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**Statement of
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**Before the Economic and Environmental Affairs Committee
The Senate of Maryland
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Good afternoon, Mr. Chairman and members of the Committee. I am pleased to have this opportunity to appear before you to discuss the Environmental Protection Agency (EPA) response to the Swanson Creek Marsh Oil spill. As you are aware, EPA plays a critical role in oil spill prevention, preparedness and response for the inland waterways of the United States, including the rivers, streams and wetlands that were affected by the catastrophic pipeline rupture at Swanson Creek.

Oil spills present a continuing threat to our nation's waters, which provide providing drinking water, recreation, and a livelihood to millions of citizens. Oil spills threaten countless species of animals and plants that must have clean water to survive and flourish. This threat is of particular concern here in the Chesapeake Bay watershed, where oil transport occurs in close proximity to the Bay's magnificent but fragile living resources. These are resources on which our environment, our economy, and our culture in the region all depend. I want particularly to commend Maryland's Department of Natural Resources and Maryland's Department of the Environment (MDE) for their partnership with EPA in a range of efforts to restore and protect these resources, including our close partnership in responding to the Swanson Creek oil spill.

EPA, MDE, agencies of the United States Department of

Transportation (USDOT), and DNR and our Federal natural resource trustees each have a critical role in protecting these resources from oil pollution. EPA's specific oil pollution responsibilities encompass four areas: EPA oversees oil spill prevention and response efforts at oil storage facilities; EPA responds to spills in all inland zone and is available to assist with response in all waters; EPA helps ensure preparedness for spills as chair of the National and co-chair of the Regional Response Teams; and we provide expert environmental advice to other responders and other agencies also charged with protecting the environment. As set forth below, each of these responsibilities were relevant at the Swanson Creek spill.

Spill Prevention and Response by Facilities

EPA's oil pollution regulations require each owner or operator of a regulated facility to prepare and implement a Spill Prevention, Control and Countermeasures (SPCC) plan. The SPCC plan is required to address the facility's design, operation and maintenance procedures established to prevent spills from occurring, as well as countermeasures to control, contain, clean up, and mitigate the effects an oil spill could have on navigable waters. EPA works with facilities to ensure that those prevention activities are effective by conducting facility inspections. Historically, the Pepco Chalk Point facility was inspected by EPA's oil program in March 1994 after a PEPCO spill of number 6 oil in February 1994 from their oil storage facility. Luckily, that spill did not enter navigable waters. At that time, a copy of their SPCC Plan (dated October 1, 1991) was also reviewed and the minor deficiencies noted at the facility during the inspection were corrected shortly thereafter. It was and is EPA's opinion that the facility's oil spill prevention activities were sufficient to prevent or contain spills from its oil storage operations. However, only facility tankage

and the piping associated with bulk storage are within the jurisdiction of EPA's spill prevention program. The requirements for spill prevention and response by pipeline owners and operators are established by the USDOT, and for the most part, by the Office of Pipeline Safety.

Spill Response by EPA

As you are aware, an EPA On-Scene Coordinator arrived at the site of the April spill after a determination by the US Coast Guard that an oil spill had occurred into a subsurface tidal marsh within EPA's geographic jurisdiction. EPA was joined by representatives of the state, counties and other federal agencies, including the U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce, and Office of Pipeline Safety (OPS) of the Department of Transportation. EPA's initial response was somewhat restrained because the initial call to EPA indicated that the volume of oil was very small.

Once EPA assessed the full extent of the spill, EPA immediately established a unified command that included MDE and PEPCO representatives in all response decisions. Our On-Scene Coordinator inspected the site, and quickly issued an emergency order to PEPCO that directed PEPCO to acquire all resources available for the immediate containment and collection of the discharged oil. In spite of this order, and additional verbal direction to ensure that protective booming and other measures were in place to contain the spill, there were significant failures by PEPCO's and its first set of contractors to implement the measures EPA required. The resources and expertise that PEPCO ostensibly had in place under the spill response plans were not effective in practice. A lack

of necessary equipment, including on-water oil collection capability, also was a problem during the first few days.

The precise impact of these failures is difficult to assess, because a late winter storm producing high winds, waves, and rainfall defeated the booms that were in place, releasing oil that might have been contained in the Swanson Creek Marsh into the open waters of the Patuxent and further impeding response efforts. We do know, however, that the failure to put protective booms in place after the storm did result in impacts to significant natural resources that might have been spared if EPA's orders had been followed.

EPA and our partner agencies responded with a highly effective and coordinated response. Task-oriented assignments were provided to specific agencies within the incident command. Generally, the Coast Guard was tasked with the responsibility for leading the water response, MDE was tasked with leading the marsh area response and boom maintenance, PEPCO was responsible for pipeline repair and shoreline response; State and Federal natural resource trustees (USFWS, NOAA, and DNR) oversaw natural resource impacts while ensuring coordination of EPA's and MDE's response actions with the longer-term challenge of natural resource damage assessment and restoration.

To address the shortcomings of PEPCO's initial response effort, EPA identified a contractor that was capable of providing the equipment and resources that could respond to the now widespread oil spill, and made arrangements for that contractor to supplement PEPCO's response activities. Once it became clear that PEPCO and its contractors were unable to manage all of the necessary response operations, the OSC

received assistance from the US Coast Guard in establishing and staffing an Incident Command System, which could more directly manage the response and clean-up activities of PEPCO and its contractors. USCG personnel from three Strike Teams and various Ports throughout the area provided staff to oversee contractor operations in all areas. Areas impacted were divided into zones for ease of identification, and Incident Action Plans were developed and updated each day that specified the work to be accomplished by zones for that particular day. Eventually, over 800 individuals from federal, state and local governments, as well as contractors, were involved in performing and monitoring the cleanup.

Concurrent with the spill cleanup efforts, the Natural Resource Trustees from federal and state agencies initiated the natural resource damages assessment (NRDA) process. The NRDA process involves the identification of impacts to resources, and defines the possible restoration of or compensation for those lost resources. The NRDA process proceeds on a separate track from the cleanup, however, it is valuable to note that coordination between the response effort and the damage assessment staff is essential in determining immediate cleanup methods. The bioremediation technique that was implemented within the marsh was not necessarily an alternative that the Trustees would have entertained in their evaluation process, but their acceptance of the technique was critical in the consideration of the technology by EPA and the other involved agencies. My staff also coordinated with the state Trustees during development of the long term administrative order to ensure that the state's resources would be restored to pre-spill conditions to the maximum extent practicable, in consultation with the Trustees, or in the alternative, to a level that the Trustees would approve to prevent more significant environmental damage.

Notwithstanding EPA's concerns about PEPCO's initial response, PEPCO did make exemplary efforts to marshal the resources needed for an effective response effort once the extent of the spill was clear. I particularly commend John Derrick, PEPCO's chairman and chief executive officer, for personally taking charge at the scene, for joining EPA in meeting with the community to hear their concerns, and in sending a clear signal to his employees that no expense or effort would be spared in responding to the spill. EPA has concerns about PEPCO's preparedness at the time of the spill and the personnel and resources initially available for response, and PEPCO's potential liability is still under review at EPA, MDE and the natural resource trustee agencies. But it is important to recognize that PEPCO has acknowledged its responsibility for the spill, has focused on the issue at the highest level of the company, and has spent more than \$60 million in response.

The first of many public meetings was held on the fifth day of the response. There was tremendous public interest in information about the spill, and evident frustration about the level of information available and the level of effort observed by the community. EPA and MDE then assumed the lead for reporting out to the citizens and both federal and state congressional representatives, and established a Joint Information Center that included representatives of EPA, the state and PEPCO to provide periodic reports/press releases to the media, made arrangements for the many public meetings that were to be held, and fielded calls from citizens regarding their observations of spill impacts on the environment as well as wildlife that required assistance. Prior to, and even after the establishment of the JIC, public awareness activities devoured the OSC's time and attention. Preparation and participation in public meetings with all of the counties affected by the spill, as well as the many differing organizations,

such as the recreational and commercial fisherman's associations, was time consuming and averted the OSC's focus on the cleanup. EPA will be evaluating its community involvement processes in an effort to improve this very important responsibility.

The response effort was divided into phases of work. The emergency phase consisted of removing all floating free product, as well as controlling any mobile oil to prevent damage or re-oiling of cleaned areas. The methods that were employed to accomplish this work included skimming, use of sorbents, flushing, raking and the manual removal of "oil patties" and tar balls. Beach fluidization was an innovative technique that was adapted from work performed by response agencies at the Exxon Valdez spill, that called for the introduction of air or water under pressure into areas of sandy beach to force buried oil to the surface for collection. It was also during this phase of the work that bio-stimulation was instituted at the Swanson Creek marsh in an effort to overcome impacts to the vegetation that the oil may have had and, in fact to allow for the assimilation of the oil by that vegetation. Shoreline Cleanup Assessment Teams, comprised of federal and state representatives, evaluated the status of all shorelines and had the responsibility to "sign off" as to the phase of cleanup of that particular zone. While there was still visible oil staining present, Phase I of the response was deemed complete on May 11.

Phase II was considered the long term removal phase and involved the consideration of minimizing damage to the environment by either leaving the oil in place or deliberately removing oil so that more serious damage would be avoided. This Phase is the culmination of the requirements of the administrative order that I issued on May 1st, that also

include the long term monitoring of the Patuxent River and its tributaries, the identification, evaluation and implementation of remediation technologies that will mitigate the discharge of oil and the establishment of public availability centers for responding to reports of oil and for providing a public awareness/education program. Under the Order, a Response Action Plan, or RAP, was required to be submitted by the PEPCO and ST Services that would serve as the blueprint for future work.

The RAP, was subject to review and acceptance by the Trustees and advisory groups, and proposed the long term cleanup criteria to be used for the different impacted environments (marshes, beaches and man-made structures) for final close-out of impacted areas. The cleanup criteria for each of these areas stated that all areas must be free of recoverable, potentially mobile and black oil (no tar balls) and rainbow sheen. Oil that produces a silver sheen may be present in marshes and on man-made structures. Beaches must be clear of any rainbow or silver sheen. Long term cleanup also includes the characterization of the extent of contamination through the use of Shoreline Cleanup Assessment Teams (SCATs) and sampling/analysis of sediments in the Swanson Creek Marsh, Patuxent River and its tributaries. Results from the extent of contamination assessments will form the basis of a long term monitoring program for monthly sampling of the surface water and sediments.

Significant progress has been made in the cleanup of the Swanson Creek and Marsh and shorelines along the Patuxent River and its tributaries. Light flushing, manual recovery, containment with sorbents, and monitoring continue at "hot spots" within approximately 15 zones are not yet meeting the long term criteria. Active cleanup in the Swanson Creek Marsh at the location of the spill is complete including excavation of

the area around the pipeline. Flushing operations have stopped and any free product being released is collected by sorbent pads and boom combinations. The heavily contaminated sediments in trenches, installed as part of the emergency response activities, have been aerated and refilled. Revegetation efforts in the marsh have been undertaken in order to restore the area to its original pre-spill condition to the maximum extent practicable. All of this work has been completed under the direction of EPA in consultation with Natural Resource Trustees (MDE, MDNR, USFW and NOAA) and the counties of Prince George's, Charles, Calvert and St. Mary's.

Federal Preparedness/Regional Response Team Activation

In addition to the National Response Team, which is comprised of up to 16 federal agencies, there are thirteen Regional Response Teams that are located within each of EPA's ten regional offices, in Alaska, the Caribbean and the Pacific Basin. Region III's RRT, co-chaired by EPA and the US Coast Guard, with members from emergency response and natural resource agencies from all of the states in the region, is primarily responsible for coordinating federal, state and local government preparation, planning and training for emergency response. However, the RRT also provides assistance and advice to the OSC during a response action. The Region III RRT was activated during the Swanson Creek response to consider the bioremediation technique that responders hoped would help in remediating the marsh. With approval from the RRT, the OSC was authorized to allow the nutrient application that would stimulate the growth of vegetation and subsequent plant uptake of a great deal of the oil pollution that was present in the marsh. As later described, the RRT will also assist EPA in performing a critique of the handling of the incident so

that future response efforts will be more effective.

Expert Environmental Advice

While the Natural Resource Trustees are certainly experts in the evaluation of damages and restoration of resources to pre-spill conditions, EPA's national Environmental Response Team (ERT) provided two individuals - a Scientific Support Coordinator and liaison was named to assist the Natural Resource Damage Assessment Response effort, as well as to provide expertise on the methods and rates employed for application of the nutrients for the bioremediation technique. ERT also provided substantial assistance in coordinating the environmental experts that came to assist the response from many sources, including EPA's own Chesapeake Bay Program. The EPA ERT staff worked closely with state agency personnel to bring together the necessary information and expertise to deal with the clean-up. In particular, detailed maps of the area and the location of environmentally sensitive resources provided by MDE and DNR were valuable resources for the Incident Command and NRDA activities. EPA's role in providing or arranging for the environmental expertise was in the coordination of the experts to ensure that the most effective, yet least damaging, response methods were identified and used to protect this sensitive resource without creating further damage.

Conclusion

EPA is actively seeking solutions to the challenges we face. We are now in the process of evaluating our response effort and have solicited input from over 50 representatives from the organizations that had some role in the response. We have developed a tactical plan that require our

response operations, including better notification, quicker mobilization and more effective site operations, to be ramped up more quickly and effectively in the event of another major spill. That plan will also require the Region to consider all pipeline spills as major incidents for justification of our immediate response. We have also drafted a communications plan that establishes a Joint Information Center as a key element for even initial communications. All of these activities, as well as the response itself, will be evaluated by the RRT, which will serve as the forum for an unbiased, constructive critique of the incident, as well as provide verification for the successful measures that were employed by EPA and all of the response agencies. The RRT can provide recommendations to all of the agencies that were involved so that future incident response will be as smooth or better. In addition, as an organization comprised of the sixteen federal agencies that have roles in responses to these incidents, the RRT will also play a key role in ensuring that agency coordination issues that go beyond individual organizations can be addressed.

Mr. Chairman, thank you for the opportunity to address the Committee. I would be pleased to answer any questions you or the other Members may have.