keith Takata	Peter Guria
Region 10	Dan Opalski	Chris Field	Dan Opalski	Calvin Terada	Dan Opalski	Carl Kitz

Section II — OEM Prevention, Preparedness and Response Overview

2004 has been a remarkable year for EPA's emergency management activities. We have made significant progress promoting accident prevention, preparedness and response, and we have met the new challenges of this post September 11, 2001 era in advancing the protection of human life and safeguarding the environment. The following pages summarize the many activities and accomplishments of 2004. The success of these endeavors represents the collaborative efforts of our EPA Regional Offices and Headquarters, and state and local agencies.

Strategic Goals and Measures

The Government Performance and Results Act of 1993 (GPRA) aims to improve governmental effectiveness by setting program goals, and measuring program performance against those goals. By managing for results, we are setting a strategic course that will allow us to measure the success of our program components.

The EPA FY 2003-2008 Strategic Plan identifies measures of performance for five strategic goals. The following is a list of the 5-year strategic targets of relevance to our program components.

Objective 3.2: Restore Land:

- Each year, improve the Agency's emergency preparedness by achieving and maintaining the capability to respond to simultaneous large-scale emergencies and by increasing response readiness by 10 percent from a 2003 baseline using core emergency response criteria.
- Each year, respond to 350 hazardous substance releases and 300 oil spills.
- Each year, minimize impacts of potential oil spills by inspecting and/or conducting exercises or unannounced drills at 6 percent of the approximately 6,000 oil storage facilities required to have Facility Response Plans (FRPs).
- Each year, perform 1,000 inspections at facilities required to develop and implement Spill Prevention, Control, and Countermeasures (SPCC) plans.

Objective 4.1.4: Reduce Risks at Facilities:

- By 2008, 30 percent of the approximately 15,000 Risk Management Plan (RMP) facilities will have reduced the risk of a major chemical accident.
- By 2008, 50 percent of the approximately 3,200 Local Emergency Planning Committees (LEPCs) will have incorporated facility risk information into their emergency preparedness and community right-to-know programs.

Strategic Goals FY 2005- 2008

- Reduce the risk of releases of oil and hazardous substances.
- Lead the Agency in the development and continual updating of emergency preparedness structures for oil and hazardous substance emergencies and in providing for a timely and effective response to any release.
- Develop and continually support external partnerships (with other federal agencies, state and local governments, and the private sector) to prevent, prepare for, and respond to releases of oil and hazardous substances.
- Develop and maintain timely and accurate information and state-of-the art technology for understanding and managing oil and hazardous substance hazards.

Advancing Strategic Goals through Partnerships

We strive to meet our prevention, preparedness and response goals through collaborative partnerships with other governmental agencies and departments, non-governmental organizations and the private sector.

We partner closely with a number of organizations to promote sound prevention, preparedness and response practices, as well as to implement regulatory programs.

The following section highlights some of our partnership activities for 2004.

Federal Partners Develop National Response Plan

In 2004, the Department of Homeland Security (DHS) continued its collaboration with EPA and nearly 40 other key federal agencies and departments to develop the National Response Plan (NRP). Developed over a two-year period

with input from states, locals, and the private sector, the NRP was issued on December 15, 2004. An interagency process was used to incorporate input from a wide range of stakeholders and reflects 3 rounds of stakeholder review — totaling over 8,000 individual comments. The NRP establishes a single, comprehensive approach for federal prevention, preparedness, response, and recovery activities. It forms the basis for how the federal government coordinates with state, local, and tribal governments and the private sector during incidents. The NRP is critical to helping the federal government manage domestic incidents.

States Participate in Storage Tank Standards Development with Support of EPA Grant

In 2004, EPA strengthened its partnership with states through a grant to the Association of State and Territorial Solid Waste Management Officials (ASTSWMO). This grant supports state participation in the development of national consensus standards for aboveground storage tanks. These standards are developed by industry organizations such as the American Petroleum Institute (API) and the Steel Tank Institute (STI). Participation in the development of industry standards by OEM and the states not only improves the standards but strengthens partnerships between government and industry and advances spill prevention. The grant also supports coordination of state and federal aboveground storage tank programs, sharing of prevention-related information, and an annual meeting for states.

EPA Joins in Alliance with OSHA and Six Chemical Organizations

Managing chemical reactivity hazards received a major boost in March 2004, when EPA and six organizations involved in the chemical industry formed an Alliance with the U.S. Occupational Safety and Health Administration (OSHA). Together, Alliance members will strive to provide chemical reactivity hazards management information, methods and tools to a variety of audiences while, at the same time, gain experience in the use of methods and tools to continuously improve identification and management of the hazards.

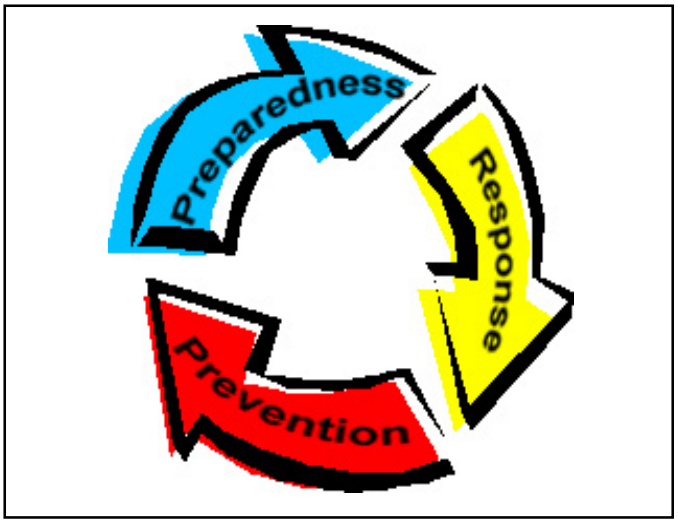
EPA Co-Chairs U. S.-Mexico Border Workgroup

During 2004, the Border 2012 Workgroup accomplished many planning activities, set priorities, and completed a number of projects to improve preparedness, disaster management, and emergency response in the U.S.-Mexico border area. Key accomplishments for 2004 are listed below:

- Two binational emergency response plans were completed. In addition, the Del Rio, TX and Ciudad Acuna, Coahuila emergency response plans were updated.
- Four hazardous material exercises and several bilingual workshops on varied topics such as railcar safety, the Incident Command System, hospital mass casualty decontamination, radiation detection, weapons of mass destruction, and exercise design were designed and conducted.
- A hazardous materials commodity flow study (CFS) for the city of El Paso, Texas was conducted.
- The Presidio/Ojinaga Sister City Plan was signed.
- Three waste tire pile site assessments and fire prevention planning in the Mexicali area were conducted.
- Scholarships were awarded to twenty-eight border emergency responders to attend the Hazardous Material Continuing Challenge training and symposium.
- The concept and workplan for a Border Emergency Management Academy in Tijuana were developed.
- English/Spanish Field Guides for Emergency Response Communication were developed and distributed.

Wharton Publishes RMP Paper with Support of EPA Cooperative Agreement

In 2004, EPA continued its partnership with the Wharton School of the University of Pennsylvania. Under this



The Safety Continuum

cooperative agreement, a multi-disciplinary team of economists, statisticians and epidemiologists has studied the accident history data collected under the RMP Rule. In June 2004, Wharton published a paper that provides an overview of the results of analyzing the accident history data for the reporting period 1994-2000 and addresses preliminary findings on the effectiveness of the RMP Rule as a management system regulation.

"Drivers of accident preparedness and safety: evidence from the RMP rule," Journal of Hazardous Materials, Vol. 115, Issues 1-3, November 2004, pages 9-16. http://grace.wharton.upenn.edu/risk/downloads/04-19-PK.pdf

International Partnership Improves Response to Oil Spills at Sea

In 2004, EPA helped sponsor the demonstration of a new wave tank at the Bedford Institute of Oceanography (BIO) in Dartmouth, Nova Scotia. The wave tank mimics a wide range of breaking wave energy levels at sea. Using the wave tank, scientists will be able to simulate a range of oceanic conditions while conducting research into chemical dispersants that can be used to break up oil slicks. The tank was developed as a result of ongoing cooperation between Fisheries and Oceans Canada (DFO) and EPA, both of which provided funding.

Section III — Achieving Results through Prevention, Preparedness and Response Efforts

Prevention Highlights

EPA's approach to the prevention of oil spills and hazardous substance releases emphasizes planning. To prevent oil spills, EPA requires owners or operators of certain oil storage facilities to prepare and implement Professional Engineer (PE)-certified SPCC plans that detail the facility's spill prevention, control and countermeasure activities. To prevent chemical releases, EPA requires owners or operators of certain facilities to prepare and implement Risk Management Plans (RMPs) and submit these plans to EPA. RMPs summarize the facility's hazard assessment — including an evaluation of worst-case and alternative accidental releases; a prevention program; and an emergency response program.

EPA also enforces the strengthened oil spill liability and penalty provisions under the Federal Water Pollution Control Act as amended by the Oil Pollution Act of 1990, which provides incentives to facility owners/operators to take the necessary steps to prevent oil spills.

In addition, EPA conducts document reviews and on-site facility inspections and audits to ensure compliance with the SPCC and RMP regulations.

Regulatory Updates

SPCC Rule

2004 was an eventful year for the SPCC rule. Following publication of the final amendments to the SPCC rule in 2002, EPA was subject to several lawsuits. In the spring of 2004, OEM and the plaintiffs reached settlement of the legal challenges on nearly all issues. Subsequently, in May 2004, EPA published clarifications resulting from this settlement. Additionally, EPA held a public outreach meeting to address

Freshwater Spills Symposium 2004

The Oil Program hosted the Fifth Biennial Freshwater Spills Symposium in April, 2004 in New Orleans, Louisiana. More than 70 speakers volunteered their time to share their expertise. Issues discussed included homeland security, the National Response Plan, and the Maritime Transportation Security Act of 2002, and how these efforts will affect freshwater spill response.

International Oil Spill Conference Workshop in London, England

Key OEM representatives joined with an international contingent of participants from government, industry and academia at the International Oil Spill Conference (IOSC) Workshop in London, England in September, 2004. OEM representatives provided the U.S. perspective on prevention and participants reached agreement on promoting preventive measures applicable in oil spill response. A report was drafted from the findings of the IOSC Workshop.

20th Anniversary of Bhopal

In December 2004, experts from around the world gathered at the International Conference on the 20th Anniversary of the Bhopal Tragedy, held in Kanpur, India. OEM took this opportunity to share a historical perspective of the U.S. chemical accident prevention and community right-to-know programs, which were triggered to a large extent by the Bhopal incident.

concerns with the rule and listen to feedback from stakeholders. In August 2004, EPA extended the compliance dates for SPCC by 18 months. In September 2004, EPA issued two Notices of Data Availability (NODA) to present data from industry on ideas for new regulatory approaches for facilities that handle below a certain threshold of oil as well as facilities with oil-filled and process equipment and to request data for evaluation of these alternatives. Information collected under the NODAs will be used as a basis for determining if the Agency will take action resulting in streamlining the SPCC requirements.

2004 State Risk Management Program Implementation National Award

Gary D. Meyer and Diana Keller, Kansas Department of Agriculture, are this year's recipients of the State Risk Management Program Implementation National Award for their program on the safe storage and handling of anhydrous ammonia, including RMP requirements. The state worked closely with agricultural fertilizer dealers to inspect their RMPs and conducted outreach to the anhydrous ammonia community.

RMP Rule

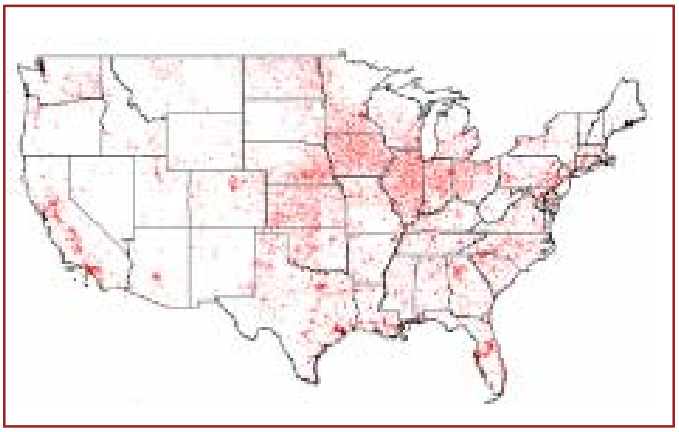
2004 was also an eventful year for the RMP rule. In April 2004, EPA amended the RMP rule to require that reporting of chemical accidents be included in the RMP within six months of the date of the accident; that emergency contact information be current within one month of any change; and to add three new data elements. The amendment also removes the requirement to include a brief description of the off-site consequence analysis (OCA) in the RMP executive summary. The RMP suite of software was updated to reflect these changes. In addition, a new internet-based tool, RMP*WebRC, was developed to facilitate correction of certain administrative data elements, such as emergency contact information, required by the amendments.

RMP Highlights

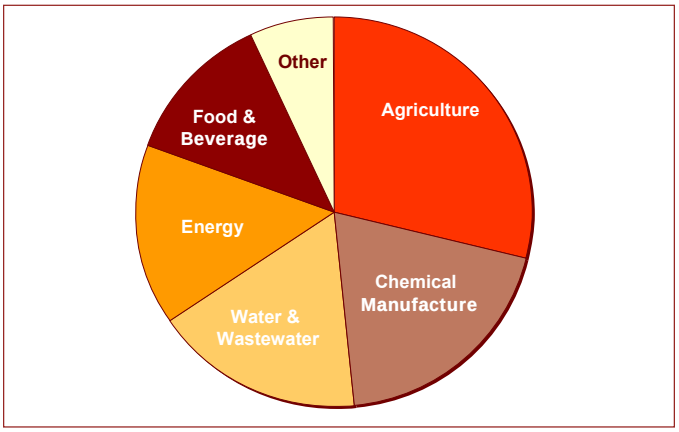
During 2004, the majority of RMP facilities resubmitted their plans, resulting in the processing of more than 14,000 RMP submissions. At the end of 2004, 14,600 RMPs covering 20,000 processes are active. These processes include 17,150 toxic and 7,700 flammable chemicals. Nearly 2,000 facilities have not updated, corrected, withdrawn, or deregistered their original RMP. Approximately 1,160 of the remaining RMP submissions will require follow-up by the Regional Offices.

In-depth analysis of the data from the 2004 submission cycle is ongoing. An early look at the latest data indicates that the size and overall characteristics of the universe of regulated RMP facilities have not significantly changed since the advent of the RMP regulation in mid-1999. The one category where a significant change in the number of facilities has occurred since 1999 is water and wastewater treatment. In this category, nearly 600 facilities have de-registered since 1999, while only 250 new registrations have been received, for a net decrease of approximately 350 facilities. This trend is consistent with anecdotal information that EPA has received, indicating that a significant number of municipal water and wastewater treatment plants are replacing gaseous chlorine with an alternative means of water disinfection, such as sodium hypochlorite. Use of the alternative arises out of the public safety concerns associated with bulk chlorine storage.

Just as the numbers and relative frequencies of RMP facilities in various industrial categories have largely remained constant, so have the aggregate quantities of regulated



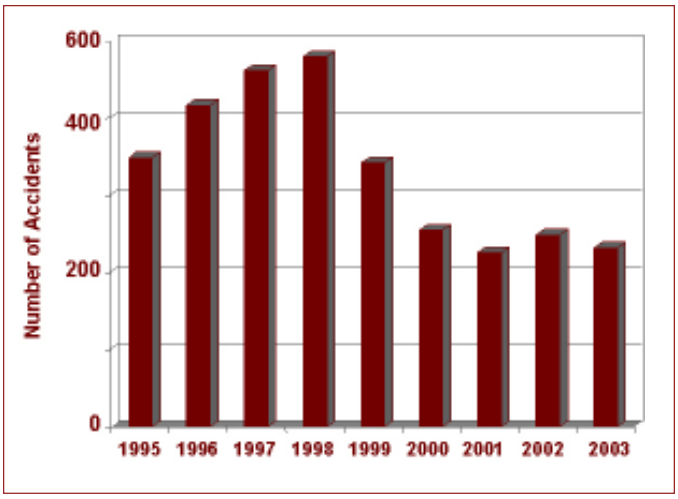
2004 Geographic Distribution of RMP Facilities



2004 Distribution of RMP Facilities by Industrial Categories

Chemical	10^6 tons, 2000	10^6 tons, 2004
Flam mixture	13.9	13.9
Ammonia	5.0	4.9
Propane	4.0	4.7
Butane	4.4	4.1
Ethane	1.6	0.7
Isobutane	1.6	1.4
Ethylene	1.2	0.9
Chlorine	0.32	0.31

Comparison of Aggregate Quantities of RMP Substances as Reported in 2000 and 2004



Number of Accidents Reported in RMPs

substances present at those facilities. Where significant changes have occurred (e.g., ethane reporting), those changes may be due to fluctuations in market forces related to fuels and commodity petrochemicals.

An important question that EPA hopes to answer using the RMP database is whether the number of accidents at RMP facilities is decreasing over time, and if so, whether that trend is due, in part, to the effects of the RMP regulation itself. The RMP facility accident histories reported to EPA contain significant detail, and the full depth of that information has not yet been analyzed. An early look at the gross trend in number of accidents reported by RMP facilities over the last decade is encouraging.

However, at this point it is important not to read too much into this apparent trend. EPA intends to continue its collaborative relationship with academic institutions, such as the Wharton School to apply the tools of statistical, epidemiology to the RMP data in an effort to determine the basic factors that influence chemical facilities' accident propensity.

Nationwide Inspections and Audits

SPCC Inspections

In fiscal year (FY) 2004, 1,008 SPCC inspections were conducted by EPA regional inspectors to ensure compliance with the SPCC regulations and provide outreach/compliance assistance to facilities. Inspections consist of an on-site walk through and include verification that facilities have adequate secondary containment; integrity inspection programs; emergency contact information on hand; and countermeasures to detect, respond to and clean up a spill. Inspectors also review the SPCC plan to ensure compliance with the regulation's technical requirements.

RMP Audits

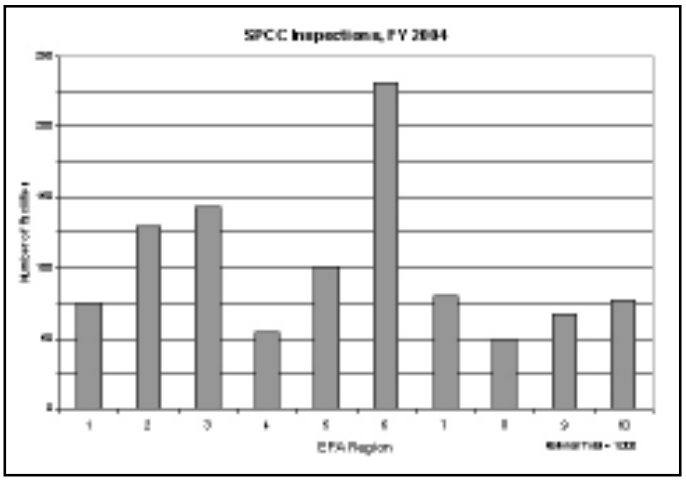
In FY 2004, 730 RMP field audits/inspections were conducted by regional and state auditors to ensure compliance with the Risk Management Program. These field audits/ inspections consist of an on-site visit and a document review to verify completeness of the RMP and to evaluate the underlying safety programs. Auditor(s) review RMPs for compliance with the regulations. Auditors may also review the supporting documentation for the RMP program elements.

Preparedness Highlights

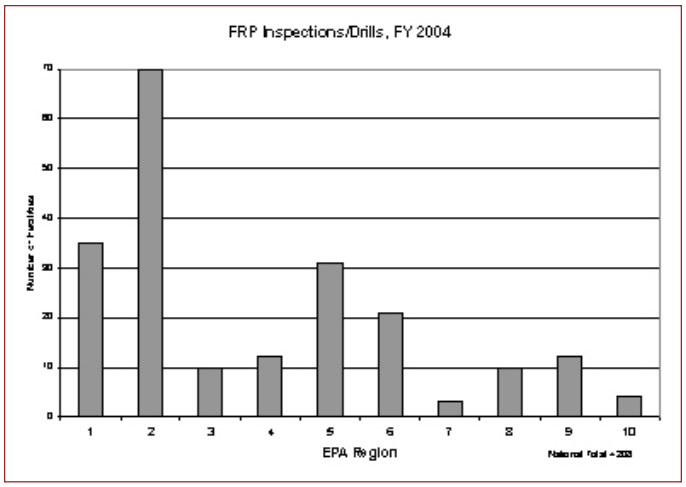
OEM and EPA's Regional Offices place a high priority on preparedness activities related to potential accidental chemical releases and oil spills. This preparedness work—including planning, exercises, and training—is carried out with agencies at all levels of government, as well as with the private sector.

2004 National Leadership Award

Fendol Chiles, EPA Region 6, received the CEPPO National Leadership award for his innovative approaches to improve and implement chemical and emergency preparedness and prevention programs on the US/ Mexico border.



SPCC Inspections by Region, FY2004



FRP Inspections/Drills by Region, FY2004

Facility Response Plans (FRPs)

FRPs are an important planning link between facilities and the area contingency plans as required under the Oil Pollution Act (OPA). Certain facilities with large oil storage capacity are required to prepare and submit a FRP to prepare to respond to a worst case discharge of oil and to a substantial threat of such a discharge. The FRP requires facilities to establish emergency response resources, conduct a hazard evaluation, and determine discharge scenarios for small, medium and worst case discharges. Facilities that may cause significant and substantial harm in the event of a release are required to submit the FRP to the Regional Office for approval.

Facilities must also train employees and conduct drills and exercises to prepare for an oil response. EPA conducts inspections and drills at FRP facilities and has found that unannounced exercises are an effective way to determine emergency response readiness.

During 2004, a Workgroup was formed to identify common practices and differences among the Regional Offices relating to unannounced inspections and drills. The workgroup gathered and reviewed information, materials, input and correspondence from the Regional Offices and developed a set of tools and materials to facilitate unannounced inspections and drills.

In FY 2004, 208 FRP inspections and/or unannounced drills were conducted by EPA regional personnel at oil storage facilities required to have FRPs.

National Approach to Response Initiatives

Preparedness on a national level is essential to ensure that emergency responders are able to deal with multiple, large-scale emergencies, including those that may involve chemicals, oil, biological agents, or radiological incidents. Over the next several years, EPA will enhance its emergency response program to respond quickly and effectively to simultaneous, large-scale national emergencies, including homeland security incidents.

During 2004, ten priorities were identified in EPA's National Approach to Response (NAR) and appointed a HQ/regional workgroup to address each priority. In 2004, EPA advanced a number of important initiatives to support the NAR. EPA has:

- Drafted the National Emergency Response Program training strategy and participated in several national exercises and pre-deployments.
- Drafted the Response Support Corps (RSC) guidance. Over 600 EPA personnel volunteered for RSC and

Chemical Safety Alerts

OEM periodically issues Chemical Safety Alerts to disseminate information about the causes of chemical accidents and to encourage integration of lessons learned into safe operations. In 2004, OEM issued two Alerts:

Chemical Safety Alert: Failures of Excess Flow Valves in Hazardous Materials Service, Issued: April 2004.

Chemical Safety Alert: Identifying Chemical Reactivity Hazards: Preliminary Screening Method, Issued: May 2004.

received orientation and initial training.

- Drafted initial chapters of a Health and Safety Reference Document covering medical monitoring; radiation; and respiratory protection.
- Funded the National Telecommunications Plan Strategy and purchased satellite cell phones, upgraded computers, personal digital assistants (PDAs), and high-frequency (HF) radios.
- Established an Information Technology (IT) Forum and developed national procedures for electronic incident and data management.
- Updated the national equipment list and prioritized response equipment needs.
- Purchased ID clothing for all EPA OSCs and response personnel and developed an ID clothing warehouse for subsequent orders.
- Drafted the National Incident Management System (NIMS) compliance Strategy and developed Regional Incident Manager Teams (IMTs). Key staff was trained in the Incident Command System (ICS). Additionally, 250 OSCs were trained in advanced ICS. The IMT personnel also received training in staffing specific ICS positions.
- Initiated development of a playbook to address coordination of radiation response actions and developed radiological knowledge, skill, or abilities (KSAs) for Superfund Technical Assessment and Response Team (START) and Emergency and Rapid Response Services (ERRS) contracts.
- Assessed counter-terrorism contract support and identified the contract vehicles available.

National Core ER Scores Increase in 2004

The primary goal of Core ER is to achieve enhanced readiness and national consistency among the EPA Regional Offices, Emergency Response Team (ERT), and Headquarters while maintaining flexibility to allow for different state capabilities and needs, different geographic conditions, and other reasonable differences. Other goals are to maintain a baseline emergency response readiness and to increase our capability to respond to chemical, biological and radiological releases resulting from terrorist incidents.

Overall, EPA Regional Offices, ERT and Headquarters have increased their Emergency Response scores from last year. The total overall 2004 score was 9,222, increased from 8,553 for 2003.

Major Exercises

EPA gained important experience in 2004 by participating in several homeland security exercises involving Regional Offices and HQ and other agencies. This experience is critical to helping all levels of government prepare for terrorist threats.

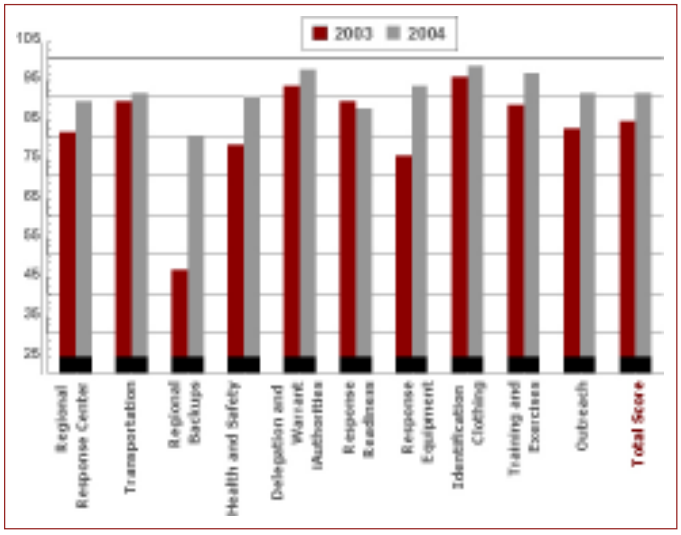
EPA Radiation Emergency Exercise ("Ruby Slippers")

In July 2004, EPA's Office of Radiation and Indoor Air conducted a radiation emergency training exercise in Leavenworth, Kansas dubbed "Ruby Slippers." Participants included more than 130 EPA emergency responders and experts from across the country. An extensive table top exercise enabled key staff to walk through the emergency response plan to identify and resolve problems. Field play (the actual playing out of the simulated response) took place on the following two days to test Agency procedures and state-of-the-art equipment and to allow participants to practice their roles as defined in federal response plans.

EPA's National Approach to Response

Issued on July 17, 2003, the National Approach to Response provides a framework for a consistent, Agency-wide approach to quickly and comprehensively respond to major incidents. Under the National Approach to Response, EPA adopted the National Interagency Incident Management System (NIIMS) Incident Command System (ICS) as the management structure for a major incident. The National Approach to Response also clarifies regional coordination and affirms the role of the National Incident Coordination Team (NICT) as the focal point for multi-program information sharing and issue resolution. The National Approach to Response identifies "backup" regional offices for each region that will provide, upon request, additional emergency response support. It also establishes the Homeland Security Policy Coordinating Committee as a forum for addressing significant policy issues. Other priorities identified in the National Approach to Response are the establishment of the Response Support Corps; a training and exercise plan; laboratory capabilities; and data management.

Participants During Exercise Play



Comparison of CORE ER Scores

Federal Terrorism Exercise ("Operation River City")

In November 2003, EPA along with other federal, state and local agencies, participated in a 3-day terrorism exercise in Louisville, Kentucky dubbed "Operation River City." EPA Region 4's Emergency Response and Removal Branch sponsored the event. More than 550 participants from throughout the nation were involved in this exercise. Designed to improve response readiness in the event of a terrorist attack involving weapons of mass destruction (WMD), the exercise focused on interagency cooperation, communications, deployment of equipment, data management, and the roles and responsibilities of various entities. A unique aspect of the exercise was that participants used the NIMS, an incident command system designed to manage emergencies.

Federal Homeland Security Exercise ("Determined Promise 04")

In August 2004, EPA Region 3 along with other federal, state, and local agencies, participated in a 3-day full deployment exercise sponsored by the Department of Defense Northern Command (NorthComm). The exercise involved a series of five simulated events in southern Virginia and engaged over 100 agencies. EPA participated in an advisory role to the Incident Commander and provided sampling and decontamination support. The event provided EPA the opportunity to integrate closely with the Department of Defense as well as strengthened ongoing relationships with local and state counterparts.

Response Highlights

Each year in the United States, over 30,000 accidental releases of hazardous materials are reported to the federal government through the National Response Center. These hazardous materials may be toxic, corrosive, flammable, or radioactive. Emergencies range from small-scale hazardous materials spills to large events requiring prompt action and evacuation of nearby populations. Such releases, large or small, threaten public health.

EPA is a key federal partner in the National Response System. EPA chairs the National Response Team (NRT), which is composed of sixteen federal departments/agencies

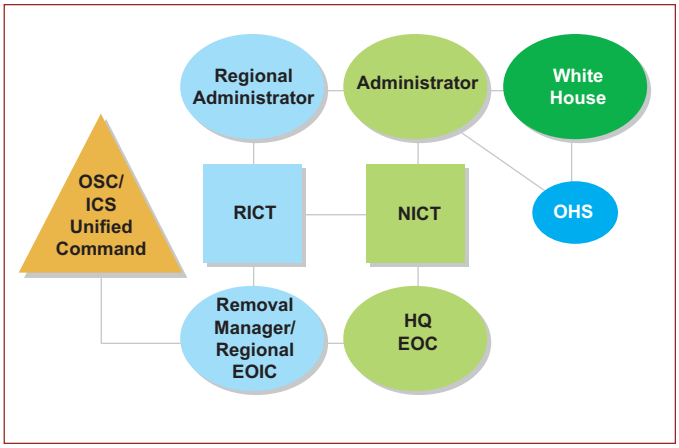
Homeland Security Presidential Directive 5

Establishes a single, comprehensive National Incident Management System (NIMS) and a comprehensive National Response Plan (NRP), and assigns roles and responsibilities for each. EPA is a full participant in NIMS and the NRP.

Homeland Security Presidential Directive 8

Establishes a method of delivering federal preparedness assistance to state and local governments. Mandates a national preparedness goal, and a comprehensive national training and exercise program.

The Emergency Operations Center



National Incident Management System

New Emergency Operations Center (EOC) Opened

In January 2004, our new EOC officially opened. A state-of-the-art facility, the EOC is designed to serve as the operational focal point in HQ and to increase data management and coordination capabilities. As a communication and coordination hub, the EOC provides support for Watch Officer communications, communications with other federal agencies and DHS, and links to regional and field assets. Capabilities include video conferencing, audio teleconferencing, data analysis and modeling, and secure information management.

with responsibilities and expertise in various aspects of emergency response to oil and hazardous substance pollution incidents. EPA is also the co-chair for each of the thirteen Regional Response Teams (RRTs). The RRTs cover the ten federal Regional Office, Alaska, the Caribbean and Oceania, and are composed of state and federal members.

Under the National Contingency Plan (NCP), EPA also directs its own emergency response operations through 250 OSCs located in each of our Regional Offices. OSCs are on-call and ready to respond 24 hours a day. Every year, EPA OSCs conduct hundreds of emergency response actions to address oil spills and hazardous substance releases and work closely with US Coast Guard and other federal, state, and local agencies to address threats. The OSCs ensure that cleanup, whether accomplished by private parties, local, state, or federal officials, is appropriate, timely, and minimizes damage to human health and the environment. OSC responsibilities include directing the removal of containers or soil containing hazardous substances; moving residents temporarily while cleanup activities take place; and installing fences to prevent direct contact with hazardous substances.

The 2004 On Scene Coordinator of the Year

The On Scene Coordinator of the Year is Michael Towe from Region 3 for his work at the Standard Chlorine of Delaware site (aka Metachem Products, LLC) in Delaware City, Delaware. Through Mr. Towe's efforts, nearly 65 percent of 40 million pounds of hazardous chemicals at the site have been shipped off-site for commercial uses resulting in disposal cost savings.

EPA also co-chairs the Joint Response Team (JRT) which includes Protección Civil and representatives from U.S. and Mexico federal, state and local agencies responsible for emergency prevention, preparedness, and response in the border area. Under the Joint Contingency Plan (JCP), the U.S. and Mexico cooperate in preparing for and responding to oil and hazardous substance incidents along the border and in emergency response planning, exercises, and training.

In addition, the National Strategy for Homeland Security designates EPA with the lead responsibility for decontamination of affected buildings and neighborhoods and providing advice and assistance to public health and authorities in determining when it is safe to return to these areas and on safest disposal options for residues.

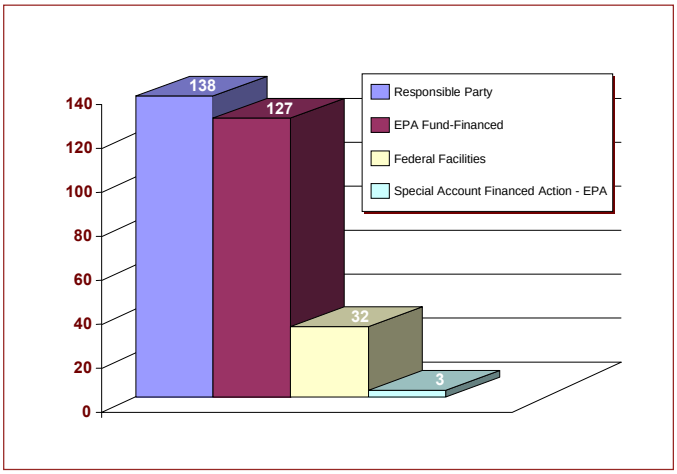
Nationwide Statistics

Oil Spill Responses

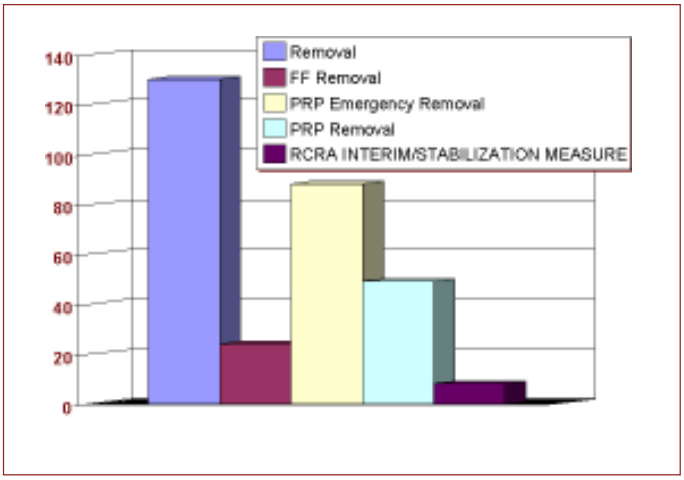
EPA responds to spills that threaten or directly impact inland waters of the United States and supports the U.S. Coast during spills to the marine environment. In FY 2004, EPA responded to 308 oil spills.

Removal Response Actions

In FY 2004, 387 removal response actions were started. Of these, 182 were Superfund lead actions; 28 were federal



FY2004 Completed Removal by Lead Organization



FY2004 Completed Removal by Type of Action

facility actions; 113 were potentially responsible party (PRP) actions; and 64 were voluntary actions. EPA responds to a release or threat of release of a hazardous substance, pollutant, or contaminant that may present an imminent and substantial danger to the public health or welfare. A removal action is generally short-term and addresses the most immediate threats.

Major Response Actions

Macdona Train Derailment

On June 28, 2004,a west-bound Union Pacific train struck an eastbound Burlington Northern train near Macdona, Texas. The collision resulted in the derailment of four locomotives and 35 railcars. In addition to a small fire involving spilled fuel, a breached 90-ton chlorine car released approximately 60 tons of chlorine. The chlorine release resulted in three fatalities. Secondary releases included nitrogen fertilizer solution and the diesel fuel. Numerous local organizations responded, including fire, police, and emergency management agencies. Upon notification of the incident, EPA Region 6 OSCs responded with START contractors to provide overall response coordination using the Incident Command Structure (ICS) with Unified Command. In addition, EPA's Airborne Spectral and Photographic Environmental Technology (ASPECT) plane was dispatched to conduct aerial monitoring of the site, collecting data in the immediate vicinity of the incident. EPA also initiated air monitoring in the surrounding area. The chlorine was off-loaded into large mobile tanks (frac tanks).

Participation in National Special Security Events (NSSE) Pre-Deployments

In 2004, EPA Regional Office, assisted by OEM, participated in pre-deployments at three major events classified as National Special Security Events (NSSE): Region 4 pre-deployed to the G8 Sea Island Summit; Region 2 pre-deployed to the Republican National Convention held in NYC, and Region 1 pre-deployed to the Democratic National Convention held in Boston.

Response to Ricin Incident on Capitol Hill

In February 2004, ricin was found on a mail-opening machine in the Senate Office building. The U.S. Capitol Police (USCP) requested assistance from EPA and other federal partners to assist in the collection of mail, and ultimately to assist with decontamination plans and implementation. Region 3 personnel provided technical support, resources and personnel and assisted in the removal of all unopened mail from the Capitol Building. They also provided the collection and containment (over-packing) of all unopened mail from

Airborne Spectral and Photographic Environmental Technology (ASPECT) Plane

EPA's ASPECT is a high-tech sensor suite— consisting of a multispectral line scanner, a hyperspectral fourier transform infrared spectrometer (FTIR) and a Gamma-ray spectrometer— mounted on a small aircraft that allows for timely surveillance of gaseous chemical releases from a safe distance. ASPECT provides critical information to emergency responders regarding the size, shape, composition and concentration of plumes generated in incidents such as a derailed train or a factory explosion or in a terrorist attack. The ASPECT aircraft is based in Waxahachie, Texas. Once on site, the aircraft operates at about 2200 feet (above ground) and can remain on station for over 5 hours.

Response to Hurricane Ivan

Senate Office buildings, the documentation and data management of unopened mail; and the creation of sampling and decontamination plans.

Response to Major Hurricanes

As hurricanes swept across a large section of the United States, FEMA activated the Federal Response Plan, calling for the mobilization of EPA Region 4 On-Scene Coordinators and field support. EPA assisted Florida and local jurisdictions in conducting assessments of the affected areas by air and boat. From overflights, EPA identified fuel spills at hurricane-damaged marinas. EPA also responded to many reports of drums, propane tanks, and minor oil spills. Workers removed and disposed of many drums, tanks, and other chemical containers and recovered diesel oil from leaking tanks. OSCSs and field support from Regions 3 and 5 also were mobilized. OSCs responded in Virginia, North Carolina, Pennsylvania and Ohio to support state and local authorities with conducting flood impact reconnaissance work, responding to industrial spills, and collecting orphaned drums and tanks.

First Nationwide Response Support Corps Activation

More than 150 EPA personnel from the Response Support Corps were mobilized to provide disaster support to affected communities in Florida. Corps members traveled from all ten EPA Regional Offices and Headquarters to a FEMA mobilization center in Atlanta for training, and then to Florida to help the disaster victims. As community relations officers, Response Support Corps members went door-to-door in the disaster-affected communities to disseminate information about available disaster assistance.

Section IV — Looking to the Future

The terrorist attacks of Sept. 11, 2001, the subsequent anthrax releases and the recent ricin incident in the Senate office building demonstrate that EPA must continue to enhance its capabilities to protect human health and safeguard the environment. Because OEM plays a major role in reducing the risks of oil and hazardous substance incidents, the Office's future work promises to be challenging.

In the coming years, OEM will continue to work closely with government and industry partners to make certain that all partners understand where EPA fits into the federal response system and to improve coordination and communication mechanisms. OEM will also lead Agency efforts to improve its capability to respond to chemical, oil, biological, or radiological incidents. And OEM will continue to assist local communities and industry in understanding potential chemical risks, ways to reduce risks and how to prepare.

In addition, OEM's culture will continue to evolve as the Office integrates its prevention, preparedness, and response roles and responsibilities and standardizes its business practices. This continued transformation will support EPA's strategic goals.

Finally, with the emphasis on government's ability to measure performance, OEM will develop and implement an office-wide plan for program evaluation in order to establish and track measurable goals. In implementing a formal program evaluation function, OEM will be able to better demonstrate that our activities are achieving desired results in leading the nation in prevention, preparedness, and response to oil and hazardous substance incidents.

The activities and accomplishments of the past year are the basis for OEM's path forward in 2005. The following lists includes some key initiatives from OEM's FY 2005 Workplan:

Prevention

- Develop SPCC Regional Office inspector guidance document.
- Evaluate the NODA responses related to oil-filled and process equipment and "certain" facilities and determine the appropriate regulatory action.
- Propose an RMP amendment to clarify "storage incident to transportation" for deepwater port facilities, onshore LNG terminals, etc.
- Participate as co-sponsoring agency in the May 2005 International Oil Spill Conference (IOSC).
- Complete workgroup deliberations to develop proposed changes to Subpart J (Product Schedule) of the NCP to better equip oil spill emergency responders with the tools they need to mitigate the effects of oil spills.

Preparedness

- Revise the NCP to be consistent with the new NRP.
- Develop and implement a comprehensive response training and exercise program.
- Advance the priorities under EPA's National Approach to Response (NAR).
- Design consistent decontamination policies and guidance.
- Conduct a nationwide survey of LEPCs

Response

- Implement NIMS to improve internal and external coordination.
- Create a Virtual Response Team.
- Assist in developing an intergovernmental network of environmental laboratories.
- Develop CAMEO enhancements to address weapons of mass destruction, flammables and explosives.

If you would like more information about this Report or have any comments, please e-mail OEM_Homepage@epa.gov.