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OVERSIGHT HEARING ON
THE OIL POLLUTION ACT OF 1990

BEFORE THE
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES

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Thank you, Mr. Chairman and members of the Committee, for the opportunity to testify on the role of the National Oceanic and Atmospheric Administration (NOAA) in response, restoration, and research under the Oil Pollution Act of 1990 (33 U.S.C. 2701-2761; OPA). I am David Kennedy, Director of the Office of Response and Restoration within the National Oceanic and Atmospheric Administration.

OVERVIEW

The *Exxon Valdez* oil spill taught us a valuable lesson. Our Nation must be prepared to respond to major oil spills. Some time has passed since a domestic spill rivaled the *Exxon Valdez* in size. However, the near simultaneous *Athos I* (Delaware River) and *Selendang Ayu* (Unalaska Island) vessel spills in late 2004 and the magnitude of oil spilled after hurricanes Katrina and Rita last fall, serve as reminders that significant oil spills still happen. We must therefore continue to be prepared for when they do occur.

OPA created a comprehensive prevention, response, liability, and compensation regime to respond to these types of oil pollution incidents from both vessels and on-shore facilities. Under OPA, NOAA acts on behalf of the public as a natural resource trustee for coastal and marine resources regarding the discharge or threatened discharge of oil into the environment. These responsibilities include:

- Working through the National Response Team and the Regional Response Teams to ensure the most appropriate response and cleanup actions are taken to protect resources from further injury;
- Working with our co-trustees to assess and restore injured natural resources and the services they provide;
- Carrying out oil spill research and development under Title VII of OPA; and
- Participating on the Interagency Coordinating Committee on Oil Pollution Research, which coordinates research and development efforts among industry, universities, and others.

NOAA'S RESPONSE ROLE

When a spill occurs, a multi-agency interdisciplinary scientific response team provides and coordinates advice on response, cleanup, and natural resource issues. NOAA has Scientific Support Coordinators (SSCs) in U.S. Coast Guard (USCG) offices, to assist the USCG in its role as Federal On-Scene Coordinators when a spill occurs in the coastal zone. The SSC supports the Incident Command System, which is the organization that coordinates incident response among the several response agencies. SSCs lead a team of scientists who provide support in areas including pollutant fate and transport, resource identification and protection strategies, shoreline cleanup assessment, and natural resource trustee coordination. NOAA also provides weather forecasts and emergency survey and charting capabilities to assist response efforts.

NOAA's response to each incident is dependent upon the spill's characteristics. Scientific coordination is critical. Using experience, expertise, and state-of-the-art technology, NOAA forecasts the movement and behavior of spilled oil, evaluates the risk to resources, and recommends protection priorities and appropriate cleanup actions.

Effective spill response depends on effective planning and preparation. NOAA promotes preparedness by working closely with Regional Response Teams to develop policies on dispersant use, best cleanup practices, communications, and response organization. In addition, NOAA enhances the state of readiness by developing better response tools including trajectory models, fate models, and integration of improved weather data and data from ocean observing systems into spill trajectory forecasts.

NOAA'S DAMAGE ASSESSMENT AND RESTORATION ROLE

Regulations promulgated by NOAA under OPA provide a framework for conducting natural resource damage assessments. NOAA scientists and economists work with other trustees and responsible parties to ensure that coastal and marine resources injured by oil spills are restored.

NOAA experts follow the practical guidance provided by the regulations for conducting natural resource damage assessments. The regulations describe these steps:

1) Preassessment – Trustees evaluate data on impacts to natural resources to determine whether natural resources and their associated services have been injured;

2) Restoration Planning – Trustees quantify injuries to natural resources and their services and use that information to determine the type and scale of restoration activities that fully compensate the public for the injures; and

3) Restoration Implementation – Trustees, often working with those responsible for the release, implement restoration actions.

Cooperative Assessments

NOAA has long been interested in promoting cost effective and efficient natural resource damage assessments. One approach is a cooperative assessment process where trustees work with responsible parties to design and implement appropriate assessment efforts, thereby avoiding duplicative, often competing studies, and reducing costs and the risk of litigation. Cooperative assessments expedite restoration, encourage innovative approaches, strengthen partnerships, and provide meaningful public involvement. Cooperative assessments also offer industry the opportunity to play a greater role and have some control over the timing of restoration actions, without undermining the natural resource trustee responsibilities.

One example of a cooperative assessment occurred at Chalk Point, Maryland. In April 2000, a Potomac Electric Power Company (PEPCO) oil pipeline ruptured beneath a marsh on a Maryland tributary. Roughly 140,000 gallons of heavy fuel oil flowed over the marsh and down the Patuxent River, oiling about 40 miles of environmentally sensitive creeks and shoreline. Working together, NOAA, the U.S. Fish and Wildlife Service (USFWS), the State of Maryland, and PEPCO assessed the injured natural resources. In this case, the cooperative assessment approach resolved PEPCO's liability, yielded restoration projects that met both natural resource and community concerns, and fostered greater trust among the agencies, PEPCO, and the community.

Based on NOAA's successful experiences in cooperative assessments, NOAA is promoting this approach through national and regional dialogues. Over the last five years, NOAA has carried out a number of cooperative damage assessments, resulting in restoration that has contributed to the program total of over 4000 acres of coastal and marine habitat protected or restored under NOAA's damage assessment and restoration activities.

NOAA'S RESEARCH ROLE

OPA also addresses the need for research. Even though the number of large spills from vessels has decreased over the last decade, the total number of vessel spills has not changed significantly. The ability to mitigate the effects of oil spills on these coastal and marine resources is dependent upon the availability of relevant, strong scientific data needed to make decisions regarding response and restoration options.

Response

NOAA has been a leader for many years in on-the-ground research in spill response. We work with other federal agencies, states, industry and academia to develop methods for improving efficiency and minimizing environmental impact, lessening the time between cleanup and environmental recovery. As part of this coordination, we participate on the Interagency Coordinating Committee on Oil Pollution Research, which was established by OPA to coordinate efforts to address oil pollution research and technology development. Another example of coordination is NOAA's partnership with the Coastal Response Research Center at the University of New Hampshire, created in 2004. This

partnership combines the strength of two entities – NOAA's spill response and spill responders and the University of New Hampshire's research abilities and academic affiliations. Two current subjects being researched are:

- Transport and fate of submerged oil; and
- Transport of oil in ice-infested waters

Assessment and Restoration

NOAA also undertakes a variety of activities designed to develop and strengthen techniques and methods for natural resource damage assessment and restoration. These activities allow NOAA to improve our ability to assess the impact of oil on natural resources and increase timeliness and effectiveness of efforts to restore our trust resources. A few examples of on-going activities include:

- Evaluation of the toxicity of oil components to larval fish;
- Relative productivity of different habitat types;
- Economic value of coral habitats; and
- Innovations in using new remote sensing technologies to produce high resolution maps showing oil exposure and impacts to shoreline habitats and sensitive natural resources.

EXAMPLES OF RESPONSE, RESTORATION, AND RESEARCH AT WORK

M/T Athos I

On November 26, 2004, the *M/T Athos I*, a 750-foot tanker, hit several submerged objects in the Delaware River near Philadelphia, PA, spilling approximately 265,000 gallons of heavy oil. In addition to surface and shoreline oiling, a portion of the oil migrated below the water surface, complicating response and assessment efforts.

NOAA responded to this incident in several ways as mandated under OPA. The SSC led the Unified Command's Environmental Unit, which coordinated the environmental aspects of the spill. Through the SSC, NOAA provided its traditional support: oil trajectory analysis, weather forecasts, identification of sensitive resources at risk, coordination of shoreline impact assessment, recommendations on environmentally appropriate cleanup techniques, seafood safety consultation, risk communication and public outreach. The NOAA Navigation Response Team conducted emergency NOAA navigational surveys to locate the objects responsible for the incident and to identify potential sunken oil collection points. NOAA also led state and federal trustees in efforts to initiate natural resource damage assessment.

The USCG suspended vessel traffic through this major U.S. commercial and industrial hub, and the Salem Nuclear Power Plant shut down two reactors as a precaution to prevent possible oil-fouled water intakes. The detection of submerged oil was a critical economic issue in this case, essential to the reopening of the port and the reactivation of the power plant. To address this issue, NOAA led a special task force for developing detection and mitigation methods. NOAA's efforts aided in the rapid return of normal vessel traffic and helped a significant regional power supplier to come back on line.

The *Athos I* incident is a reminder that while the threat of large tanker spills has diminished, it has not disappeared; there is still a need to sustain an integrated spill response and restoration research program. NOAA's response to the *Athos I* spill highlighted the need for improved understanding of the transport and fate of submerged oil, and the need to develop more efficient technologies for submerged oil detection, tracking, and modeling. The *Athos I* response also highlighted the need for additional research on ways to collect submerged oil and/or protect locations from it. Without reliable technologies for prediction and detection, the Federal On-Scene Coordinator and his science staff are placed in the position of "proving a negative" to the public in order to assure no continued threat. Such "proof" adds time and expense to the response and can substantially raise the overall costs of cleanup. NOAA's research efforts continue to address these concerns.

As a natural resource trustee for coastal resources, NOAA continues to work closely with the U.S. Fish and Wildlife Service and the States of New Jersey, Delaware, and Pennsylvania, on behalf of the public, to restore coastal and marine resources injured by the *Athos I* oil spill. NOAA and the co-trustees agencies are working with the public to develop a natural resource damage assessment and restoration plan that will focus on specific projects to restore the injured resources and services. Typically, citizens and environmental groups help trustees identify, select, and implement on-the-ground restoration.

M/V Selendang Ayu

On December 7-8, 2004, the cargo vessel *M/V Selendang Ayu* lost power, ran aground and broke in half on the shore of Unalaska Island, Alaska, losing her 60,000 ton cargo of soybeans and spilling approximately 335,000 gallons of fuel oil. During rescue operations, six *Selendang Ayu* crew members were lost at sea due to a USCG helicopter crash.

During the initial response, NOAA participated in aerial observations and mapping of floating and shoreline oil, as well as provided on-scene weather information, including the establishment of an emergency remote weather station and the provision of a dedicated on-scene meteorologist. To give an example of the difficult nature of the work involved, a heavy-lift helicopter was used to remove the remaining 140,000 gallons of fuel from the wreck by transporting seventy, 2,000-gallon fuel canisters, one at a time, through the mountains, 25 miles to Dutch Harbor. Without accurate, up to date, spot-specific forecasts, it would not have been possible to safely conduct this complicated operation in such an extreme climate.

The SSC coordinated environmental issues for the Unified Command, including technical matters related to potential dispersant use and trajectory forecasts for the residual oil onboard. The SSC reviewed satellite data and remote sensing information and assisted the USCG prioritizing search areas for the flight recorder from the downed helicopter.

NOAA conducted shoreline and aerial surveys and helped prepare a comprehensive map of shoreline contamination. NOAA also worked with the USCG and State of Alaska to monitor cleanup operations and determine the potential trade-offs in using one cleanup technique versus another.

The Port of Dutch Harbor on Unalaska Island is the largest fishing port in the United States and the largest Alaskan native subsistence community in the Aleutians. NOAA worked with the local community to address subsistence and seafood safety concerns. Any real or perceived contamination of fisheries products with oil could disrupt both the local community and worldwide markets. With a combination of trajectory analysis and experience from other large spills, NOAA was able to provide valuable assistance to the Seafood Safety Task Force.

NOAA continues to work with the other natural resource trustees (USFWS and the State of Alaska) and the responsible party to conduct a natural resource damage assessment. The parties are assessing injury to natural resources and beginning to evaluate restoration alternatives. Public meetings already have been held to solicit local input on potential restoration alternatives, and NOAA is committed to providing the public with up to date information and meaningful opportunities for review and comment during the damage assessment and restoration planning process.

Hurricane Aftermath

The magnitude of the impacts to the environment in the aftermath of Hurricanes Katrina and Rita is unprecedented. Over 9 million gallons of oil were released and thousands of vessels, mostly in ports and inland waterways, were sunk or stranded. The number of incidents, magnitude of the spills, and devastated regional infrastructure made for an extraordinary emergency.

NOAA was one of the first federal agencies to respond on-scene, staffing multiple command posts, providing the USCG, the Environmental Protection Agency, and states with critical scientific information to support clean up and recovery. This included the assessment, prioritization, and mitigation of over 1000 hazardous materials releases. NOAA provided essential information, graphically documenting pollution cases, waterway closures, New Orleans flood levels, and locations of sunken and stranded vessels.

NOAA staff collected data at the larger spill sites for damage assessment and restoration purposes. This work was accomplished by dedicated NOAA scientists with unique skills and experience, working in areas with little or no infrastructure. Assessment work continues at the largest oil spills in order to address injuries to natural resources.

The actions of NOAA resulted in a more effective and efficient clean up, thereby mitigating environmental impacts. NOAA identified hundreds of pollution incidents. Through careful monitoring and coordination, clean up was conducted effectively, enhancing the potential for environmental recovery and restoration.

CONCLUSION

Thank you for the opportunity to talk about NOAA's important role under OPA. NOAA's expertise is critical to prevent further harm, restore adverse effects on natural resources, aid planning and response decision-making, and document damages associated with oil spills. I look forward to any questions that you may have.