COMPLETE STATEMENT OF

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DEPARTMENT OF THE ARMY

BEFORE THE

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Energy and Commerce Committee
HOUSE OF REPRESENTATIVES

"Hurricane Katrina: Assessing the Present Environmental Status"

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Introduction

Mr. Chairman and distinguished members of the subcommittee, I am John Paul Woodley, Jr., Assistant Secretary of the Army (Civil Works). I am honored to be testifying before your subcommittee today, on the environmental aspects of the United States Army Corps of Engineers' recovery activities related to Hurricane Katrina. My testimony today will provide a brief background and update the Subcommittee on the environmental management techniques the Corps of Engineers is using during the on-going unwatering and debris removal and cleanup missions in the greater New Orleans area. These efforts are a collaborative effort of the Corps of Engineers, the U.S. Environmental Protection Agency, the Louisiana Department of Environmental Quality, the Sewage and Water Boards, Louisiana Department of Health and Hospitals and contractors to ensure impacts upon human and environmental well-being are minimized to the greatest extent possible.

Background

The Corps of Engineers is doing everything it can to get the water out of New Orleans as quickly as possible, in an environmentally acceptable manner. Everyone is

concerned about the quality of water being moved from New Orleans to Lake Pontchartrain, but the first priority is health and safety of residents of New Orleans and all responders as water is drained from the city. The Corps is working with the EPA, including its on-scene coordinator, and state agencies to ensure human health and safety. EPA is continually monitoring and testing the water. Corps of Engineers personnel in New Orleans and Baton Rouge are co-located with the EPA and the Louisiana Department of Environmental Quality, and other state agencies since shortly after Katrina to facilitate close interaction and coordination. The headquarters and forward field offices of the Corps and EPA are fully engaged in this collaborative effort.

Status of Unwatering Mission

Working with the city of New Orleans Water and Sewage Board, private contractors and even some foreign governments (Dutch and German dewatering teams), the Corps of Engineers continues to make steady progress on pumping out floodwaters from the city of New Orleans and immediate vicinity into Lake Pontchartrain. The current estimate is that the New Orleans area is more than 80 percent unwatered, with the overall unwatering effort estimated to be completed in early to mid-October, with a number of parishes completed by September 30th. As the water drains to its final amounts, there may be more concentrated levels of contaminants that will require special attention and handling. The Corps is coordinating with EPA and state agencies regarding this possibility. The unwatering effort will remove most, but not all the water. The remaining isolated pockets of water should not hamper recovery efforts such as debris removal, structural assessments and restoration of critical services.

Preventative and Remedial Management Actions

An interagency technical sub-group (water quality/ecosystem restoration management experts) collaboratively identified an array of recommendations for preventative and remedial mitigation management actions during unwatering for both inside and outside the levees. Inside the levees the Corps has deployed sorbent booms with sorbent skirts at appropriate intake points. There is a special management strategy for appropriate containment and treatment of HOT-SPOT areas identified by personnel on the ground as the water lowers. Though most of the City is dry, the Corps still is treating water in the three main canals, Orleans, London and 17th Street. The Corps has deployed artificial aeration devices in major channels to reduce biological oxygen demand (BOD) and support healthy dissolved oxygen concentrations in the water column. Two aerators in each of the three main channels draining to Lake Pontchartrain were strategically placed and operating successfully prior to Hurricane Rita and 20 more aerators are being placed in these and other strategic locations, even in the outfall areas of Lake Pontchartrain. More aerators also are being planned – about an additional 20, or total of 40. After a suspension of pumping operations during Hurricane Rita the Corps has resumed the aeration operations, and are coordinating with the U.S. Coast Guard to deploy booms, skimmers, and suction at pumping stations where oil was observed. Based on input from EPA, the Corps is doing its best to address bacteria, suspended solids, and petroleum in storm water runoff. Options include more

booms, silt screens, aerators, and possibly adding some mobile treatment plants. EPA and the Corps are formulating approaches to manage known and suspected areas of hazardous materials production and storage, and areas with contaminant sequestration materials such as flocculation, disinfection, and sorption.

The Corps is working with EPA who is developing a comprehensive non-point source control program to manage the first flush of rainfall from contaminated residuals as well as developing and executing program to clean streets, canals, storm drains of contaminated residuals to minimize their flushing from receiving waters during rainfall events. This approach is being formulated collaboratively between the Corps and EPA to be coordinated with State and Local governments and water boards.

In addition to the floodwaters, the EPA and State of Louisiana are sampling and monitoring the sediments left behind from the New Orleans floodwaters for possible contaminants and infectious agents. Appropriate sampling and analysis are critical to effective evaluation and characterization to assure proper handling and disposal. The Corps and its contractors are working closely with the EPA and the state of Louisiana to assure that this is achieved in a safe manner.

Water Quality Results

EPA emergency response personnel are working in partnership with FEMA and state and local agencies and the Corps to help assess the test results and evaluate health and environmental conditions related to water quality from Hurricane Katrina. In emergency situations such as this, EPA serves as the lead Agency for water quality including the cleanup of hazardous materials such as oil and gasoline. EPA national and regional Emergency Operations Centers are currently activated 24 hours a day. The Corps has employees embedded with the EPA/LDEQ team in Baton Rouge and onsite teams locally in New Orleans for rapid and effective communication regarding water quality issues.

More than 190 water quality data parameters are constantly being updated, reviewed and validated through an EPA quality assurance process to ensure scientific accuracy. Fuel oils, as they are encountered, are being skimmed by floating booms or other pick-up mechanisms as monitored by the Corps, EPA, LDEQ and Coast Guard, but contact with fuels and oils absorbed onto sediment is always a possibility. With any of these water quality constituents, it is recommended that contact with the area water be avoided, and if contact is made, use soap and water to clean areas and remove contaminated clothing.

The Corps teams in the field and at the Baton Rouge office will continue to follow interagency guidance and accepted doctrine and continue working collaboratively with the entire suite of human health agencies to respond to health and human safety issues. The Corps will follow OSHA/CDC guidance pertaining to human health and safety risk associated with New Orleans floodwaters, sediment and related microbial

issues and continues to operate in the field under that guidance and its internal guidance for emergency work zones.

Debris Management Plan

In support of FEMA, the states and localities, the Corps is conducting a comprehensive debris removal effort in the areas impacted by Hurricane Katrina. There is very strong interagency communication between the federal agencies, states and local agencies both vertically and horizontally. Additionally, the Corps is a participant in a multi-agency working group established by the EPA that meets twice weekly to coordinate innovative debris management issues such as recycling and reuse. That working group also includes state and private non-profit and for profit entities. An output of this coordination is management plans (by state) for hazardous materials and other debris.

With respect to household hazardous waste, while the collection and disposal of this material is an Emergency Support Function (ESF)-10 task, it is being conducted by both the Corps and EPA. We expect that most hazardous and toxic waste will consist of containers filled with fuel oil and propane tanks, containers of unidentified material, paint, pesticides, spoiled food, freon removal and batteries. The Corps is working closely with state and federal regulators on all matters dealing with all types of debris including contaminated debris

As public rights of way are cleared and segregation of materials at curbside and at staging areas gets in full swing, the Corps realizes that recycling will increasingly become a key component of the debris strategy. White goods, automobiles, marine vessels, and, in areas not impacted by the Formosan Termite, clean woody debris should be common targets for recycling. Recycling can be effective in reducing the volume of debris and reducing the impact on landfills.

Closing

The Corps is implementing preventative management actions during pumping inside the levees to minimize additional ecological impact during the balance of the unwatering effort. The Corps also is implementing remedial management actions in the receiving waters to continue to minimize the ecological impacts of the discharge of flood waters. The Corps of Engineers is seeking a balance between pumping all the water out of the city and minimizing ecological impacts during the unwatering process. Strategies are being developed by the Corps and EPA to manage the post-pump down flushes of potential pollutants and potentially contaminated residuals. The U.S. Army Corps of Engineers appreciates the tremendous cooperation of the EPA, Coast Guard, Louisiana Department of Environmental Quality and other local officials and agencies to carry out all of our public works missions under Emergency Support Function #3. The current promising outlook for the environment and human safety and health would not be possible without the combined efforts of all that were mentioned.

This concludes my statement. Again, I appreciate the opportunity to testify today. I would be pleased to answer any questions you may have.