



ISCO NEWSLETTER

The Newsletter of the International Spill Response Community

Issue 386, 27 May 2013

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The 3rd Conference and Exhibition a topco event
Oil Spill Response Workshop (OSRW 2013)
26-27 June, 2013 Beijing China
— Improving Environment amid Spill Prevention, Preparedness and Response

International news

INTERSPILL 2015 WILL BE HELD IN AMSTERDAM

Amsterdam 2015
Find out more - visit www.interspill.org

Next Triennial event - IOSC 2014
Savannah, USA - visit www.iosc.org

The Interspill Steering Committee has decided to hold the next event of this triennial series, Interspill 2015, at RAI, in Amsterdam, The Netherlands, over 24-26 March 2015.

Chris Morris, Chairman of the Interspill Steering Committee, said that "the decision was unanimous and reflected the importance of locating the event at a central European capital city, where the oil, marine and environment industries come together." Spill Response Group Holland, (SRGH) have agreed to host the event, and have joined the Interspill 2015 event Organising Committee.

Interspill 2015, as the leading European oil spill conference and exhibition will build on the success of Interspill 2012 in London, taking into account the potential issues to be raised from any future oil spills, and supporting the networking that this group depends on to deal with spill events.

Interspill has contracted with Reed Exhibitions to partner and organise the 2015 event, following the success of this partnership in 2012. Co-located with Oceanology International at Excel in London, Interspill 2012 attracted over 1300 delegates, visitors and exhibitors from over 70 countries, it was the most successful event so far in the Interspill series since it started in 2000. Proceedings of the 2012 Conference, Workshops and Seminars are published on the Interspill website www.interspill.org.

Interspill 2015 will reflect the strength and breadth of its Organising Committee, which includes the European Spill industry trade organisations, NOSCA, SYCOPOL, UKSPILL, EUROSPILL, together with the European Maritime Safety Agency, (EMSA), (IPIECA), the International Maritime Organization, (IMO), International Oil Pollution Compensation Funds, (IOPC Funds), the International Tanker Owners Pollution Federation (ITOPF), France's Centre of Documentation, Research and Experimentation on Accidental Water Pollution (CEDRE), Oil Spill Response Ltd (OSRL), and SRGH, as the spill trade association representing the host country.

The Committee plans to announce its Conference and Events programme in September 2013.

[More info](#)

NOSCA ANNOUNCES 20th INTERNATIONAL SEMINAR IN LOFOTEN, NORWAY



This year is a very special year for NOSCA. We can proudly look back on 20 years of continuously successful seminars, which have always covered actual and relevant topics related to oil spill preparedness and response. Opportunities to share knowledge and experiences as well as developing personal relations with colleagues around the world, have always been our focus. Fully booked events and valuable feedbacks from our participants have enabled us to improve from year to year.

We take great pleasure in announcing the 20th International NOSCA Oil Spill Technology Seminar which will take place in spectacular Lofoten in Northern Norway from 9th to 13th September 2013.

This year's seminar will have its focus on Oil Spill Response in remote and vulnerable areas. With continued oil exploration in new and remote areas, new challenges have been surfacing with higher traffic in these regions. How do we handle the higher drilling/ship activities related to conflict of interest, legislations, vulnerable environment and what tools should we use to clean up spill? The 20th NOSCA Seminar addresses:

Oil Spill in Remote Areas:

- Oil activity and Fisheries / Oil activity and Tourism – how to meet the challenges
- Oil Spill Response in Vulnerable Areas – how to be prepared
- Emergency Preparedness in Remote Areas
- Who's responsible? – different models in different countries
- Oil Spill Exercise: "Exercise Lofoten"

Lofoten is an area where the cod comes every year in quantity. Hundreds of millions of eggs and larva are produced during this season. With potentially large oil reservoirs in this region debate has been going on for years on whether the government should allow exploration drilling. This exercise will test the equipment to see if today's technology can protect the sensitive environment surrounding Lofoten.

For registration and more information please see www.nosca.no

EUROPEAN UNION TIGHTENS OFFSHORE OIL REGULATION

May 21 (Bloomberg) — The European Union tightened safety rules for offshore oil and natural-gas exploration to curb the risk of a major accident after BP Plc's 2010 spill in the Gulf of Mexico, the largest in U.S. history.

The European Parliament has approved legislation that forces oil and gas companies to submit special hazard reports and emergency-response plans before offshore operations can start. The law also requires operators of offshore platforms to prove their ability to cover potential liabilities and extends the zone in which businesses would be liable for damage to 370 kilometers (230 miles) off the coast from the current 22 kilometers.

"The rules we are currently coming up with can be used as a template at international level," said Ivo Belet, a Belgian member who steered the legislation through the 27-nation EU assembly today in Strasbourg, France. *gCaptain* [Read more](#)

Incident reports

AUSTRALIA: SANTOS CONFIRMS UNCONTROLLED LEAK AT OIL AND GAS WELL IN QUEENSLAND'S REMOTE SOUTHWEST

May 20 - An exclusion zone has been set up around an oil well in southern Queensland, which has been leaking about 50,000 litres a day for almost a week.

Santos today confirmed it discovered the leak in their Jackson oil fields, and brought in international experts to bring it under control late yesterday.

The well, in the company's Zeus field, is believed to have started leaking either Tuesday night or Wednesday morning last week. The company's Jackson facility is about 160km west of Thargomindah,

While it was described as a "limited leak" the company said it was generating about 300 barrels a day. A barrel is equivalent to 158 litres. [News.com.au](#) [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

USA: ENBRIDGE ENERGY CLEANS UP 2,500-BARREL CRUDE LEAK AT CUSHING TERMINAL

May 19 - Enbridge Energy Partners is cleaning up a leak of about 2,500 barrels of crude oil Saturday at its Cushing terminal in Oklahoma.

Oil leaked from a trunk line connected to a tank on the property, then flowed outside of a berm into a containment pond, according to a National Response Center filing. The cause of the leak is unknown and the report showed the line would be sealed, dug up and replaced.

Workers at the Cushing south terminal noticed the leak about 2 p.m. local time, Larry Springer, an Enbridge spokesman, said in a phone interview today. The failed line and the connected tank have been isolated. [Fuel Fix](#) [Read more](#)

CANADA: CANADIAN PACIFIC SPILLS MOST OIL IN THREE MONTHS IN SASKATCHEWAN



May 22 - [Canadian Pacific Railway Ltd. \(CP\)](#) rail cars spilled 545 barrels of crude oil near Jansen, Saskatchewan, in the company's third and largest oil spill in as many months.

Five rail cars derailed and two leaked, with one car emptying its entire contents, Ralph Bock, manager of hazardous materials at the province's [Environment Ministry](#), said in phone interview from near the accident site. The company spilled a combined 757 barrels in March and April in two accidents in Ontario and Minnesota, [Ed Greenberg](#), a company spokesman in [Minneapolis](#), said in an e-mail.

"CP is building a temporary line around the incident," Bock said. "That will allow the traffic to flow and then they can do their clearing operations at the incident site." [Bloomberg](#) [Read more](#)

Another report: More than 91,000 litres of oil spilled from derailed Sask. train

May 21 - A freight train jumped the tracks in southeastern Saskatchewan Tuesday and spilled more than 91,000 litres of oil.

The accident happened as the Canadian Pacific Rail eastbound train was rolling through an area near the village of Jansen, about 150 kilometres southeast of Saskatoon.

The company said five cars derailed, but only one leaked its contents. A total of 575 barrels hit the ground, said spokesman Ed Greenberg.

"There is one car that was leaking product," Greenberg said. "It has been contained into the area around the car."

The leaking car was well back in the 64-unit train and remained upright. The other four cars were on their sides. Excavation equipment was being sent to the site to build a wall of dirt to further contain the spill. [CTV News](#) [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

Other news

USA: NEW NOAA REPORT EXAMINES NATIONAL OIL POLLUTION THREAT FROM SHIPWRECKS

NOAA presented to the U.S. Coast Guard today a new report that finds that 36 sunken vessels scattered across the U.S. seafloor could pose an oil pollution threat to the nation's coastal marine resources. Of those, 17 were recommended for further assessment and potential removal of both fuel oil and oil cargo.

Other news (continued)

The sunken vessels are a legacy of more than a century of U.S. commerce and warfare. They include a barge lost in rough seas in 1936; two motor-powered ships that sank in separate collisions in 1947 and 1952; and a tanker that exploded and sank in 1984. The remaining sites are 13 merchant marine ships lost during World War II, primarily along the Atlantic Seaboard and Gulf of Mexico. To see a list of the ships and their locations, visit: <http://sanctuaries.noaa.gov/protect/ppw/>.

From the *SF Chronicle*: Study: Most shipwrecks a minor US pollution threat



Photo: This May, 14, 1942, U. S. Army Air Corps photograph, provided by the National Archives, College Park, Md., shows the burning tanker *Potrero del Llano*, a Mexican ship heading to New York that was sunk on May 14, 1942 by a German U-boat, about 15 miles southeast of Miami's Biscayne Bay. It carried about 1.8 million gallons of oil aboard. A new government report details 87 shipwrecks that could pollute U.S. waters with oil. Most were sunk during World War II. The potential for pollution is less than scientists had expected. They estimate that far less oil will leak into the ocean than the BP oil spill of 2010, which spewed roughly 200 million gallons into the Gulf of Mexico alone. However, six leaks are considered potentially significant coastal pollution problems. Study author Lisa Symons said Monday those six keep her up at night. Five are off the Florida coast, one just 15 miles from shore. Photo: National Archives, College Park, Md

May 20 - Shipwrecks lying deep off America's coasts are more often historical artifacts than present-day threats from leaking

old oil tanks, a new federal report says.

While 87 of the ships — most sunk during World War II by German submarines — have the potential to leak tens of millions of gallons of oil, the report issued Monday concludes that "the scope of the problem is much more manageable than initially feared."

"Our coastlines are not littered with 'ticking time bombs,'" government scientists wrote. They note that only six of the 87 are likely to be serious enough to be disasters to local economies and coastlines, the report said. *San Francisco Chronicle* [Read more](#)

From *The Hill*: Report: 36 shipwrecks may pose 'oil pollution threat'

May 20 - Thirty-six sunken ships in U.S. waters could pose a coastal "oil pollution threat," and about half of them should undergo further evaluation and potential efforts to retrieve the fuel, a new federal report finds.

The National Oceanic and Atmospheric Administration (NOAA) is providing the data to the U.S. Coast Guard to help it plan, as possibly help determine the source of "mystery" oil sightings, among other uses.

"This report is the most comprehensive assessment to date of the potential oil pollution threats from shipwrecks in U.S. waters," said Lisa Symons, resource protection coordinator for NOAA's Office of National Marine Sanctuaries, in a statement Monday. *The Hill* [Read more](#)

USA: FRACFOCUS DRILLERS' REGISTRY TO CREATE CHEMICALS DATABASE

May 23 - [FracFocus](#), the website drillers use to disclose chemicals in hydraulic fracturing, is revamping its system next week to let regulators for the first time search and aggregate the information. The industry-backed system, which is used by drillers such as [Exxon Mobil Corp. \(XOM\)](#) and [Anadarko Petroleum Corp. \(APC\)](#), is resolving a criticism from environmental groups by converting the online information into a database of chemicals used in individual wells that can be analyzed, said Stan Belieu, deputy director of the Nebraska Oil and Gas Conservation Commission, who testified on behalf of FracFocus today at a Senate forum.

"The improvements that are going to be made to FracFocus will be a substantial improvement," Mark Brownstein, associate vice president of the [Environmental Defense Fund](#), said today at the Senate forum on hydraulic fracturing, or fracking. For regulators, "this helps them target resources and enforcement." *Bloomberg* [Read more](#)

USA: GULF COAST ECOSYSTEM RESTORATION COUNCIL RELEASES DRAFT INITIAL COMPREHENSIVE PLAN: RESTORING THE GULF COAST'S ECOSYSTEM AND ECONOMY

The Gulf Coast Ecosystem Restoration Council marked significant progress today with the public release of the [Draft Initial Comprehensive Plan: Restoring the Gulf Coast's Ecosystem and Economy](#) and accompanying [Draft Environmental Assessment for formal public comment](#). The Draft Plan provides a framework to implement a coordinated region-wide restoration effort in a way that restores, protects, and revitalizes the Gulf Coast region following the *Deepwater Horizon* oil spill.

The Draft Plan establishes overarching restoration goals for the Gulf Coast region; provides details about how the Council will solicit, evaluate, and fund projects and programs for ecosystem restoration in the Gulf Coast region; outlines the process for the development, review, and approval of State Expenditure Plans; and highlights the Council's next steps. The Council expects to release a Final Plan this summer.

Along with the release of the Draft Plan, Acting Secretary of Commerce Rebecca Blank and Council Chair announced today that Justin Ehrenwerth will serve as the Executive Director of the Council. These steps signify the Council's efforts to ensure that it is ready to move efficiently and effectively to implement a restoration plan once funds are received. [Restorethegulf.gov](#) [Read more](#)

USA: FIRST RESPONDERS SUE IN PAULSBORO DERAILMENT



Picture: Work crews prepared to hoist the derailed tanker cars from the Mantua Creek in Paulsboro on Dec. 12. (ED HILLE / Staff photographer)

May 16 - Twenty-four plaintiffs, including a dozen police officers who rushed to the scene of a November train derailment in Paulsboro, sued on Monday, alleging that the rail company's negligence caused the derailment, and that it downplayed the dangers of a chemical spill and failed to protect responders.

As a result, the suit says, the plaintiffs have suffered ailments such as breathing problems, headaches, neurological disorders, and elevated blood pressure since the tanker carrying 23,000 gallons of vinyl chloride derailed Nov. 30.

Investigators have determined that the freight train crossed the automated drawbridge over Mantua Creek

against a red light after the crew got the go-ahead from a dispatcher. The swing bridge, built in 1873, was not locked in place. It was the scene of a similar derailment in 2009. [Philly.com](#) [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

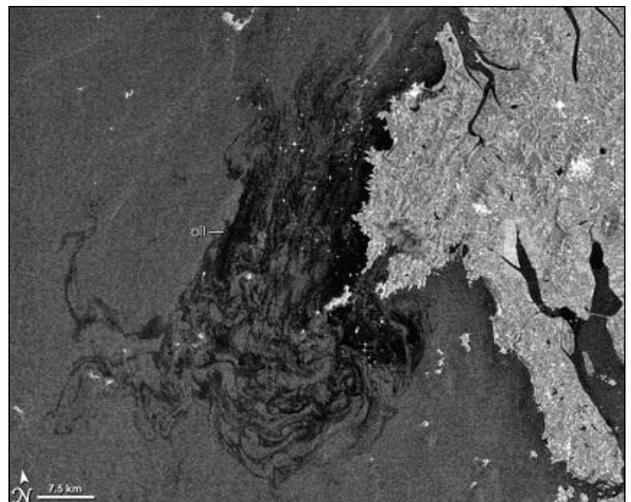
AUSTRALIA: SPYING OIL SPILLS FROM SPACE -AMSA

Photo: Crude oil from the wrecked 146,000-ton tanker, *Hebei Spirit*, is seen polluting the sea off South Korea in this *Envisat* image, provided by the European Space Agency. The image was acquired on December 11, 2007, at 10:40 a.m., local time (01:40 UTC) by the Advanced Synthetic Aperture Radar (ASAR) aboard ESA's *Envisat* satellite. [Source: <http://visibleearth.nasa.gov/>]

May 21 - The Australian Maritime Safety Authority (AMSA) is trialling the use of satellites to detect oil spills in Australian waters. Satellite-based Synthetic Aperture Radar (SSAR) can identify potential oil spills directly from orbit. These satellite sensors can monitor day and night, can see through cloud, rain, fog and other weather. It is one of the most effective and reliable ways of spotting oil spills and the ships that cause them.

AMSA's Acting Marine Environment Division General Manager Jamie Storrie said AMSA currently relies on other vessels, airlines or the public to report any oil spill or marine pollution.

"By the time a spill is reported, the oil may have already spread to sensitive areas and the chances of catching the polluter are poor," Mr Storrie said. [The Maritime Executive](#) [Read more](#)



Other news (continued)

BAHRAIN: ESG-5 HOSTS OIL SPILL CASE STUDY DISCUSSION DURING IMCMEX13

May 16 - An oil spill response (OSR) case study discussion, hosted by Rear Adm. William Lescher, commander of Expeditionary Strike Group Five and Combined Task Force (CTF) 59, the 5th Fleet crisis response task force, took place during the International Mine Countermeasures Exercise (IMCMEX) 13, May 16.

The OSR discussion consisted of five panel members representing industry, civil agency, contract responder and military perspectives, who were asked a series of questions by a moderator. Roughly 80 audience members from IMCMEX 13 participating navies, regional representatives and industry were encouraged to ask questions throughout the event, which generated a broadly informative conversation regarding OSR plans and procedures in the region.

The discussion followed a table top exercise conducted earlier in the week, which explored a fictional scenario north of Bahrain in international waters. A Combined Maritime Force (CMF) ship responded to a foreign flagged tanker with an international crew damaged by a mine. *US 5th Fleet* [Read more](#)

IRELAND: ISAA SEMINAR REPORT



The oil spill response seminar held in Dublin by the International Spill Accreditation Association (ISAA) on 9th May was well attended by representatives from County Councils, Port Authorities and Oil Spill Response Companies. Delegates heard about the latest developments in oil spill response and clean-up. Speakers giving their perspectives on spill response and their roles and responsibilities included Hugh Barry (Irish Coast Guard), Captain Fergus Britton (Dublin Port Company), John Collins (Dublin City Council), David Waller and Richard Smyth (Environmental Pollution Claims Services). Feedback from attendees indicates that all enjoyed an interesting and sociable day, benefiting from the high quality presentations and participating in stimulating discussions.

The next ISAA event will be the popular training days at Castle Archdale in September, giving responders the opportunity to refresh and update their knowledge and skills. Details of the dates and programme content will be soon released

ISCO News

ISCO EXECUTIVE COMMITTEE TO ADDRESS INCREASING ISCO MEMBERSHIP AND IMPROVING FUNDING FOR THE WORK OF THE ORGANIZATION

On behalf of the Executive Committee the President and Secretary have written to Members of the ISCO Council requesting views on steps to be taken to increase membership revenue in order to increase funds available for running the organisation and moving forward with its work programme.

It is part of the role of the ISCO Council members to advise the Executive Committee and comment on major items of policy.

A proposal has been made that readers of the ISCO Newsletter who are not currently members of ISCO should become members if they want to continue receiving the free newsletter. With individual membership costing only £65 per year, the cost of joining is not at all expensive. Companies and organisations would be expected to join at the relevant rates as corporate members or industry partners but would continue to be able to nominate multiple members of staff as recipients of the newsletter at no cost.

Since the newsletter began publication eight years ago in July 2005 it has been free of charge for all and has helped greatly in raising the ISCO's international profile.

However, in approaches to readers, reactions to the proposal have all been positive. For example, Dr Merv Fingas said "An excellent idea - there are so many people getting the newsletter now and it is the only good one out there" and ISCO Member of Council for Brasil, John Cantle said "I totally agree what you are saying, I'm sure the membership numbers will increase". Several of the delegates attending the recent IMO OPRC-HNS Technical Group meetings in London expressed similar views and fully understood that ISCO needs more funding.

Readers will be kept informed on decisions taken.



In this issue of the ISCO Newsletter we are printing No. 128 in a series of articles contributed by Dr Douglas Cormack.

Dr Douglas Cormack is an Honorary Fellow of ISCO. As the former Chief Scientist at the British Government's Marine Pollution Control Unit and head of the UK's first government agency, the Warren Spring Laboratory, Douglas is a well known and highly respected figure in the spill response community. He is the Chairman and a founder member of the [International Spill Accreditation Association](#)

CHAPTER 128: KNOWLEDGE AND COUNTER-BELIEF

Articles 121-127 showed that knowledge capable of restoring the environment to its pre-incident state as quickly and cost-effectively as possible is countered by regulations based only on beliefs in species-extinction/ecological-disaster arising from the physical coating of organisms and their exposure to water column concentrations despite the absence of such extinction/disaster in reality and despite all organic compounds and all biomass detritus being biodegraded to carbon dioxide and water at concentrations low enough to avoid the anaerobic conditions which fossilise them to natural gas, petroleum and coal.

However, the R&D programme conducted by the UK's Warren Spring Laboratory into oil/HNS pollution and response, produced the environmental knowledge now being reviewed herein, though it has always been opposed by the environmentalist beliefs which it refuted.

Thus, we have long known that fully spread layers of oils/HNS are too thin to produce more than a few parts per million in the top metre of the water column; that these concentrations subsequently tend to zero by dilution and biodegradation within the column as a whole without significant toxic effects; that the numbers of heterotrophic bacteria at the base of the ecosystem/food-chain actually increase where oil component concentrations extend their food supply beyond the degradation-products of themselves and the more complex species within the ecosystem's organic carbon cycle; that while oil slicks coat individual birds, the significance of the numbers dying are assessable only by comparison with the birth/death rates which maintain natural species populations; that environmentalists publish no such comparisons; and that, in any case, no incident has thus far produced the species-extinction/ecological disaster which belief expects and reality fails to deliver. Nonetheless, it is this belief which prevents dispersant-use, water-decanting in recovery operations, oil/HNS release for R&D purposes, and which bans commercial fishing regardless of the absence taint at exposure concentrations.

However, even more paradoxically, this belief also inhibits use of safe havens for the cargo/bunker transfer which, in preventing further release, reduces the coating of shorelines and organisms. Again, this belief paradoxically inhibits the use of dispersants to increase the natural dispersion rates which do more to prevent the coating of shorelines and organisms than either dispersant-use or mechanical recovery, for both of which, encounter rates are limited by the layer-thinness which in turn limits dispersed oil concentrations whether natural or dispersant-induced.

Thus, on the basis of knowledge-acceptance/belief-rejection, I am preparing a general-contingency/ incident-specific approach to response planning in which the latter will derive from the former. The contingency plan will identify the physicochemical properties of oils/HNS which control the floating, sinking, evaporating, emulsifying, dispersing and dissolving rates of pollutants at sea, and which predict the amounts remaining for dispersant treatment, mechanical recovery and/or stranding as functions of time and wind/tide vectors.

Further to stranding, the contingency plan will identify the shoreline properties which govern pollutant adhesion/penetration, dispersion, recovery, downstream-processing, heterotrophic bioremediation, recycling and/or disposal. Thus, the contingency plan is intended to be a general repository of response knowledge available to all who need/want to know, while substitution of incident-specific values for the properties of the specific substance(s) released, will determine its fate effects and feasibility of response at sea and on incident-specific shoreline types, thus providing an incident-specific action/inaction plan for each and every incident as it arises.

Again, record-keeping as to the implementation of incident-specific plans will keep the general-contingency plan up-to-date, thus compensating for the frequency of changes in response staff and the infrequency of major incidents,

Thus, the intention is to bring this knowledge-accepting/belief-rejecting approach to the attention of all organisations and individuals concerned to see marine incidents dealt with quickly and cost-effectively on the basis of knowledge rather, than to see continuance of the current high-cost/non-effective belief-based alternative.

1 The *Rational Trinity: Imagination, Belief and Knowledge*, D.Cormack, Bright Pen 2010 available at www.authorsonline.co.uk

2 *Response to Oil and Chemical Marine Pollution*, D. Cormack, Applied Science Publishers, 1983.

3 *Response to Marine Oil Pollution - Review and Assessment*, Douglas Cormack, Kluwer Academic Publishers, 1999.

IN SITU BURNING: CHAPTER 20



A short series of articles on In Situ Burning contributed by Dr Merv Fingas of Spill Science, Edmonton, Alberta, Canada T6W 1J6 fingasmerv@shaw.ca

Merv Fingas MSc PhD worked for more than 35 years in the field of oil spill technology at Environment Canada's Environmental Technology Center in Ottawa, Ontario. As head of the Emergencies Science Division at the Centre, he conducted and managed research and development projects. He is currently working independently in Alberta. Dr Fingas is the Member of ISCO Council for Canada.

Summary of the Serial

This is the 20th of a series of articles on in-situ burning of oil spills. This series will cover in-situ burning step-by-step and will present the latest in knowledge on the topic.

20. Marshes II

Several marsh burns have been conducted around the world. These burns were largely successful and provided important information on protecting the marsh plants and the best time of year to burn. The roots of marsh plants, which also house the propagation portion of the plants, are sensitive to heat. If burning is conducted at a dry time of year, such as in late summer, these roots could be killed.⁵³ Flooding is a useful technique for flushing oil out of a marsh while protecting the roots of marsh plants. This can sometimes be accomplished by putting a berm across the drainage ditches or by pumping water into the high areas of the marsh. When burning in marshes, care must be taken to prevent damage to shrubs and trees that grow in the back and higher areas of the marsh. A fire-break must be available to prevent the fire from spreading outside the marsh and to ensure that wind will not drive the fire into nearby forested areas.

Some cases of burning in marshes are given below:

Mosquito Bay⁵⁴

On April 5, 2001, 160 m³ of condensate spilled in Mosquito Bay, Louisiana in a remote coastal marsh. The oil spill resulted from the failure of a 20-inch pipeline. The spill oiled a total of 15 Ha with heavy oil covering approximately 5 ha. The environmental conditions of the brackish tidal marsh included *Distichlis spicata* (salt grass), *Spartina alterniflora* (cord grass), and *Spartina Pattens* (wire grass). The oil penetrated burrows and root cavities during the low tide. Pre-burn surveys and photo documentation were conducted. The oil was burned on April 12 and 13, approximately 7-8 days after the spill occurred. Varying daily wind speeds and tidal changes played an important role in this burn. After the burn, > 40 ha. were burned which was nearly 3 times the oiled area. Burning was effective in removing surface oil, but not subsurface oil. Vegetation died in areas of heavy oiling, but recovery occurred in light and unoiled areas. A photo of the burn is shown in Figure 21.

Tank Spill Resulting from a Hurricane⁵⁵⁻⁵⁷

On August 29, 2005, Hurricane Katrina made landfall near Buras, Louisiana and caused an oil storage tank to rupture, spilling about 600 m³ of Louisiana Sweet Crude. Most of the oil migrated to the retention pond at the facility. During Hurricane Rita (September 24), approximately 16 to 40 m³ of oil were released into the adjacent marsh environment. A portion of the marsh was heavily oiled or moderately oiled (ca. 2 Ha and 6 ha., respectively). A total of 15.5 Ha of marsh were covered by the oil. On October 12 to 13, a burn was initiated and covered 7.9 Ha of the marsh. Test plots were sampled 9 months and one year after the burn. Re-growth from heavily and moderately-oiled plots (28 plots) were compared to two non-oiled and non-burned or reference plots. The plots were monitored for aboveground biomass, plant height and stem density. Total aboveground biomass, live biomass and dead biomass in the oil and burned zones were not significantly different than those in the reference areas after one year. Stem heights also showed recovery within one year and the number of stems of the dominant plant, *Scirpus*, in the oil and burned areas was equal to, or greater than, that in the reference areas. Complete recovery of the aboveground vegetation occurred within one year after the burn.

One of the concerns is that burns will affect the environment on a long-term basis. Otitoloju and co-workers studied a mangrove system that was affect both by a spill and a subsequent burn.⁵⁸ The refined petroleum and fire resulted in a decrease in biodiversity from about 0.8 to about 0.2. About 2 ½ to 3 months later, there were signs of recovery along with a decrease in hydrocarbon levels from about 3.7 mg/kg to 0.42 mg/kg. The recovery coincided with the loss of hydrocarbons.

Lindau and Delaune carried out field studies on the sensitivity of *Sagittaria lancifolia*, a common marsh plant, to in-situ burning of crude oil.⁵⁹ Plots (24) were constructed in a fresh marsh and schemes of control and treatments set up. Burning was carried out 3 days after oil application and at a flooding stage of 15 to 25 cm of water. Live stem count and carbon fixation were measured up to 52 weeks after the oil application. It was found that the oil application and burning had only a short-term effect on the *Sagittaria*. After 5 to 6 weeks after the burn, most indications were that the *Sagittaria* had returned to before oil and burn conditions. The tests also showed that leaving the oil to naturally degrade may also be an option as plant recovery in the unburnt section was similar to the burnt section. The recovery in the burned section may be more rapid.

Special feature – In situ burning (continued)

Mendelsohn and co-workers carried out a series of experiments to determine optimum water depth for burning on marsh plants.⁶⁰⁻⁶³ Three marsh types were collected, a *Spartina alterniflora* dominated marsh, a *Spartina patens* and *Distichlis spicata* co-dominated brackish marsh and a *Sagittaria lancifolia* dominated marsh. The sods were placed in metal buckets and instrumented with thermocouples. Various control and treatment procedures were applied. After burns, the vessels were returned to a greenhouse where recovery was evaluated. It was found that water depth was a key factor in the recovery of the marsh plants. When the water depth was 2 to 10 cm, the soil temperature did not exceed 40°C and there was little vegetative damage. In those test vessels where the water table was 2 cm below the soil surface there was significant vegetative damage and the soil temperatures rose to 80 to 100°C. There were different effects on the different species. *Spartina patens* and *Distichlis spicata* were less affected by these higher temperatures. The in-situ burned removed about 99% of the oil from the water or soil surfaces.



Figure 21 A salt marsh burn in Mosquito Bay, Louisiana.

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To be continued

DR. DOUGLAS CORMACK, HON.FISCO, REPORTS ON THE IMO MEPC 65 MEETING

The Committee approved the fifteenth Report of the OPRC-HNS Technical Group in respect of its activities and progress on dispersant guidelines; spill response on ice and snow; international assistance for major events; safe operation of combating equipment; information inventory on matters relating to the OPRC-HNS Convention; and in respect of its intended activities on HNS contingency planning in general and oil contingency planning for offshore units, seaports and oil handling facilities in particular. It also endorsed the Secretariat's support for the triennial oil spill conferences, welcomed Mr Woo-Rak Suh (Republic of Korea) as Chairman and Mr Christophe Rousseau (France) as Vice-Chairman of the Technical Group; extended thanks and appreciation to the outgoing Chairman Mr Alexander von Buxhoeveden for his leadership and support throughout his tenure; and approved the draft planned output and provisional agenda for the sixteenth session further to restructuring of the sub-committees.

In addition, the Committee approved the text of the manual on legal and administrative aspects of HNS incidents for final editing by the Secretariat and publication through IMO, as it did the texts on dispersant guidelines, on in situ burning, and on sunken and submerged oil assessment and removal techniques. The Committee also noted the information supplied by ROPME/MEMAC on the establishment of the Marine Emergency Mutual Aid Centre for the ROPME Sea Area.

Apart from the above aspects of agenda item 8 on implementation of the OPRC Convention and the OPRC-HNS Protocol and Relevant conference Resolutions, the Committee proceeded through agenda items on harmful aquatic organisms in ballast water; recycling of ships; consideration and adoption of amendments to mandatory instruments; interpretations of, and amendments to, MARPOL and related instruments; identification and protection of special areas and particularly sensitive sea areas; inadequacy of reception facilities; reports of sub-committees; work of other bodies; harmful anti-fouling systems for ships; promotion of implementation and enforcement of MARPOL and related instruments; technical co-operation activities for protection of the marine environment; role of the human element; noise from commercial shipping and its adverse impacts on marine life; work programme of the Committee and its subsidiary bodies; application of committees' guidelines; election of Chairman and Vice-Chairman for 2014; and any other business.

As to the future, the Committee unanimously elected Mr. Arsenio Dominguez (Panama) as Chairman and Dr. Naomi Parker (New Zealand) as Vice-Chairman, Mr. Andreas Chrysostomou (Cyprus) having been highly commended for his outstanding ten year Chairmanship. However, irrespective of sub-committee reorganisation, the above MEPC and TG agendas clearly indicate to this observer the continuing relevance of ISCO involvement. Indeed, the temperature dependence of physicochemical oil/HNS properties will enable our knowledge-only contingency and incident-specific response plans to be seamlessly extended to the arctic environment. Again, with knowledge/belief differentiation being the basis of these response plans, it was gratifying that another NGO and some delegations reported their concern that special area proposals lack ship-source impacts sufficient to justify them

Publications

FOR YOUR INTEREST – LINKS FOR RECENT ISSUES OF PERIODICALS

ASME EED EHS Newsletter	News and commentary on HSE issues from George Holliday	Most recent issue
Bow Wave	Sam Ignarski's Ezine on Marine & Transport Matters	Current issue
Cedre Newsletter	News from Cedre in Brittany, France	April 2013 issue
The Essential Hazmat News	Alliance of Hazardous Materials Professionals	March 13 issue
USA EPA Tech Direct	Remediation of contaminated soil and groundwater	May 1 issue
USA EPA Tech News & Trends	Contaminated site clean-up information	May 2013 issue
Technology Innovation News Survey	From US EPA - Contaminated site decontamination	April 1 -13 issue
Intertanko Weekly News	International news for the oil tanker community	MEPC Special
Intertanko Weekly News	International news for the oil tanker community	No. 21 2013
CROIERG Enews	Canberra & Regions Oil Industry Emergency Response Group	May 2013 issue
Soil & Groundwater Product Alert	From Environmental Expert	May 20 issue
Soil & Groundwater Ezine	Articles, papers and reports	May 2013 issue
Soil & Groundwater Newsletter	From Environmental Expert	May 23 issue
Soil & Groundwater Events	Upcoming events compiled by Environmental Expert	May 2013 issue
IMO Publishing News	New and forthcoming IMO publications	April 2013 issue
Pollution Online Newsletter	News for prevention & control professionals	May 22 issue
EMSA Newsletter	News from the European Maritime Safety Agency	May 2013 issue
JOIFF "The Catalyst"	Int'l Organisation for Industrial Hazard Management	April 2013 issue
Int'l Environmental Technology	Environmental Monitoring, Testing and Analysis	April 2013 issue
HELCOM Newsletter	Baltic Marine Environment Protection Commission	May 2013 issue

THE TENTH EDITION OF THE WORLD CATALOG OF OIL SPILL RESPONSE PRODUCTS IS NOW AVAILABLE

S.L. Ross Environmental Research has recently completed work on the Tenth Edition of the World Catalog of Oil Spill Response Products, the single most important reference in the oil spill business.

The World Catalog started out as a basic listing of equipment specifications in 1986, and has since evolved to be a useful reference book with descriptions of how equipment works, how to select equipment for different applications, and summaries of field and tank tests. As always, it includes comprehensive data listings with information on containment booms, skimmers, sorbents, oil/water

Publications (continued)

separators, pumps, oil/water separators, dispersant application equipment, and temporary storage devices.

The Catalog is available in its usual hard-copy form as well as a CD version. The price of the Catalog is US\$250, plus shipping and handling. More information on the Catalog is available at: <http://www.OilSpillEquipment.com>

Events

UK: IOPC FUNDS' SHORT COURSE: 2013 DATES ANNOUNCED



The Director is pleased to announce that the 2013 IOPC Funds' Short Course will take place from Monday 11 to Friday 15 November at the Funds' headquarters in London. The course programme will cover all aspects of the work of the IOPC Funds and the international liability and compensation regime in general and will include practical exercises which allow participants to study a theoretical incident and the subsequent claims submission process. The course is supported by IMO, INTERTANKO, ICS, the International Group of P&I Associations and ITOFF.

The course is open to a maximum of ten self-funded participants from 1992 Fund Member States, who should be nominated directly by their government by no later than Friday 28 June 2013. Further details can be found in Circular: [IOPC/2013/Circ.3](#)

NORWAY: INTERTANKO STRATEGIES FOR SURVIVAL SEMINAR - YOUR OPPORTUNITY TO DISCUSS THE WAY FORWARD

On Thursday 30 May 2013 at the Grand Hotel in Oslo we are bringing together high-powered panellists and speakers to highlight market imbalances, to focus on the risks involved in trading tankers at below basic operating costs, and to raise awareness of the problems which might arise from doing so.

Come and join them and be part of shaping a viable future for tanker shipping. We need your input and will value your views.

Apart from the first Big Picture session, the seminar will be unconventional – no long presentations. Instead panellists will make positioning statements and then open for discussion between panellists and with attendees. [More info](#)

NORWAY: IRN IS LAUNCHING THE INAUGURAL ARCTIC OIL & GAS 2013 SUMMIT

The global summits organiser, IRN, is pleased to announce the launch of its inaugural Arctic Oil & Gas 2013 Summit that will take place on 18-19 June, in Oslo, Norway.

The summit will create a platform that will facilitate discussions amongst the major key players of the Arctic circle all the way through Russia, Alaska, Canada, Greenland, Norway, Sweden, Finland and Iceland, bringing together senior level representatives from the international oil companies that are already involved and those that are looking to invest in the future developments.

Each one of the countries in the Arctic Circle presents different investment opportunities, with some advantages like vast natural reserves or reliable governments and disadvantages like uncertain environment or extreme weather conditions. This summit aims to illustrate the ways to get involved in the upcoming developments providing all the necessary information through an exquisite expert faculty and to give delegates the chance to network and for key partnerships through senior level delegation. The head of LNG supply of French company Total, Guy Broggi, the director of the Offshore Oil & Gas deposits centre in Gazprom, Marat Mansurov and the adviser on maritime technology in Norwegian firm Statoil, Ove T Gudmestad will be amongst the experts that will elaborate on the developments of the region.

For more information and registrations contact IRN by phone: +44 (0) 20 7111 1615 or by email: info@irn-international.com. For regular updates follow IRN Oil and Gas on Twitter, [@IRN_OilandGas](#) and join the LinkedIn Group 'The Oil & Gas Network'.

THE NETHERLANDS: EUROPEAN BULK LIQUID STORAGE 2013

ACI's European Bulk Liquid Storage Conference will be taking place in Rotterdam, The Netherlands on 30th- 31st October 2013. The bulk liquid storage industry plays a crucial role in interregional trade and faced with a volatile market, the Bulk liquid storage industry has to adapt to a growing market. The two day event will be looking at the need to invest in storage facilities and expansion of ports & terminals; with a focus on improving technical & HSE standards [More info](#)

Events (continued)

UK: 4TH MARITIME SALVAGE & CASUALTY RESPONSE

The final agenda for **4th Maritime Salvage & Casualty Response** (4th - 5th September 2013, London) has now been released. To receive the agenda please revert to this email and we will send you a copy or please [click here >>>](#)

CANADA: REMINDER - 36TH AMOP TECHNICAL SEMINAR ON ENVIRONMENTAL CONTAMINATION AND RESPONSE

The **36th AMOP Technical Seminar on Environmental Contamination and Response** will take place from June 4 to 6, 2013. The Seminar provides a forum for professionals working in the field of oil and hazardous materials spills. The forum facilitates the transfer of scientific results and is intended to link research and the operational community. All submitted papers are peer-reviewed by scientific and technical experts.

The Technical Seminar features plenary sessions of 10- or 20-minute presentations on spill-related topics including Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE). **Sessions will begin at 8.30 a.m. each day.** Presentations will be followed by a question-and-answer period. Sessions may conclude with one or more **Speaker's Corner** presentations at which participants without a paper can formally present the most recent results of their research. [More info](#)

Training

CANADA: LAND BASED SPILL RESPONSE TRAINING – NEWFUNDLAND & LABRADOR EIA

June 4th, 2013, 9:00 am – 12:30 pm, NEIA's Green Room, 90 O'Leary Avenue, Suite 207, Cost \$250.00

A training course for front line workers designed to provide preparedness to deal with small oil spills that can occur on a construction site. [More info](#)

INDIA: THREE DAYS EQMS CERTIFIED COURSE ON INDIAN EHS LEGISLATION AT VADODARA, GUJARAT ON 04-06TH JUNE 2013

Enterprises in India are increasingly required to respond effectively to emerging Environmental, Occupational Health and Safety imperatives. There is also a growing realization that ensuring '**Total Regulatory Compliance**' is an elementary pre-requisite to demonstrate sound business performance and upholding commitment to company valued stakeholders. [More info](#) [Thanks to Dipil Kumar Vasu of the Indian Environment Network]

Company news

KVICHAK DELIVERS 15 SKIMMERS TO U.S. NAVY

Kvichak Marine, Industries, Inc. recently completed delivery of fifteen (15) 30' Rapid Response Skimmers to the U.S. Navy. With the addition of these skimmers the Navy will be operating over 85 Kvichak-built skimmers worldwide as the Navy's tier one response asset.

The rapid-response, shallow-water capable skimmer is ideally suited for use on oil spills in waterways, bays and harbors. The all-aluminum skimmer is 30' – 3" long, with a beam of 9'-8", and a draft of 2' - 6", and is easily trailerable. Powered by twin 90hp outboards, the skimmer has a response speed of up to 17 knots and features an enclosed two person pilothouse for operator comfort. [More info](#)

The ISCO Newsletter is published weekly by the International Spill Control Organisation, a not-for-profit organisation supported by members in 45 countries. ISCO is dedicated to raising worldwide preparedness and co-operation in response to oil and chemical spills, promoting technical development and professional competency, and to providing a focus for making the knowledge and experience of spill control professionals available to IMO, UNEP, EC and other organisations. ISCO is managed by an elected executive committee members of which are Mr David Usher (President, USA), Mr John McMurtrie (Secretary, UK), Mr Marc Shaye (USA), Mr Dan Sheehan (USA), Rear Admiral M. L. Stacey, CB (UK), M. Jean Claude Sainlos (France), Mr Kerem Kemerli (Turkey), Mr Paul Pisani (Malta), Mr Simon Rickaby (UK), Mr Li Guobin (China), and Captain Bill Boyle (UK). The Executive Committee is assisted by the non-executive ISCO Council composed of the following national representatives – Mr John Wardrop (Australia), Mr Namig Gandilov (Azerbaijan), Mr John Cantlie (Brazil), Dr Merv Fingas (Canada), Captain Davy T. S. Lau (China, Hong Kong), Mr Li Guobin (China, Mainland), Mr Darko Domovic (Croatia), Eng. Ashraf Sabet (Egypt), Mr Torbjorn Hedrenius (Estonia), Mr Pauli Einarsson (Faroe Islands), Prof. Harilaous Psaraffis (Greece), Captain D. C. Sekhar (India), Mr Dan Arbel (Israel), Mr Sanjay Gandhi (Kenya), Mr Joe Braun (Luxembourg), Chief Kola Agboke (Nigeria), Mr Jan Allers (Norway), Capt. Chris Richards (Singapore), Mr Anton Moldan (South Africa), Dr Ali Saeed Al Ameri (UAE), Mr Kevin Miller (UK), and Dr Manik Sardessai (USA). More info on Executive Committee and Council Members can be found on the ISCO website at www.spillcontrol.org

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