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Prevention Corner

EPA Amends SPCC Rule to Streamline Requirements and Proposes Extension of Compliance Dates

On December 26, 2006, EPA published a final set of amendments in the Federal Register and proposed to extend the compliance dates to the Spill Prevention, Control and Countermeasure (SPCC) rule (found at 40 CFR part 112). These amendments were promulgated to streamline several SPCC requirements, and to increase environmental protection by tailoring the requirements to certain facilities and pieces of equipment in an effort to improve compliance. The 2006 amendments directly address issues discussed in the two Notices of Data Availability that EPA published in September 2004: more focused requirements for facilities subject to the SPCC rule that handle oil below a certain threshold amount,

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Happy New Year!

About the EPA Oil Update

The EPA Oil Update newsletter is an informal journal of EPA's oil activities within the Office of Emergency Management. The EPA Oil Update seeks to attract a broad audience within the general public, including concerned citizens, students and environmental groups, and highlight current developments related to oil spills. The journal covers oil spills in the United States and throughout the world, and emphasizes the effects these spills have on wildlife and ecosystems.

The EPA Oil Update is available on the U.S. EPA Office of Emergency Management webpage at www.epa.gov/oilspill. This newsletter is distributed electronically. To add or remove your name from the distribution list, send an email request to Nick Nichols (nichols.nick@epa.gov) or Leigh DeHaven (dehaven.leigh@epa.gov). The EPA Oil Update is replacing the former Oil Drop and Oil Program Newsletters.

and alternate regulatory requirements for facilities with oil-filled equipment. The 2006 amendments also provide relief related to other priority issues raised by the regulated community: motive power, mobile refuelers, requirements for facilities with animal fats and vegetable oils, and farms.

Concurrently with the publication of these amendments, EPA announced that it is proposing to extend the compliance dates for owners and operators of facilities to prepare or amend and implement SPCC Plans. This proposed rule would extend the dates in §112.3(a), (b), and (c) by which a facility must prepare or amend and implement its SPCC Plan, until July 1, 2009.

In addition to the 2006 amendments, which are described in more detail below, EPA is considering further streamlined regulatory modifications or guidance for certain types of facilities and equipment. EPA is currently exploring potential options for an additional subset of qualified facilities, facilities handling animal fats and vegetable oils, issues relating to farms, specific issues relating to the exploration and production industry, and the definition of loading rack. EPA expects to put forth this rulemaking proposal in 2007.

Qualified Facilities

EPA responded to concerns expressed by the regulated community about the need/cost for Professional Engineer (PE)-certification of SPCC Plans at small facilities by providing this alternate certification option. The “qualified facilities” option provides relief for certain smaller facilities that meet two qualifying criteria. First, the facility must have 10,000 gallons or less in aggregate aboveground oil storage capacity. Second, the facility must not have had (1) a single discharge of oil to navigable waters exceeding 1,000 U.S. gallons, or (2) two discharges of oil to navigable waters each exceeding 42 U.S. gallons within any twelve-month period, for the three years prior to the SPCC Plan certification date, or since becoming subject to 40 CFR part 112 if the facility has been in operation for less than three years. When making this determination, the gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines, not the total amount of oil spilled. Oil discharges that result from natural disasters, acts of war, or terrorism are not included in this qualification determination.

Owners or operators of facilities that meet these qualifying criteria may choose to self-certify the facility’s SPCC Plan instead of having the Plan reviewed and certified by a licensed PE. These facilities may also take advantage of new streamlined facility security and tank integrity testing requirements for self-certified Plans. However, under the self-certified Plan option, owners and operators face some limitations – they are not allowed to certify the use of environmentally equivalent measures (normally allowed under §112.7(a)(2)) or make impracticability determinations with respect to secondary containment (normally allowed under §112.7(d)). EPA believes that the expertise of a PE is necessary in evaluating whether particular measures provide equivalent environmental protection and in determining whether the required secondary containment is impracticable. To provide flexibility, EPA does allow owners/operators of qualified facilities to take advantage of environmental equivalence and impracticability determinations, if they have a PE certify these specific elements in their Plan.

Qualified Oil-Filled Operational Equipment

Oil-filled operational equipment is defined as equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device (e.g. transformers, hydraulic equipment and lubrication equipment). With the 2006 SPCC rule amendments, EPA responded to concerns expressed by the regulated community about the difficulty of providing secondary containment for operational equipment. The revised rule provides a new option for oil-filled operational equipment that meet qualifying criteria. For qualified oil-filled operational equipment, instead of providing secondary containment, owners and operators may provide an oil spill contingency plan and a written commitment of manpower, equipment and materials to expeditiously control and remove discharge oil – without a written explanation of why secondary containment measures are not practicable. However, to avoid the need for this written impracticability determination, facilities must establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge.

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Proposal to Extend SPCC Compliance Dates

On December 26, 2006 (71 FR 77266) EPA proposed to extend the compliance dates by which a facility must prepare or amend and implement its SPCC Plan. Under this proposal, facilities would be required to prepare or amend and implement their Plans by **July 1, 2009** (the current compliance date for existing facilities is October 31, 2007).

EPA is proposing this extension because EPA expects to propose further revisions to the SPCC rule in 2007, and the extension would allow EPA the time to promulgate further regulatory revisions before the compliance dates. In addition, the EPA intends to issue revisions to the *SPCC Guidance for Regional Inspectors*, to address amendments to the SPCC regulation, both the 2006 revisions and the upcoming revisions expected to be proposed in 2007. EPA believes that an extension would provide the regulated community the opportunity to understand the material presented in the revised guidance before preparing or amending their SPCC Plans.

All public comments on this proposal should be directed to Docket ID No. EPA-HQ-OPA-2006-0949. Comments may be submitted through the Federal Rulemaking Portal at <http://www.regulations.gov>.

Equipment is eligible for this option if the facility did not discharge from any oil-filled operational equipment (1) more than 1,000 U.S. gallons of oil in a single discharge to navigable waters or (2) discharge more than 42 U.S. gallons of oil in each of two discharges to navigable waters, within any twelve month period, from any oil-filled operational equipment in the three years prior to the SPCC Plan certification date, or since becoming subject to 40 CFR part 112 if the facility has been in operation for less than three years. When making this determination, the gallon amount(s) specified (either 1,000 or 42) refers to the amount of oil that actually reaches navigable waters or adjoining shorelines, not the total amount of oil spilled. Oil discharges that result from natural disasters, acts of war, or terrorism are not included in the eligibility determination.

Motive Power Exemption

Motive power containers are defined as any onboard bulk storage containers used primarily to power the movement of a motor vehicle, or ancillary onboard oil-filled operational equipment. Motor vehicles such as aircraft, buses, sport utility vehicles, small construction vehicles, self-propelled cranes, self-propelled forestry, agricultural, construction, and excavation vehicles, aircraft and locomotives that contain oil in capacities greater than or equal to 55 gallons solely for the purpose of providing fuel for propulsion, or solely to facilitate the operation of the vehicle, were technically subject to the SPCC rule, including the requirement for secondary containment and other SPCC requirements. By adding a specific exemption for motive power containers, the 2006 rule amendments clarify EPA's intent not to regulate these motive power containers or facilities where these vehicles might be located (where not otherwise subject to the SPCC requirements), because of the impracticability of application of the SPCC requirements to such vehicles. This exemption does not include containers which store or transfer oil for further distribution, or oil drilling and workover equipment. Finally, transfers into motive power containers at an otherwise regulated SPCC facility continue to be regulated.

Mobile Refuelers

A mobile refueler is a bulk storage container onboard a vehicle or being towed, that is designed or used solely to store and transport fuel for transfer into or from an aircraft, motor vehicle, locomotive, vessel, ground service equipment, or other oil storage container. Members of the aviation sector expressed concern that requiring sized secondary containment for airport mobile refuelers is not practicable for safety and security reasons. Other industry sectors provided arguments that this relief should be extended to all refuelers. EPA has responded to these concerns by amending the SPCC rule to exempt mobile refuelers from the sized secondary containment requirements. Owners and operators of mobile refuelers will no longer need to provide secondary containment systems that are sufficient to contain the capacity of the largest single compartment or container with enough volume for

precipitation. General secondary containment requirements (§112.7(c)) do still apply.

Animal Fats/Vegetable Oils

The 2006 SPCC rule amendment modified Subpart C of part 112, the subsection that provides requirements for animal fats, oils and greases, fish and marine mammal oils, and vegetable oils, by removing three sections. EPA removed §112.13 (requirements for onshore oil production facilities), §112.14 (requirements for onshore oil drilling and workover facilities), and §112.15 (requirements for offshore oil drilling, production, or workover facilities) because these sections were not appropriate for animal fats and vegetable oils. EPA is currently considering whether to differentiate SPCC requirements for animal fats and vegetable oils from the requirements for petroleum and other oils, and plans to address this issue in a future rulemaking.

Extension of Compliance Dates for Farms

For purposes of the SPCC rule, EPA defined a farm as a facility on a tract of land devoted to the production of crops or raising of animals, including fish, which produced and sold, or normally would have produced and sold, \$1,000 or more of agricultural products during a year. While determining if the agriculture sector warrants specific consideration under the SPCC rule, EPA has provided a compliance date extension for all farms until the Agency promulgates a rule specifically addressing how farms should be regulated under the SPCC rule.

For more information, see the outreach materials (fact sheets, Q&A's, etc.) that EPA has prepared, located on the Office of Emergency Management website, at www.epa.gov/oilspill. Read the complete rule text at 71 FR 77266-77293. ♣

For more information about specific EPA oil programs:

- ♣ SPCC: <http://www.epa.gov/oilspill/spcc.htm>
- ♣ FRP: <http://www.epa.gov/oilspill/frps/>
- ♣ NCP: <http://www.epa.gov/oilspill/ncp/>

For questions, contact the EPA Hotline: **1-800-424-9346**
To report a spill, contact the NRC: **1-800-424-8802**

Maine Oil Facility Agrees to Pay Fine to EPA for Lack of Oil Spill Plan

(Boston, Mass. – Sept. 6, 2006) - To settle claims that it had failed to guard against oil spills at its North Bath, Maine facility, an oil delivery company agreed to pay \$35,000 to the federal government.

According to a complaint filed by EPA's New England office in March, Kaler Oil Company, Inc. did not have a "Spill Prevention, Control, and Countermeasure" (SPCC) plan in place, as required by the federal Clean Water Act.

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An inspector from EPA's New England office inspected the Kaler facility in October 2005 and found that, in addition to not having a plan, the company failed to construct containment around its oil tanks and loading area, leading to a risk of a spill to surface waters and/or drinking wells should tank or piping fail.

“Oil spills can cause significant environmental damage, and particularly in this case to nearby drinking water wells,” said Robert W. Varney, regional administrator for EPA's New England office. “EPA will continue to ensure that New England facilities storing oil take the measures required by the Clean Water Act to minimize the risk of spills.”

Federal spill prevention and control laws help ensure that a tank failure or spill does not lead to oil being released into private wells, rivers or streams.

For more information, see:

- Federal oil spill prevention requirements (www.epa.gov/oilspill/spcc.htm)
- How EPA works in New England to prevent oil spills (www.epa.gov/ne/superfund/er/oilstor.htm) ♦

Secondary Containment Prevents Environmental Damage from 235,000-Gallon Oil Discharge

According to local media reports (KYW), on October 15, 2006, a Sun Oil refinery in South Philadelphia, PA experienced a spill of 5,600 barrels of crude oil – more than 235,000 gallons – from a storage tank located at the facility. The spilled oil was held inside a containment area surrounding the tank. Media reported that the spill seemed to have originated from an outlet valve located near the bottom of the tank.

Pennsylvania Department of Environmental Protection was notified of the discharge. Sun Oil personnel handled the response to the incident and no help was required from the city or its fire department's HAZMAT team.

The incident reinforces the importance of providing secondary containment for bulk storage containers as required by the Oil Spill Prevention regulations at 40 CFR part 112. ♦

Preparedness & Planning Corner

Characteristics of FRP Facilities: Results of Nationwide Inventory

EPA's Office of Emergency Management (OEM) recently completed an updated inventory of facilities that submitted Facility Response Plans. For the first time, the inventory

provides a national perspective on these facilities and an interesting view on their geographical distribution and oil storage characteristics.

Background on FRP requirements

The Facility Response Plan (FRP) requirements are contained in sections 112.20 and 112.21 of the Oil Pollution Prevention regulation at 40 CFR part 112. Promulgated under the authority of the Oil Pollution Act of 1990, they have been in effect since 1994. Facilities that must prepare and submit to EPA an FRP are non-transportation-related facilities that could, because of their location, cause substantial harm to the environment by discharging oil. Factors for determining applicability of the FRP requirements include, but are not limited to, oil storage capacity, type of transfer activities, adequacy of secondary containment, proximity to fish and wildlife or environmentally sensitive areas, proximity to drinking water intakes, and discharge history. The Regional Administrator may also independently determine that a facility presents a substantial risk and require the facility owner or operator to prepare and submit an FRP. A subset of FRP facilities that have the potential to cause *significant* and substantial harm must have their plan reviewed and approved by EPA prior to starting their oil operations.

Overview of Draft Inventory

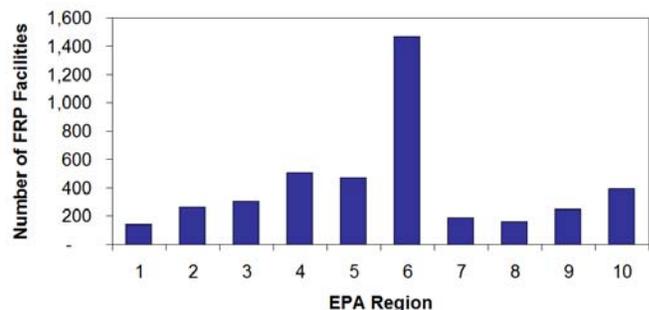
In 2005, EPA Headquarters surveyed each of the 10 EPA Regions to gather information about facilities that have submitted FRPs. A first draft of the national inventory was completed in November 2005.

Based on data contained in the draft national inventory 4,135 active facilities have prepared and submitted an FRP to date. The facilities are located in all ten EPA Regions, with Regions 6 and 4 having the largest number of facilities, as shown in the bar chart above. A number of these FRP facilities fell within the paths of Hurricanes Katrina and Rita, which hit the Gulf Coast in the late summer of 2005.

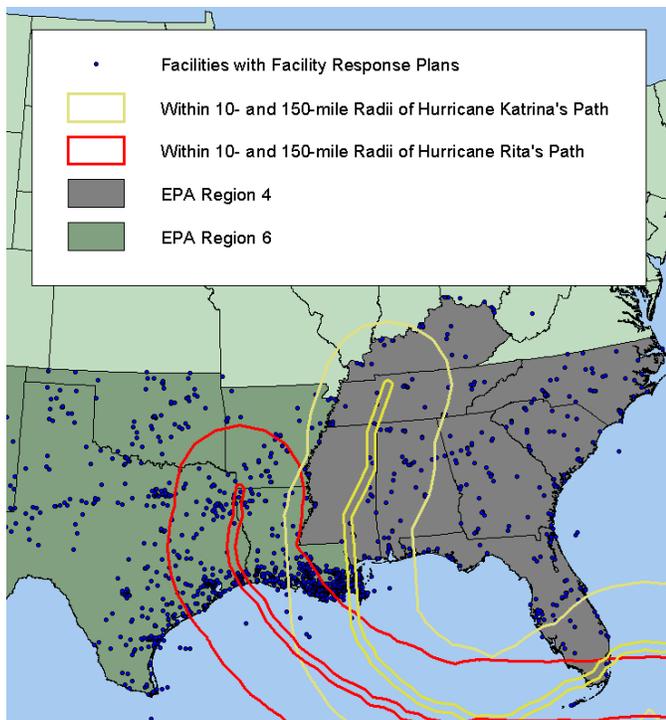
Oil and gas extraction facilities, electric power generators, iron and steel mills, and petroleum products wholesalers represent the largest share of FRP facilities in term of the number of facilities and total oil storage capacity.

Although the draft inventory contains data on total oil storage capacity for only a subset of FRP facilities, median storage

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Distribution of FRP facilities by EPA Region. (Source: EPA.)



FRP Facilities Located in the Paths of Hurricanes Katrina and Rita. (Source: U.S. EPA Office of Emergency Management: 2005 Year in Review.)

capacity for facilities for which information is available exceeds 4 million gallons, while the median worst-case discharge volume (which is often the size of the largest aboveground tank at the facility) is 1.4 million gallons.

EPA compared the facility inventory to discharge data obtained from the National Response Center (NRC). The comparison suggests that FRP facilities are responsible for a large share of oil discharged to navigable waters, based on discharge volumes reported to the NRC each year. Although the number of incident reported each year from these facilities is relatively small, the volumes of oil involved are disproportionately large. This highlights the importance of response preparedness and planning for worst-case discharges at these facilities.

In the coming months, OEM intends to improve the inventory by having each staff in each Region verify the information currently available, by collecting additional information on the types of operation and oil storage characteristics of the facilities, and by complementing the FRP inventory with data from other EPA programs.

For more detailed EPA FRP information, contact Troy Swackhammer at (202) 564-1966 or swackhammer.j-troy@epa.gov.

EPA Region I and U.S. Coast Guard Collaborate on Government-Initiated Unannounced Exercises

EPA Region I and the U.S. Coast Guard (USCG) have always had a strong partnership in their efforts to protect the environment. However, recent efforts between the two agencies on Government Initiated Unannounced Exercises (GIUE's) have shown a new level of excellence in efficiency and effectiveness.

The EPA Region I Oil Program conducts unannounced exercises at selected facilities each year. These exercises, which test the ability of a facility to respond to a spill and implement its emergency response procedures, are conducted in accordance with the national Preparedness and Response Exercise Program (PREP) guidelines and 40 C.F.R. Part 112, Appendix E.

This year Region I made great strides in refining the Government Initiated Unannounced Exercises (GIUE) process by developing a strong partnership with the United States Coast Guard (USCG) Sectors in the Region as well as the State Environmental Agencies. Eight GIUE's were conducted this year with each of the four USCG Sectors in Region I as well as some Marine Safety Field Offices. Region I took the lead on organizing the exercises while the Coast Guard actively participated in facility selection, scenario development and evaluation of the facility. Most of the Region I oil terminals are coastal facilities and are jointly regulated by both agencies. The team approach by the two agencies shows a coordinated and effective government that is well received by industry.

Through coordinated efforts, Region I developed a Standard Operating Procedure (SOP) for the GIUE's that incorporated the program goals of both agencies as well as including the interested parties and stakeholders from the State and Local agencies. The SOP contains the appropriate preparation prior to the actual date of the GIUE including contacting the

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Boom being deployed during a Government-Initiated Unannounced Exercise (GIUE) at Webber Tanks, Bucksport, Maine (Photo: EPA Region I)

identified interested parties, having meetings to develop the scenario, and gathering information about the facility that will be important to know during the exercise. The SOP also defines evaluation criteria for the facility by using a checklist. The checklist was refined through a collaborative effort with the USCG to meet the goals and objectives of both agencies. The checklist identifies major portions of the exercise and indicates whether the facility was successful or unsuccessful at these tasks. Overall, the Coast Guard and the EPA have found that using the terms successful/unsuccessful instead of pass/fail has helped to solidify the positive relationship that the agencies have developed with the facilities.

At the completion of the exercise, the agencies meet to discuss the performance of the facility based on the criteria set in the checklist. The Exercise Evaluation Team consists of a Spill Response Team (SRT) and a Command Post Team (CPT), each made up of USCG and EPA team members. During the exercise, each team was able to view different aspects of the response. The meeting is used to bring all the information regarding the facilities performance together and create a final evaluation checklist. A copy of this checklist is given to the facility and all the participating agencies.

Over the past year, the GIUE process has become more effective and has served to solidify the relationship between USCG and EPA and the States. It has also helped to identify areas for improvement at facilities and has also identified facilities that serve as examples for effective partnerships. ♦

OEM Working to Map Oil Storage Facilities in Indian Country

OEM's Tribal Coordinator is currently working with EPA Regions and with EPA's American Indian Environmental Office to identify aboveground storage tanks and facilities in or near reservations, allotments, and other tribal lands.

For more information about this project, contact William Nichols (202) 564-1970; nichols.nick@epa.gov

For more information about EPA's American Indian Environmental Office, visit <http://www.epa.gov/indian>. ♦

EPA Oil Spill Facts and Figures

EPA responds to spills that threaten or directly impact inland waters of the United States, and works with the U.S. Coast Guard during spills to the marine environment.

In 2005, EPA responded to approximately 260 oil spills in the United States.

Source: 2005 Year in Review. U.S. EPA Office of Emergency Management.

Response Corner



On-Scene Coordinator Warren Dixon (EPA Region IV) participating in EPA's response to hurricanes Katrina and Rita (Source: EPA)

EPA Responders Cover a Broad Spectrum of Issues in their Response to Hurricanes Katrina and Rita

The federal government faced unprecedented challenges responding to hurricanes Katrina and Rita. Almost every EPA office supporting Regions 4 and 6 as they worked on a range of issues along the Gulf Coast. The depth of EPA's emergency response experience, and its on-going commitment to preparation and training enabled EPA to go above and beyond its traditional role by providing the support necessary to protect human health and the environment.

In the first days of the response, EPA took on a new role at the request of FEMA: rescuing approximately 800 residents from New Orleans flood waters. As the response continued and presented more unique demands and challenges, more than 1,100 EPA employees from across the country were deployed to the Gulf Coast region to assist in the response and cleanup efforts. Thousands of additional employees supported EPA's response from their home offices. Under these mission assignments, as of April 30, 2006, EPA has:

- Collected more than 10,000 samples of floodwater, sediment, soil, air, surface water, and ground water. For all media, there were more than 400,000 analyses associated with the sampling activity throughout the Gulf Coast region.
- With the help of its partners, assessed more than 4,000 drinking water and wastewater system facilities, which EPA continues to monitor as they return to operation.
- Helped the lower six counties of coastal Mississippi control damaged water sector infrastructure. EPA also helped restore damaged sewer infrastructures in 11 coastal municipalities

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and cleaned lift stations to provide emergency power to local communities.

- Helped set up temporary mobile water treatment units for community and medical facilities and delivered emergency supplies to water and wastewater utilities.
- Provided oversight for assessment and cleanup efforts at the million-gallon Murphy Oil Spill. The spill affected a square mile of residential properties, including approximately 1,800 houses.
- Collected more than 3.2 million unsecured or abandoned containers of potentially hazardous wastes, collected more than 439,000 electronic goods, and recycled more than 360,000 large appliances. ♦



Judge Perez and Jacob Drive in St. Bernard Parish, Louisiana, shown before (top) and after (bottom) cleanup of flood damage (Source: EPA)

Science & Research Corner

Demonstration of EPA/DFO Wave Tank at the Bedford Institute of Oceanography, Oct 9-10, 2006

On October 9 and 10, 2006, Dr. Albert D. Venosa of EPA's National Risk Management Research Laboratory-Cincinnati (NRMRL-Ci) led the demonstration of a wave tank, which was constructed and is co-owned by EPA and Fisheries and Oceans Canada (DFO), to a group of scientists from a variety of government and private agencies. This demonstration occurred at the Bedford Institute of Oceanography, Dartmouth, Nova Scotia. The wave tank was built there in 2003 as an advanced tool to study the effectiveness of dispersants used in treating oil slicks on water. Its dimensions are 32 m long by 2 m deep by 0.6 m wide (approximately 105 f x 6.5 feet x 2 ft). The wave tank is unique in that it is the only one in the world able to generate breaking waves at precise locations in the tank. Breaking waves are necessary to provide sufficient energy to break the oil slick into small droplets so that the oil can be driven into the water column to mitigate exposure to water fowl and other wildlife that are threatened by spills on open water. The eventual result of dispersion is to enhance the disappearance of the oil by biodegradation of the high surface area oil droplets.

This research is a direct outgrowth of a National Research Council (NRC) report entitled Oil Spill Dispersants: Efficacy and Effects, 2005, National Academies Press, Washington, D.C. In fact, research began even before the NRC report was published. The report concluded that "...one of the most significant weaknesses in correlating laboratory-scale and meso-scale experiments with conditions in the open ocean result from a lack of understanding of the turbulence regime in all three systems." The NRC report called for characterizing "...the energy dissipation rates that prevail over a wide range of operating conditions. Future effectiveness tests should measure chemical effectiveness over a range of energy dissipation rates to characterize the functional relationship between these variables." In addition, the report concluded that "...evaluation of chemical dispersant effectiveness should always include measurement of droplet-size distribution of the dispersed oil." All of these activities have been planned and are being carried out in our wave tank.

Attendees at the demonstration were officials representing EPA Headquarters, the U.S. Coast Guard (USCG), the National Oceanic and Atmospheric Administration (NOAA), the Coastal Response Research Center (CRRC at the University of New Hampshire, a funding body of NOAA's), the Prince William Sound Regional Citizens Advisory Council (PWSRCAC), the Cook Inlet RCAC, the Minerals Management Service, and others from diverse groups around North America. Two separate demonstrations were conducted, one

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EPA and Fisheries and Oceans Canada (DFO) wave tank at Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada (Photo: EPA)

on October 9 and the other on October 10, 2006. Both demonstrations were actual experiments in the overall experimental design of the project. Three types of waves are generated during this project: a regular, non-breaking wave, a spilling breaker, and a plunging breaker. In the Monday morning demonstration, the attendees were shown how breaking waves and their associated energy dissipation rates are measured. In the afternoon, an actual dispersant effectiveness experiment was conducted with a commercial dispersant currently listed on the National Contingency Plan Product Schedule, using weathered Mesa Light crude oil. The experiment lasted 2 hours, during which time attendees were shown how the oil was dispersed by the plunging waves and the extent to which the oil was dispersed throughout the tank within a short period of time. An *in-situ* laser particle counter was used to measure the droplet size distribution of the dispersed oil in the water column. Samples of dispersed oil were collected at 3 depths in the tank and at 4 different locations along the length of the tank for measurement of oil concentration by spectrophotometric and fluorometric techniques.

During the second day, another experiment similar to the first was conducted, but this time recoalescence was investigated by shutting off the wave generator after 2 hours and allowing the

wave tank to remain quiescent for an additional 2 hours to observe if the oil droplets surfaced and recoalesced.

Both demonstration experiments were highly successful, and interest was generated among the other agencies to supplement the base funding with additional funds to study cold water dispersion as well as the induced toxicity of dispersed oil to pelagic and benthic species. If these funds are successfully awarded, they would greatly extend the utility of the wave tank to longer time periods (winter as well as spring, summer, and fall) and enable development of extensive fundamental knowledge about the fate and toxicity of dispersed oil plumes in water bodies.

For more detailed information on the EPA-DFO wave tank, contact Dr. Albert D. Venosa at venosa.albert@epa.gov.

Meetings, Training Events, Conferences, and Seminars

Over 300 Participants Met in Portland, Oregon for the 2006 Freshwater Spills Symposium

On May 2-4, 2006, U.S. EPA hosted the sixth biennial Freshwater Spills Symposium in Portland, Oregon. Established in 1996, the Freshwater Spills Symposium offered an opportunity for local, state, federal, and industry responders; natural resource trustees and managers; facility response planners; and additional stakeholders to engage in an exchange targeted at the unique problems of freshwater oil spills.

The symposium attracted over 300 participants from Federal agencies such as EPA, the U.S. Coast Guard, and the Department of Interior, State and provincial governments, tribal governments, local governments, academia, the private sector, and other non-governmental organizations. It also attracted participants from outside the United States,



Dr. Kenneth Lee, Fisheries and Oceans Canada (DFO) and Dr. Albert Venosa, EPA Office of Research and Development, primary wave tank researchers (Photo: EPA)

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specifically Canada, Peru, and United Kingdom. Participants were welcomed to Portland by Paul Slyman (Oregon Department of Environmental Quality), Socorro Rodriguez (EPA Region 10, Portland), and Craig Matthiessen (EPA Office of Emergency Management).

This year's symposium centered on the theme "Natural Disasters, Human Error, and Equipment Failure - Causes for Major Inland Oil Spills and the Resulting Multifaceted Response." The plenary session featured presentations on this topic by J.T. Ewing (Texas General Land Office), Richard Franklin (EPA Region VI), Douglas Eames (U.S. Coast Guard), and Mark Howard (EPA Office of Emergency Management).

Breakout sessions covered a wide range of issues related to oil spills in the inland area, including pipeline incidents; chemical and biological measures; SPCC and FRP rules; response strategies; aboveground storage tanks; environmental impacts; prevention and response strategies; cleanup techniques and strategies; emergency preparedness and planning; oil behavior and risk assessment; hurricanes Katrina, Rita, and Wilma response. Throughout these sessions, numerous case studies were presented and discussed.

Additionally, for the first time, this year's Symposium offered free short courses for interested participants on the Monday preceding the Symposium, May 1, 2006. Participants could attend one full day course or two half-day course of their choice on Shoreline Cleanup Assessment Technique (SCAT); SPCC Guidance for Regional Inspectors; Oiled Wildlife Response; Extreme Cold Weather Oil Spill Response; and Fast Water Booming Techniques and Strategies.

Proceedings of this and prior Freshwater Spills symposia are publicly available on EPA's website at <http://www.epa.gov/oilspill/fss>.



Dr. Gregory Wilson (EPA) presenting "Consideration of Characteristics Influencing Emulsification Factors for Vegetable Oil Spills" at the Freshwater Spills Symposium in Portland, OR (Photo: EPA)

Save the Date - International Oil Spill Conference - Spring 2008 in Savannah, Georgia

Mark Your Calendars! The International Oil Spill Conference (IOSC) will take place in Savannah, Georgia on **May 5-8, 2008**. The IOSC Opening Session will occur on May 5, while Short Courses will occur on May 4 and the morning of May 5. The Call for Abstracts will open in **January 16, 2007**.

For more information, watch for the debut of the 2008 IOSC Website at www.iosc.org.



One of many beautiful features of Savannah, Georgia, host city of IOSC 2008. (Photo courtesy of Savannah Convention & Visitors Bureau)



IOSC 2008

Call for Abstracts
opens

January 16, 2007

For information, visit www.iosc.org