

### ISCO NEWSLETTER

The Newsletter of the International Spill Response Community

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Email info@spillcontrol.org Web http://www.spillcontrol.org



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#### IMO OPRC-HNS TG 11 AND MEPC 61 MEETINGS

The 11<sup>th</sup> session of the OPRC-HNS Technical Group Meeting was completed last Friday with the approval by delegates of the TG11 report to be submitted at the 61<sup>st</sup> MEPC Meeting that starts on Monday 27September. The TG11 meeting ended with a presentation and vote of thanks to Mr Nick Quinn of New Zealand for his outstanding chairmanship of the TG over the last three sessions. Earlier in the proceedings, Mr Alexander von Buxhoeveden (Sweden) was unanimously elected as the new chairman and Mr Suh Woo Rack (Republic of Korea) as the vice-chairman for the year 2011, subject to the approval of MEPC. Delegates agreed that the quality of Mr Quinn's leadership of the TG had been exceptional and wished him well in his new position with the Australian Marine Response Centre (AMOSC).

Work completed during TG11 included an oil spill waste management decision support tool; a joint IMO/IPIECA guidance document on sensitivity mapping for oil spill response; an operational guide on the use of sorbents; and guidelines for oil spill response in fast currents.

Presentations made during the meeting included a demonstration of a new computer-based model for support of marine HNS incident response (Dr Wierd Koops, ISCO); Deepwater Horizon (USA and IPIECA); the recent Barents Sea exercise (Norway and Russia); and the new Korean Oil Spill Training Facility (Mr Suh Woo Rack, Republic of Korea).

ISCO members will be interested to note that ISCO was invited to work with the delegations of REMPEC, USA, Spain and ITOPF in further developing a draft ISCO template for gathering information, lessons learned, and best practice relevant to marine HNS incident response, and to submit this document to TG12. ISCO, in association with other interested delegations, was also requested to continue its efforts to collate information on experience gained in marine HNS incident response and sub-sea oil recovery, relevant R&D and new technology. REMPEC is to provide a web platform for HNS-related information on its website but ISCO will, for the time being, continue to share information received with other delegations and interested parties by posting it on the IMO Work Groups HNS and Sub-Sea sections of the ISCO website.

The 61<sup>st</sup> Session of MEPC runs from Monday 27<sup>th</sup> September through to Friday 1<sup>st</sup> October and ISCO will be represented by Dr Douglas Cormack.

### **DEEPWATER HORIZON WELL IS FINALLY SEALED**

Last week's ISCO Newsletter went to press earlier than usual last week because your editor was travelling to London for the IMO OPRC-HNS TG11 meeting. Consequently we missed out on including Admiral Allen's announcement. Just in case you didn't hear the news, here is the opening part of his briefing - "After months of extensive operations planning and execution under the direction and authority of the U.S. government science and engineering teams, BP has successfully completed the relief well by intersecting and cementing the well nearly 18,000 feet below the surface. With this development, which has been confirmed by the Department of the Interior's Bureau of Ocean Energy Management, we can finally announce that the Macondo 252 well is effectively dead. Additional regulatory steps will be undertaken but we can now state, definitively, that the Macondo well poses no continuing threat to the Gulf of Mexico". Clean-up efforts are of course continuing and we will report further on this in next week's issue of the Newsletter.

### ARCTIC DIRECTORY: JIP PUBLISHES ARCTIC OIL SPILL RESULTS

Research shows that cold and ice extends time window for responding; in-situ burning and dispersant use appear especially effective.

The feasibility or otherwise of responding effectively to an oil spill in ice-infested waters has for several years been one of the core questions in the often contentious debate about whether or not oil and gas development should take place in the Arctic offshore.

And, working on the basis that knowledge and data are the keys to addressing Arctic oil spill concerns, a joint industry program coordinated by Norwegian research company SINTEF and begun in early 2006 has completed a series of research projects, establishing facts about the properties of spilled oil in icy water and the effectiveness of potential response techniques.

The researchers were able to obtain permission from the Norwegian government to put actual crude oil into the sea in carefully controlled conditions, thus enabling the testing of oil behavior and cleanup effectiveness in ice conditions closely similar to those that might be encountered in an Arctic oil spill emergency. So, in addition to carrying out a variety of laboratory tests, the researchers were able to run some experiments in fjord ice at SINTEF's research facility at Svea in Svalbard, as well as carry out larger scale tests in sea ice in the Barents Sea.

The end results of the research include a dataset for the development of oil spill contingency plans; a web-based oil spill response guide for Arctic and ice-covered waters; and some new technologies for offshore Arctic cleanup. Read more: <a href="http://www.petroleumnews.com/pntruncate/114405066.shtml">http://www.petroleumnews.com/pntruncate/114405066.shtml</a>

### **BP: SEQUENCE OF FAILURES CAUSED MACONDO WELL EXPLOSION**

The causes of this event will continue to be the subject of controversy for a long time but, in the meantime, the following report issued by BP gives the company's assessment of causal factors. The report, based on a four-month investigation led by Mark Bly, BP's Head of Safety and Operations, found that:

- The cement and shoe track barriers, and in particular the cement slurry that was used, at the bottom of the Macondo well failed to contain hydrocarbons within the reservoir, as they were designed to do, and allowed gas and liquids to flow up the production casing;
- Results of the negative pressure test were incorrectly accepted by BP and Transocean, although well integrity had not been established;
- Over a 40-minute period, the Transocean rig crew failed to recognize and act on the influx of hydrocarbons into the well until the hydrocarbons were in the riser and rapidly flowing to the surface;
- After the well-flow reached the rig it was routed to a mud-gas separator, causing gas to be vented directly on to the rig rather than being diverted overboard;
- The flow of gas into the engine rooms through the ventilation system created a potential for ignition which the rig's fire and gas system did not prevent;
- Even after explosion and fire had disabled its crew-operated controls, the rig's blow-out preventer on the sea-bed should have activated automatically to seal the well. But it failed to operate, probably because critical components were not working.
- Unlikely that the well design contributed to the incident, as the investigation found that the hydrocarbons flowed up the production casing through the bottom of the well.

The investigation team has proposed a total of 25 recommendations designed to prevent a recurrence of such an accident. The recommendations are directed at strengthening assurance on blow-out preventers, well control, pressure-testing for well integrity, emergency systems, cement testing, rig audit and verification, and personnel competence. BP has accepted all the recommendations from the investigation team and is examining how best to implement them across drilling operations worldwide. [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group, for providing the link to this article in the *Wall Street Journal*] <a href="https://online.wsj.com/article/BT-CO-20100908-704877.html">http://online.wsj.com/article/BT-CO-20100908-704877.html</a>

### RUSSIA: PUTIN'S ENVIRONMENTAL ACTION PLAN FOR THE FAR NORTH

September 24 - For decades, Moscow ignored environmental degradation above the Arctic Circle. But this week, Russian Prime Minister Vladimir Putin announced a massive cleanup effort -- and plans to increase the exploitation of resources in the region.

Nowhere, is the Arctic as populated as it is in Russia. And nowhere is there as much industrial activity -- and resulting pollution. The worst sites are well known. Like, for example, the double island of Novaya Zemlya which was used for a total of 130 atomic weapons tests between 1955 and 1990. In addition, reactors from Soviet-era nuclear submarines were simply scuttled in the Barents Sea

and Kara Sea. And then there are the more than 100,000 fuel barrels that the military has left to rot away on the islands of the Franz Josef Land archipelago. Read the complete article at: <a href="http://www.spiegel.de/international/world/0,1518,719443,00.html">http://www.spiegel.de/international/world/0,1518,719443,00.html</a>

### **EUROPE AGREES TO CREATE MARINE PROTECTED AREAS**

September 24 - European countries agreed Friday to create six protected marine areas in the northeast Atlantic in a bid to step up the protection of the region's environment. The decision was taken at a meeting in the southwestern Norwegian city of Bergen of the OSPAR Commission, a body through which 15 regional countries, along with the European Union, work to protect the environment of the northeast Atlantic.

They defined six zones or marine protected areas (MPAs) over a total area of 185,000 square kilometres (71,400 square miles) where human activity should be limited. These zones comprise "a range of vulnerable deep-sea habitats and species", the OSPAR Commission said in a statement, adding that it wanted to create "a precedent" worldwide. Read the complete text of this report: http://www.google.com/hostednews/afp/article/ALegM5iBql4jhiy qEI ibyApYWhaGki w

## USA: UNIVERSITY OF GA, SEPTEMBER 11 2010. SCIENTISTS FIND THICK LAYER OF OIL ON SEAFLOOR



A core sample from the seafloor of the Gulf of Mexico shows a 2-inch layer of oily material. Researchers are finding oil on the seafloor miles away from the blown-out BP well. Though researchers have yet to chemically link the oil deposits to the BP well, "the sheer coverage here is leading us all to come to the conclusion that it has to be sedimented oil from the oil spill because it's all over the place," says one scientist.

Scientists on a research vessel in the Gulf of Mexico are finding a substantial layer of oily sediment stretching for dozens of miles in all directions. Their discovery suggests that a lot of oil from the Deepwater Horizon didn't simply evaporate or dissipate into the water — it has settled to the seafloor. The Research Vessel Oceanus sailed on Aug. 21 on a mission to figure out what happened to the more than 4 million barrels of oil that gushed into the water. Onboard, Samantha Joye, a professor in the Department of Marine

Sciences at the University of Georgia, says she suddenly has a pretty good idea about where a lot of it ended up. It's showing up in samples of the seafloor, between the well site and the coast. "I've collected literally hundreds of sediment cores from the Gulf of Mexico, including around this area. And I've never seen anything like this," she said in an interview via satellite phone from the boat. Joye describes seeing layers of oily material — in some places more than 2 inches thick — covering the bottom of the seafloor. "It's very fluffy and porous. And there are little tar balls in there you can see that look like microscopic cauliflower heads," she says. It's very clearly a fresh layer. Right below it she finds much more typical seafloor mud. And in that layer, she finds recently dead shrimp, worms and other invertebrates. More: <a href="http://www.npr.org/templates/story/story.php?storyld=129782098">http://www.npr.org/templates/story/story.php?storyld=129782098</a> [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group, for providing the link to this report]

## EGYPT, ASWAN, SEPTEMBER 12 2010. LEAK OF 110 TONS OF DIESEL FUEL IN NILE AFTER BARGE SINKS IN ASWAN

A Nile Petroleum Company barge carrying 224 tons of diesel fuel has sunk north of Aswan near the village of Abu al-Reesh whilst attempting to dock in the new Nile Corniche area. The accident resulted in a leak of 110 tons of diesel into the waters of the Nile, forming large oil slicks around the islands and aquatic plants in the area. The river's current spread the spill northwards covering an area of approximately one km square. Due to the spill, all drinking water plants in the governorate were shut down, until clean-up measures were completed, to prevent diesel contaminated water from being drawn into the plants. Neighboring governorates will be notified so they can



take all necessary measures. Civil defense squads, security forces and specialized teams from the River Transportation Company arrived at the site to help unload the rest of the cargo and transport it by crane to another barge. Read more: <a href="http://www.almasryalyoum.com/en/news/leak-110-tons-diesel-fuel-nile-after-barge-sinks-aswan">http://www.almasryalyoum.com/en/news/leak-110-tons-diesel-fuel-nile-after-barge-sinks-aswan</a> [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group, for providing the link to this report]

### INDIA: 189 CONTAINERS STILL MISSING FROM MUMBAI SHIP COLLISION

September 21 - The Mediterranean Shipping Company (MSC) reports that at least 189 containers from the MSC Chitra are missing, eight of which contain toxic materials. Six of the remaining eight contains sodium hydroxide, one contains organic pesticides and another contains aluminum phosphate tablets.

A team of specialized divers has been brought in to search for the missing containers. It is believed that the containers have sunk to the seafloor and may be covered with sediment. Port authority in Mumbai say the containers are no longer in the shipping lanes and do not affect ships traveling into the port.

The MSC Chitra collided with the Khalijia-III on August 7, just outside the port of Mumbai. The MSC Chitra was carrying 531 containers, 31 of which were hazardous, and 3,300 tons of oil at the time of the collision. Since the accident 111 containers have been removed and 200 remain on the damaged ship. The MSC Chitra also spilled oil, covering the Mumbai coast.

MSC Chitra owners, Mediterranean Shipping Company (MSC), have spent more than Rs 45 crore (more than \$9.8 million) on clean up and recovery operations. The company was also initially blamed for the accident but a probe into the incident has revealed that Khalijia-III bared the brunt of the blame when it violated navigation rules. The two companies are awaiting the official Directorate General of Shipping (DGS) report to determine what action the owners of Khalijia-III will need to take.

Salvage crews are working to move MSC Chitra but are having to deal with toxic gases leaking from her six holds. The Hindustan Times reports that "officials with the Maharashtra Pollution Control Board (MPCB) measured the amount of emissions on the deck of the ship and said it was highly hazardous. The holds have been emitting between 2 parts per million (ppm) to 20 ppm of phosphine gas since" the collision.

High levels of phosphine are odorless but trade phosphine gas may form explosive mixtures with air and can self ignite. The gas is heavier than air. When phosphine burns, it produces a dense white cloud of phosphorus pentoxide. The level immediately dangerous to life or health is 50ppm. The levels coming from MSC Chitra have been as high as 20ppm and are being monitored.

According to the U.S. Occupational Safety and Health Administration, the main target organ of phosphine gas is the respiratory tract. Overexposure to phosphine gas causes nausea, vomiting, abdominal pain, diarrhea, chest tightness, dyspnea (breathing difficulty), muscle pain, chills, stupor or syncope. http://www.maritime-executive.com/article/189-containers-still-missing-mumbai-ship-collision/

### **TURKEY: MARMARA SEA 2010 SYMPOSIUM**

The Marmara Sea 2010 Symposium took place on 25<sup>th</sup> and 26<sup>th</sup> of September 2010 in the Yunus Emre Culture Centre, Bakirkoy-Istanbul and was organised by the Turkish Marine Research Foundation (TUDAV). The main purpose of this symposium was to widely investigate the Marmara Sea which is the only inland sea in Turkey, as well as its coast.

In the Symposium, articles in relation to the Marmara Sea were presented. Topics addressed included - Marine Geology and Geo-physic, Earthquake research; Chemical and Physical Oceanography; Coast Usage and Management; Bio diversity in Marmara Sea and Protected Areas issues; Fisheries in Marmara Sea; Marmara Sea and Tourism; Marine Pollution and Precautions; Oil spills, Management Plans; Marine Transportation and Turkish Straits; Air Pollution; Climate Change, adaptations and impacts.

M. Kerem Kemerli, Member of the ISCO Executive Committee, represented the organisation at the Symposium. More information about the Marmara Sea 2010 Symposium can be found at the website <a href="http://www.tudav.org">http://www.tudav.org</a>

### BP JOINS OTHER OIL GIANTS TO CREATE SPILL CONTAINMENT SYSTEM

September 20 - BP, which permanently stopped the largest offshore accidental oil spill yesterday, intends to join Exxon Mobil Corp., Royal Dutch Shell Plc, Chevron Corp. and Conoco Phillips in developing a containment system to respond to deep-water disasters. BP will make available to other oil and natural-gas companies operating in the Gulf of Mexico the underwater well- containment equipment developed during the leak, the London- based company said in a statement today.

The company also will contribute personnel with experience from the oil-spill response to the non-profit organization established by the four companies. Exxon and the others agreed in July to spend a total of \$1 billion to research and build equipment to handle deep-water spills in the Gulf. Read more: http://www.nj.com/business/index.ssf/2010/09/bp\_joins\_other\_oil\_giants\_to\_c.html

### **USA: CLEAN GULF - FINAL TRAINING PROGRAM NOW AVAILABLE**

The final training program for the Clean Gulf Oil Spill Training Event and Exhibition has just been released.

CLEAN GULF is the first event to cover the lessons learned from the Deepwater Horizon Oil Spill.

Companies from throughout the oil and chemical spill, maritime security industry and the marine salvage industry will be in attendance at the 20th Annual CLEAN GULF Training & Exhibition, October 19-20 in Tampa. Key professionals and decision makers from throughout the Gulf Coast will come together to view the latest products, services and technologies, as well as hear about the newest developments from the Deepwater Horizon response in the Gulf of Mexico. Key focus areas for this year's training will be blow-out prevention, remote operated vehicles, deep offshore SONS/Spill of National Significance, oil spill containment, subsea technology, deep water oil spill response, in-situ burn, offshore dispersants and subsea dispersants on containment.

The final Training Program can be accessed at -

http://viewer.zmags.com/publication/d5a099fc#/d5a099fc/1

### **AUSTRALIA: INFO SYSTEM ON HAZARDOUS SUBSTANCES TO BE UPDATED**

Safe Work Australia has announced it is in the process of updating the Hazardous Substances Information System online database. The update comprises of a total of 456 entries, which will also reflect the changes in Europe's 31st Adaptation to Technical Progress to Directive 67/548/EEC. The database for hazardous substances is expected to contain 360 new entries, while 92 entries will be amended and another four deleted. The updated database containing the final list of all anticipated changes will be released by the end of November 2010.

http://www.safetyculture.com.au/news/index.php/09/info-system-on-hazardous-substances-to-be-updated/?utm\_source=feedburner&utm\_medium=email&utm\_campaign=Feed%3A+safetyculture+% 28Safety+Culture+OHS+News%29 [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group, for providing the link to this report]

### USA: FOR CHEMICAL DISASTER, JUST ADD STORM SURGE

More than 20 million tons of some of the most toxic chemicals on the planet are housed in risky storm surge zones on one of the nation's most hurricane-prone coasts, a looming hazard that could produce an environmental disaster on par with the Gulf oil spill.

Despite the danger exposed by a close call with Hurricane Ike in 2008, the momentum to build protective seawalls and floodgates is lagging under the enormous scope of the problem. Meanwhile, the region remains defenseless at the peak of a hurricane season that has already reached the normal quota of storms and exceeded the typical number to reach "major" status. Read more: <a href="http://www.heraldtribune.com/article/20100919/ARTICLE/9191074/2055/NEWS?Title=For-chemical-disaster-just-add-storm-surge&tc=ar">http://www.heraldtribune.com/article/20100919/ARTICLE/9191074/2055/NEWS?Title=For-chemical-disaster-just-add-storm-surge&tc=ar</a>

### **USA EPA: TECHNOLOGY INNOVATION NEWS SURVEY**

The August 1-15, 2010 *Technology Innovation News Survey* has been posted to the CLU-IN web site. The *Survey* contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. The latest survey is available at: <a href="http://www.clu-in.org/products/tins/">http://www.clu-in.org/products/tins/</a>

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