Pacific Northwest National Laboratory
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////*Around the Region in Homeland Security***
June 2007

This monthly status report summarizes activities related to Homeland Security in the Pacific Northwest, including Washington, Oregon, Idaho, and Alaska. This issue highlights advances in

- Testing radiation detection at intermodal rail at cargo ports
- Sharing emergency response needs with DHS leadership
- Determining dosimetry needs for emergency responders
- Connecting visualization and analytics science with industry
- Gaining benefits to DHS from Puget Sound restoration efforts.

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Tacoma Chosen for Intermodal Rail Radiation Detection Test Center

The Domestic Nuclear Detection Office (DNDO) announced in May that it has chosen the Port of Tacoma for a rail test center to evaluate the capabilities of radiation detection systems in an intermodal rail environment. The SAFE Port Act of 2006 directs the Secretary of the Department of Homeland Security to establish an Intermodal Rail Radiation Detection Test Center. This center will test concepts specific to the challenges posed by on-dock rail, in addition to other detection schemes. The test center will join current DNDO test locations at the Nevada Test Site and the New York Cargo Terminal to support evaluation of radiation detection systems and will provide DNDO, U.S. Customs and Border Protection (CBP), and the Port of Tacoma with the capability to understand the potential operational impacts of scanning intermodal rail cargo with radiation detection systems.

The test center will consist of two elements. A core office will house and support the central communications, information technology, and logistics while one or more mobile satellite offices at the port will house the systems to be tested. Once a test is finished, the mobile offices can be removed or relocated, returning the port to normal operations. The test center will initially test DNDO-developed passive radiation detection systems (which do not emit radiation) and progressively support radiography and active interrogation systems as appropriate. The tests conducted at the center will include potential roles for the port operator, terminal operators, railroad operators, longshoremen, and CBP.

The Pacific Northwest National Laboratory's (PNNL) Barbara Reichmuth was instrumental in drafting the white paper that led to the collaboration between DNDO, CBP, and the Port of Tacoma for the center. Reichmuth proposed the Port because it is representative of other ship-to-rail cargo ports around the country and includes four terminals with different configurations to aid testing. She also helped DNDO identify technical challenges of locating the test center, determine appropriate scope, and chart the path to working with stakeholders and bringing the center to fruition.

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DNDO Director Meets with Regional Responders

When Mr. Vayl Oxford, DNDO Director, visited the Seattle/Tacoma area in May, he requested PNNL to organize a small, informal gathering of response community members to discuss regional needs regarding radiological and nuclear security. In particular he recognized that the coming Olympics present a national security challenge and wanted to identify ways to enhance the region's radiological and nuclear security. Participants including Pierce County Emergency Management, Seattle Fire Department, Washington State Patrol, the National Guard Civil Support Team, State Public Health, Port of Tacoma, CBP,

Seattle Police Department, and the Washington State Military Department shared their perception of needs and issues regarding radiological/nuclear security, reinforced the regional position that user engagement in technology development and associated policy from concept through development will improve and probably streamline the development of viable solutions, and proved the ease of working with this community relative to many other major urban areas and states. Mr. Oxford offered radiation protection training and assessment reports on technologies evaluated for radiation detection and measurement. He also offered the DNDO state and local office contact to help with technology consultation to help locals make appropriate purchase decisions.

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Analytics Centers at the University of North Carolina at Chapel Hill, Georgia Tech, Stanford, the University of Washington, Penn State, and Purdue University were featured in poster sessions. Consortium members also toured the Seattle Sector U.S. Coast Guard facility and the Seattle Police Department Command Center.

The VAC Consortium includes industry partners 10th Dimension Media Group, Inc.; Attenex; Boeing; Future Point Systems, Inc.; GCS Research; GreenLine Systems; i2; Microsoft Research; Objectivity; Tableau Software; and Raytheon as well as the National Institute of Standards and Testing. Detective Aaron Reynolds of the Seattle Police Department praised the event for bringing together such powerhouses in research. He also requested PNNL support in identifying how to leverage the ARJIS work to the northwest.

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questions from PNSO staff. Specific areas of the goal, such as becoming recognized as a regional partner, developing relationships with regional stakeholders, engaging the regional academic community, conducting regional workshops, and bringing national homeland security leadership to the region, have all been met or exceeded. The Northwest Homeland Security Center for Science and Technology is on track for a successful implementation by September. This virtual center is organized around state and federal advisory groups that include key stakeholders in homeland security. PNSO had a favorable response to the progress to date.

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Upcoming Events

June 14
Interagency Biological Restoration Demonstration (IBRD) Planning Meetings
Seattle

June 28
Regional Technology Integration and IBRD Coordination Meeting
Seattle

July 23-27
Evergreen Sentry 2007 Full Field Exercise
Northwest Region

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Around the Region in Homeland Security is a monthly status report from the Pacific Northwest National Laboratory in support of the Homeland Security Regional Stretch Goal to bring together major stakeholders from across the region that have a vested interest in homeland security challenges and issues and provide a collaborative environment that addresses Northwest regional homeland security requirements, needs, and challenges. For more information on PNNL's involvement in Homeland Security in the Pacific Northwest, contact Steve Stein, Regional Stretch Goal Program Manager at steve.stein@pnl.gov or 206-528-3340. For more information on how PNNL supports Homeland Security across the nation, contact Mike Mitchell, Homeland Security Sector Manager at Michael.Mitchell@pnl.gov or 509-375-6353.