



ISCO NEWSLETTER

The Newsletter of the International Spill Response Community
Issue 292, 18 July 2011

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News

ISO ACTION PLAN PROPOSES STANDARDS TO COMBAT OIL SPILL DISASTERS



ISO has developed an action plan on International Standards that could help the oil and gas industry prevent or mitigate disasters like the Deepwater Horizon oil spill in the Gulf of Mexico in 2010 and the Montara oil spill off the coast of Western Australia in 2009. Drawing on the lessons learned from the two disasters, the plan:

- Provides an inventory of relevant standards that are already available

- Proposes a programme for the development of new standards or improvement of existing ones.

The action plan covers drilling, well construction and well operations standards relevant to the Deepwater Horizon (also known as Macondo) and Montara events. It has been developed by ISO technical committee **ISO/TC 67, Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries.**

Neil Reeve, Chair of ISO/TC 67, comments: "As an international industry, the lessons learned from an accident in one country must be transferred globally. International Standards developed by ISO/TC 67 are one way of achieving this."

The inventory includes 71 existing standards and related documents available from ISO or other organizations, particularly the American Petroleum Institute (API). The programme proposes 31 standards or related documents for development or update by ISO, the API, or other organizations.

The ISO/TC 67 management committee states: "In the Macondo and Montara accidents, our industry lost 11 colleagues, caused much environmental damage, and caused material, financial and reputational loss. Standards bodies such as ISO (via its ISO/TC 67), API, and others have developed and maintained standards that are intended to facilitate the defence against such accidents. In order to continue with this, it is now essential that the recommendations identified are implemented in the International Standards portfolio."

[Read more](#) [Download the ISO Standards Document](#)

IMO OPRC-HNS TG12 AND MEPC 62 MEETINGS

The 12th session of the OPRC-HNS Technical Group Meetings took place over 4-8 July 2011.

The ISCO delegation included David Usher (ISCO President), John McMurtrie (ISCO Secretary), Dr Douglas Cormack (Honorary Member) and Dr Wierd Koops (Honorary Member).

The TG Group welcomed its new Chairman – Mr Alexander von Buxhoeveden (Sweden) and Vice Chairman Mr Suh Woo Rack (Republic of Korea). Delegations attending TG12 included those of 23 Member Governments, the EC, IOPC, MOWCA (Maritime Organization for West and Central Africa), INTERTANKO, IPIECA, ITOFF, ISCO, OCIMF, WNTI (World Nuclear Transport Institute), REMPEC and RAC/REPPEITC-CARIB.

Topics addressed by TG12 included –

- Updating of IMO dispersant guidelines
- Operational guidelines on sunken and submerged oil assessment and removal techniques
- Potentially polluting wrecks
- Guidelines for oil spill response – offshore in situ burning
- Guidelines on the safe operation and performance standards of oil pollution combating equipment
- Manual on chemical pollution to address legal and administrative aspects of HNS incidents
- Summary of incidents involving HNS and lessons learnt
- Review of web content on OPRC-HNS-related information and inventory of information, best practices and R&D on HNS preparedness and response
- IMO role in Japan's nuclear incident within the context of the Joint Emergency Management Plan (JPlan)
- Updating of OPRC Model training courses
- Oil Spill Response in ice and snow conditions
- The 3rd NOWPAP DELTA – Joint Oil Spill Response Exercise
- Technical Co-operation in Implementation on OPRC and HNS
- Implementation of the GI WACAF Project
- International Association of Oil & Gas Producers' Global Industry Response Group Review
- Proposed guideline for oily water discharge from response vessels, arising from decanting of water from collected oil during major oil pollution response operations.

Presentations made during the meeting included –

- Raising response standards in the Mediterranean Region – A Regional Accreditation Scheme (ISCO)
- Classification of HNS Incidents (ISCO)
- ARCOPOL: the Atlantic Regions' Coastal Pollution Response (Spain)
- Case Study: Oil spill response in Norway – The "Godafoss" incident (Norway)
- Case Study: MSC Chitra incident, Mumbai, India (ITOPF)
- Mediterranean Integrated Decision Support Information System on Transport of Chemical Substances (REMPEC)

The ISCO delegation submitted four papers to TG12 –

- Response to HNS Incidents at Sea - Classification of HNS Incidents (Dr Wierd Koops);
- Training – Template for information gathering at oil and HNS incidents (Dr Douglas Cormack)
- Harmonisation of Technology and Environment (Dr Douglas Cormack)
- Accreditation of Response Organizations – Raising Response Standards in the Mediterranean Region (John McMurtrie)

On behalf of IMarEST, John McMurtrie also reported on the status of the recently formed IMarEST Marine Salvage and Counter Pollution Special Interest Group.

Dr Douglas Cormack represented ISCO at MEPC62 (11-15 July, 2011), making interventions on agenda items 5, 6 and 8.

The MEPC approved the Report of the 12th session of the OPRC-HNS Technical Group. The MEPC also approved the planned outputs and provisional agenda of the 13th Meeting of the OPRC-HNS Technical Group and the exceptional request to schedule the Group's 13th session for the week following MEPC 63, to allow delegations to participate in Interspill, the IMO-sponsored European oil spill conference that would take place the week following the proposed scheduling of TG13.

USA: MAJOR SHIPWRECK SURVEY OFF COAST UNDERWAY

July 15 - A major effort is underway to identify and catalogue thousands of vessels shipwrecked off the U.S. coastline decades ago, including a vast area off Maryland's coast, to determine which pose significant threats of breaking apart.

The National Oceanic and Atmospheric Administration (NOAA) this summer is undertaking an ambitious project to identify and catalogue as many as 30,000 vessels shipwrecked off the nation's coast, many of which were sunk by German U-boats during World War II, that now pose a serious threat of corroding or breaking apart and dumping potentially harmful oil and other cargo into the ocean and ultimately onto the nation's beaches.

Some were shipwrecked in storms while others collided with other vessels and sank. Quite a few more were torpedoed by German U-boats during the Battle of the Atlantic waged off the mid-Atlantic coast during World War II, taking their potentially harmful cargo to the bottom of the sea just a mere few miles from the Ocean City coast in many cases.

Decades later, the sunken vessels are showing signs of corroding and breaking up, creating potentially harmful oil spills that could find their way to beaches throughout the mid-Atlantic, including Ocean City. In response, NOAA has embarked on a project to identify the thousands of wrecks and create a prioritized list of those most likely to need monitoring or proactive mitigation.

"This is an issue the federal government is working on," said Lisa Symons, Damage Assessment and Resource Protection Coordinator for NOAA's Office of Marine Sanctuaries this week. "A lot of vessels went down with their fuel tanks full and with potentially harmful cargo on board. Once these vessels reach 60 or 70 years old, they start to break down and deteriorate and can cause a whole lot of problems."

Symons said NOAA is preparing a list of all potentially harmful wrecks in U.S. waters all over the country, including the mid-Atlantic and the area off Maryland's coast, where a handful of wrecks have already been identified.

"We have a list for all U.S. waters and we're going through that list vessel by vessel and see what if any remediation efforts are necessary," she said. "Through our survey, we're trying to find out what happened to them, what their current status is, and what, if any, salvage efforts are required." [Read more](#)

BALTIC SEA: HELCOM SETS DATE FOR MAJOR INTERNATIONAL EXERCISE



During the international response exercises to a major oil spill at sea, oil will be simulated by popcorn.

The Helsinki Commission for the Protection of the Environment of the Baltic Sea (HELCOM), appointed the 30th of August the day for maneuvers off the coast of the Danish island of Bornholm.

According to the scenario on which the exercises in the waters of the Baltic Sea are based, an oil tanker collides with another ship.

As a result, the tanker's hull is damaged which causes an outflow of five thousand tons of oil.

The HELCOM Commission brings together nine countries: Russia, Germany, Denmark, Finland, Sweden, Poland, Latvia, Lithuania and Estonia. [Source article](#)

CHINA: OIL SPILLS IN BOHAI BAY

July 13 - On June 4 seepage on the seabed was observed along a naturally occurring fault near the ConocoPhillips-operated Peng Lai B Platform. The majority of seepage has been stopped following prudent adjustment of certain production activities. A containment device was designed and constructed and put in place as a precaution should the seep occur from the main source again. Trace amounts of oil, estimated to be no more than liters per day, continue to seep out intermittently near the original seep location and occasionally cause minor surface sheens. Booms are deployed around the immediate surface area and are containing and collecting any such oil.

In a second incident, oil and gas bubbles were observed on the surface June 17 near another platform (C Platform) during drilling operations. The platform is about two miles away from the seabed seep near Platform B. Expert teams were immediately mobilized to contain the release. A cementing procedure successfully stopped the release within 48 hours, and the well was stabilized, plugged and abandoned. Trace amounts of bubbles are occasionally observed from the sea floor, and these bubbles continue to be monitored. Absorbent boom is in place in appropriate locations. Final clean up operations are ongoing.

ConocoPhillips responded quickly to both events and mobilized extensive clean-up equipment, facilities and personnel, including substantial resources made available by our co-venturer China National Offshore Oil Corporation ("CNOOC"). Relevant authorities were promptly notified, along with CNOOC. Almost 3,000 meters of absorbent and inflatable booms were deployed to contain the oil sheen, and 33 vessels (workboats, fishing boats and tugs) supported clean-up activities. ConocoPhillips is appreciative of the support provided by CNOOC during the containment and cleanup effort and to the State Oceanic Administration ("SOA") for their guidance during these unfortunate events.

ConocoPhillips' current estimates of the aggregate amount of fluid spilled from the two incidents ranges from between 1,500 barrels (240 cubic meters) to 2,000 barrels (320 cubic meters) of oil and oil-based drilling fluids. The company is working with independent experts to validate the total spill quantity. During these incidents, no oil sheen reached the shoreline, and there were no injuries to personnel. [Read more](#)



Photo taken on July 13, 2011 shows Suizhong 36-1 oilfield on Bohai Sea, offshored the northeast China's Liaoning Province. A new leak occurred in Suizhong 36-1 oilfield of China National Offshore Oil Corporation (CNOOC) at about 1:30 a.m. Tuesday when the centralized control system of the oilfield's central platform broke down. Spilt oil was mostly cleaned up, according to CNOOC. (Xinhua/Yang Qing)

China's maritime authorities on Wednesday ordered ConocoPhillips China (COPC) to immediately suspend the operation of two of its platforms in northeast China's Bohai Bay following two oil spills, saying that the risk of more spills still exists.

The measures that COPC took to eliminate the risk of new spills since the first two spills were detected last month have been inadequate, the State Oceanic Administration (SOA) said in a statement.

"Another spill could occur at any time. This poses a huge threat to the ecology of Bohai Bay," the statement said.

A subsidiary of U.S.-based energy giant ConocoPhillips, COPC operates platforms in the Penglai 19-3 oilfield, located in Bohai Bay, under an arrangement with the China National Offshore Oil Corporation (CNOOC), China's largest offshore oil producer.

Last month's oil spills seriously polluted 840 km of sea area in Bohai Bay, sending water quality ratings in the area to their lowest level. [Read more](#)

USA: EXXON EXEC SAYS DOESN'T KNOW MONTANA SPILL'S CAUSE

July 14 - An Exxon Mobil executive on Friday told a House committee that the firm had met all regulatory standards even as the company takes full responsibility for an oil spill that dumped an estimated 42,000 gallons of crude into Montana's Yellowstone River this month.

ExxonMobil Pipeline President Gary Pruessing and others said at a hearing of the House Railroads, Pipelines and Hazardous Materials Subcommittee no one yet knows the cause of the July 1 spill that spread nearly 1,000 barrels of toxic chemicals at least 80 miles downstream to Laurel, Mont. — the third major oil spill in the U.S. in 15 months.

Cynthia Quarterman from the Pipeline and Hazardous Materials Safety Administration said the investigation is ongoing and determining the cause of the oil spill will take several months. Examining the pipeline itself will take several weeks because high water currently prevents crews from removing it. Cleanup along the shoreline is underway.

However, there was some confusion regarding when the river itself will be cleaned up. The Environmental Protection Agency — part of the team that will determine how to safely clean the river — is giving Exxon until Sept. 9. [Read more](#)



IRAQ: MILITANTS HIT MOSUL PIPELINE



Flows to a gathering facility in Iraq were disrupted on July 9 after a secondary pipeline has been hit by militants in the restive northern city of Mosul.

Officials said repairs are ongoing on the minor pipeline, which carries about 700 bpd of crude from northern fields to a gathering facility in Ain Zala.

A police source in Mosul told Reuters the explosion occurred early on Sunday and was caused by a bomb placed under an oil pipeline 120 kilometres northwest of Mosul.

Security in Iraq has widely improved since the 2003 US-led invasion that ousted Saddam Hussein but recently saw an uptick of attacks on oil installations. [Read more](#)

CANADA: 100 PIPELINE SPILLS AND ACCIDENTS IN THE LAST TWO YEARS

The Transportation Safety Board of Canada has logged 100 different incidents and accidents on federally regulated Canadian oil and gas pipelines over the past two years, new documents released to Postmedia News reveal.

The log entries by investigators are dominated by two Alberta-based companies, Enbridge and TransCanada, which are involved in nearly three quarters of the reported cases, including 21 incidents on the latter's brand new, multibillion-dollar Keystone pipeline, which launched the first phase of its commercial operation in June 2010.

An investigator from the Transportation Safety Board said the number of incidents is low, considering that there are more than 80,000 kilometres of pipelines that deliver fuel for cars and homes across the country.



In most cases, the incidents, disclosed through access to information legislation, involved the release or spillage of small quantities of crude oil or natural gas due to loose pipes, vibrations, thermal expansion of the products from heat, blown fuses and other maintenance factors. [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group, for providing the link to this report]

SRI LANKA PETROLEUM EXPLORER SEEKS OIL SPILL RESPONSE SERVICES

July 11 - Cairn India which is exploring for petroleum resources off Sri Lanka has called for proposals for oil spill response equipment and services as it prepares to drill its first well in August this year.

The company announcement said delivery of equipment could be either at Colombo or Chennai in south India indicating its support operation for offshore wells in the Gulf of Mannar might be based in India.

Sri Lankan companies interested in the oil industry business had been hoping to win support contracts for the exploration and subsequent production phase.

Cairn India (CIL) and its subsidiary Cairn Lanka (CLPL) are seeking Expressions of Interest from experienced offshore oil spill response equipment manufacturers and service providers to sell offshore oil spill response equipment to support exploratory offshore drilling.

"CIL and CLPL are exploring an option to buy offshore oil spill equipment which includes protective booms, containment booms, skimmers along with power packs, inflatable storage tanks and beach cleaning kits.

"CIL and CLPL are exploring an option to buy offshore oil spill equipment which includes protective booms, containment booms, skimmers along with power packs, inflatable storage tanks and beach cleaning kits. The contractor would be required to provide support services to include maintenance and training on use of the equipment for Cairn's oil spill response crew. [Read more](#)



In this issue of the ISCO Newsletter we are printing No. 34 in a series of articles contributed by Dr Douglas Cormack.

Dr Douglas Cormack is an Honorary Member 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](#)

KNOWLEDGE OF THE FATE OF RELEASED OIL / HNS (CHAPTER 34)

Following the early work reviewed in article 33, Stiver and Mackay derived an equation relating evaporative loss to slick thickness, wind speed, temperature, time and the available distillation data on individual hydrocarbons and hydrocarbon mixtures. However, this equation adds little to the general observation that all oil components and individual HNS having boiling points < 250°C evaporate completely within a few hours from the layer thicknesses (~ 0.1 mm) of Phase II spreading, a phenomenon which substantially reduces the need for dispersant treatment and/or mechanical recovery.

Again, this evaporation of volatile oil components produces combustible mixtures the combustion heat of which progressively volatilises higher boiling fractions to further combustion, a possibility which sustains the efforts to achieve the complete combustion of oil slicks at sea which would reduce/remove the need for the above responses. I will review these efforts in subsequent articles. In the meantime, I review the efforts made to combust oil in ships' tanks to prevent further release to the sea as for example in the *Torrey Canyon Incident* of 1967.

Thus, while recognising that heat loss to the sea which tends to terminate the combustion of slicks would be largely avoided in ships' tanks even in the presence of damage-induced water-bottoms, it was further recognised that the oxygen for combustion could be in short-supply in tanks and would be non-existent when the initial combustion rendered the tank inert. Thus, it was concluded that investigation should be directed to supplying sufficient oxygen to complete the combustion in undamaged tanks or to maintain it to the point of extinction by a water-bottom in damaged tanks.

Accordingly, investigation of the means of supplying sufficient oxygen to sustain combustion after deliberate ignition showed that in a six metre deep tank with one opening in the top and one in the top of a side and with each accounting for 10% of the top area, Kuwait crude oil could be burned at a surface-regression rate of 0.15 m h⁻¹; and that were such convective-venting to be arranged in all tanks of a casualty, it would be possible to burn-off most of the cargo. However, it was recognised that the internal oil level would need to be reduced below the lower lip of the side opening by means other than combustion before this opening could be made; that there is little scope for side-openings in the freeboard of a fully laden or partly submerged tanker; that such side-openings could not be made in centre tanks; and that the potential for combustion with deck-openings alone should be investigated.

Thus, subsequent work showed that the combined effect of two deck openings accounting for 14% of the tank top area provided sufficient oxygen ingress and combustion gas egress to sustain the above combustion rates and extents; that as the burning oil causes a high temperature zone to advance down through the tank contents as revealed by suitable located thermocouples; that on reaching a water bottom this hot zone could produce a violent eruption of burning tank contents; that such explosive eruption may occur when the hot zone reaches a tank bottom itself; and that such may occur unpredictably even while the hot zone is within the remaining oil volume.

Attention then turned to investigation of the circumstances in which the necessary tank top openings could be achieved by explosive surgery, though it was concluded that were the casualty to remain above the waves long enough for arrangements for such surgery to be made and to permit the subsequent combustion to reach completion, it would in all probability be long enough to transfer both cargo and bunkers to another ship or ships; that any future work towards understanding the mechanism of explosive eruption of burning cargo should be directed to the relevance of this phenomenon to the safety of fire-fighting onboard ships which have accidentally caught fire; and that the intentional combustion of the contents of cargo and bunker tanks can never be a routine operational technique.

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.

EI APPOINTS JOAN MACNAUGHTON AS PRESIDENT



At the Energy Institute (EI)'s Annual General Meeting, Joan MacNaughton CB HonFEI, Senior Vice President - Power and Environment Policies, Alstom Power, was appointed the new President for 2011-2013.

Joan MacNaughton has been an influential figure in the energy and climate policy debate in a variety of UK, EU and international roles. As Director General of Energy at the former Department of Trade and Industry, she delivered several major changes and made a significant contribution to international energy policy, including overseeing the energy agenda during the UK Presidency of the EU and leading the work on the energy part of the climate change proposals agreed at the G8 Gleneagles Summit. Since 2007, Joan has been with Alstom Power and spearheads the company's clean power advocacy – to advance clean, sustainable energy and reduce power generation CO2 emissions. [Read more](#)

Technology

DETECTING CRUDE OIL IN WATER

Water Pollution: A special type of mass spectrometry could help monitor the amount of oil discharged into oceans.



FLOTTA: An oil terminal on the island of Flotta in the North Sea stores crude oil and distributes it worldwide

On a tiny island at Scotland's northeast tip, workers at the Flotta Oil Terminal process crude oil carried by pipelines from North Sea oil fields and then pump the oil into tankers for distribution across the globe. Now researchers have shown that a type of mass spectrometry could help workers at Flotta and other oil processing facilities to detect seawater that's contaminated with low levels of oil (*Anal. Chem.*, DOI: [10.1021/ac2008042](https://doi.org/10.1021/ac2008042)).

Oil pumped from undersea wells contains seawater. At the Flotta Oil Terminal and other facilities, workers extract oil from the water until the oil-in-water concentration drops to a low, government-regulated level. They then discharge the resulting water back to the sea. Even with government regulations, an estimated 2.1

million barrels of oil per day worldwide enter the sea with the released water, says [Stephen Taylor](#), an electrical engineer at the [University of Liverpool](#), in the U.K.

Facilities currently rely on methods such as ultraviolet fluorescence and infrared spectroscopy for oil-in-water monitoring. Taylor and his colleagues thought that mass spectrometry could enhance existing detection techniques by measuring oil levels more accurately and at lower concentrations, while also providing information about the type of oil present. Knowing the type of crude oil present in water could help oil terminal workers pinpoint problems with the oil extraction process.

The team tested the ability of membrane inlet mass spectrometry (MIMS) to detect and analyze crude oil in seawater. MIMS relies on a membrane to block water and other polar molecules in a sample from entering the mass spectrometer, while allowing hydrophobic compounds such as oil to pass through for detection.

Although MIMS isn't a new technique, researchers haven't tested it extensively in field trials. "It's one thing to use MIMS on a beaker full of oily water in the lab, but quite another to do it in the harsh environment of the North Sea," Taylor says. He and his colleagues wanted to see if a portable MIMS system could handle the non-standard temperature, salinity, and particulate concentration of the water at Flotta.

For their field tests, the researchers mixed crude oil with seawater from the Flotta facility at known oil concentrations. The team measured concentrations of crude oil as low as 15 mg/L, which is half the legal discharge limit in the U.K. Also, the technique could differentiate between two types of North Sea crude oil, API 35 and API 36, based on differences in hydrocarbon composition. MIMS effectively detected oil at a range of water temperatures and oil droplet sizes.

Now Taylor is working on improvements to the MIMS system that will enhance its sensitivity and ease of use. He plans to eventually couple the portable MIMS instrument with existing oil-in-water monitors to complement, rather than replace, their abilities. [Read more](#)

THE NEW KOREAN OIL SPILL TRAINING CENTRE

An article contributed by Mr Suh Woo Rack, Senior Manager, Response Team, Korean Marine Environment Management Corporation (KOEM).



The new facility, namely the Marine Environment Research and Technology Institute, was completed at the end of last year (Nov.2011) and now it's fully operational.

The Republic of Korea is one of the biggest oil importers in the world. Due to the occurrence of small- and medium-sized spills that are still taking place throughout the world, the Korean Government felt the need to establish an oil spill training facility and training programmes for interested parties, based on international standards and international co-operation. The Government allocated approximately US\$7,100,000 in 2007 for this purpose, but this was not enough to construct a satisfactory facility. However, following the **Hebei Spirit** oil spill incident in December 2007, the former plan was reviewed after considering the seriousness of the impacts from the oil spill. The Korean Government subsequently agreed to invest more than double the previous amount for the construction of the facility, approximately US\$14,300,000.

The government-owned site was allocated and construction of the facility began in June 2008. The national non-profit response and marine environment management agency, called the Korea Marine Environment Management Corporation (KOEM) operates and manages the facility on behalf of the Government.



contains an artificial shoreline and pool. The shoreline is connected to the pool and will be divided into three sections of sand, pebble and tetra pod. It will be used for practical exercises and simulations, with the ability to create artificial tides and currents using seawater. In addition, an oil-water separator has been installed to conduct exercises and experiments with real oil, providing a live demonstration of how spilled oil covers shorelines during an oil spill incident.

The facility will be used for oil spill training programmes, based upon IMO OPRC (Levels 1-3) and HNS model courses. It also provides marine environment education for citizens, in order to raise public awareness in marine sectors and to ensure active international cooperation between neighbouring countries and international organizations and experts, such as IMO, IOPC Funds, ITOPF and IPIECA. The facility is expected to act as a bridge for the Republic of Korea's implementation of the OPRC Convention, its OPRC-HNS Protocol and other conference resolutions.

The main building contains classrooms, a seminar hall, meeting rooms and accommodation facilities. The outbuilding



Wendy Schmdt Oil Clean-Up X Challenge Finalists

So far in this series, the ISCO Newsletter has published features on the competition submissions from –

- Oil Whale Oy Ltd. of Finland (The Oil Whale)
- Elastec / American Marine (High capacity grooved oil skimmer)
- Enviro Voraxial Technology (Submersible Voraxial Separator)
- Crucial Inc. (New high capacity disc skimmer incorporating “fuzzy” coating)

Text and photos are awaited from other competition finalists and further articles in this series will be published as soon as possible.

Publications

THE JOIFF GUIDELINE ON CONFINED SPACE ENTRY

The development of this Guideline was carried out by experts in Confined Space Entry from JOIFF Member Organisations Worldwide. All members of the Working Group have had different backgrounds and experiences on this subject but share the aim of striving for excellence within the workplace they support.

This is an excellent and comprehensive guidance document that is strongly recommended to all members of the spill response community that may have occasion to make entry into confined spaces in the course of their work.

[Download the JOIFF Standard Guideline on Confined Space Entry](#)

TOP CONSEQUENCE 2005-2009 HAZARDOUS MATERIALS BY COMMODITIES & FAILURE MODES



The Pipeline and Hazardous Materials Safety Administration (PHMSA) evaluates safety risk and historical consequences in hazardous materials transportation when setting priorities, making policy, budgeting and allocating resources, drafting rules, targeting inspections, measuring performance, and communicating with stakeholders. In carrying out our mission to protect people and the environment from risks inherent in transportation of hazardous materials, PHMSA uses data reflecting outcomes signaling areas of concern to the Administration and the nation, particularly those of high consequence to people and the environment.

This paper outlines the hazardous materials (hazmat) in transport that have been responsible for the most serious consequences in terms of deaths and major injuries during the years 2005 to 2009. It also identifies failure modes and the corresponding transport phases that have resulted in the most high-impact casualties during this same period.

[Download the PHMSA Report](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group, for providing the link to this news item]

US EPA: TECHNOLOGY INNOVATION NEWS SURVEY

The April 1-30, 2011 *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: <http://www.clu-in.org/products/tins/>

Events

QATAR: 7TH ANNUAL HSE FORUM IN ENERGY

Doha, Qatar. 10-12 October, 2011: ISCO Members are entitled to a 15% discount on registration for this event.

Under the patronage of H.E. Dr. Mohammed Bin Saleh Al-Sada, Minister of Energy and Industry and Chairman of Qatar Petroleum.

QATAR: 7TH ANNUAL HSE FORUM IN ENERGY (CONTINUED)

With the implications of fatal explosion on the Deepwater Horizon Drilling Rig still resonating, most oil and gas industry giants have been re-assessing their HSE practise and preventive measures. Whether or not to re-visit the current safety levels and develop strict environmental and social responsibility processes is not a debatable matter anymore

The conference will congregate around 350 leading regional and international industrial figures, each a stakeholder in HSE, to not only focus on where we are today but more importantly engineer key solutions to sketch the future roadmap.

Embedding the theme of "Moulding the future of HSE Fraternity: Global Vision & Local Practise", the conference will provide the industry with necessary stepping stones to enhance skills and performance through Dynamic Dialogues, Thought Provoking Debates, Enlightening Case Studies, and Interactive Workshops that aim to sharpen leadership skills and capture leading evidence-based solutions for successfully integrating HSE into business operations.

The conference tracks will drill down into the specifics of HSE Economics, Striving for Safety Excellence, Developing Healthy Workforce and Aiming for Environmental Sustainability. Featuring 40 plus speakers and a choice of over 30 sessions, the conference promises to offer a rich selection of industry-leading education and debate. [More information](#)

NORWAY: 18TH INTERNATIONAL SEMINAR ON OIL SPILL TECHNOLOGY 2011

This year's NOSCA Seminar will take place at Horton, Norway, 6-8 September, 2011

Some of the highlights –

- "The Norwegian Coastal Administration's role in Norwegian oil spill response – including challenges in the Barents Sea" by Johan Marius Ly, Norwegian Coastal Administration, Dept. for Emergency Response
- "Preparedness to emergency situations due to the increasing oil transports on the Gulf of Finland - The environment administrations perspective" by Magnus Nyström, Senior specialist, Ministry of the Environment
- Presentation by Alexander von Buxhoeveden, Swedish Coast Guard
- "Danish Authorities cooperative approach to combating oil pollution" by Kim Møller Petersen, Commander, Danish Maritime Safety Administration
- Panel discussion, leaded by Jan Allers
- Visit to Esso Norge, Slagen Refinery and presentation of the refinery's oil spill preparedness
- At Aasgaardstrand: "A walk in Edvard Munchs footsteps" - guided trip to the house of the famous Norwegian painter Edvard Munch
- Oil spill detection for recovery and surveillance applications by means of X-band navigation radar by Mikael Rydberg, Miros AS
- New tools for submersed oil spill detection and increasing efficiency using oil booms by Trond Gulbrandsøy, Aanderaa Data Instruments AS
- Remote sensing and tactical oil spill management by Lars Solberg, Aptomar AS
- Lessons learnt from recent Oil Spills
- "Use of dispersants in Arctic conditions" by Ivar Singaas, Sintef Group
- Internordic Oil Spill Response Exercise under the supervision of the NCA and in combination with the exercise [SkagEx 11](#).
- Formal Farewell Dinner at "Verdens Ende" (The end of the world)

[More information and Registration](#)

UK: SALVAGE & WRECK REMOVAL CONFERENCE

London, 7-8 December, 2011 - Established as the definitive event in its area the annual Salvage & Wreck Removal Conference will bring together salvors, shipowners and operators, government authorities, industry regulators, service providers, and port operators to discuss the dynamic changes and new challenges that the industry faces.

CALL FOR PAPERS: Are you interested in presenting a paper at the 13th Annual Salvage & Wreck Removal Conference? Submit your presentation synopsis to kathryn.barnard@infroma.com [More information](#)

INVITATION FOR COLLABORATION

A letter from Dr Hamid Assilzadeh, Department of Geomatics in University of Calgary

"We are at the Department of Geomatics in University of Calgary targeting a series of projects that will promote the delivery of Event Based Pipeline Accident Monitoring and Management System across Canada through TECTERRA's Investing in the Commercialization of Geomatics Technology Solutions.

Our goal is to establish an adaptable and intelligent monitoring and management system for oil and gas pipeline accidents in terrestrial, underground and aquatic environments.

The system comprises an Internet-based Temporal GIS, Mobile Emergency Asset Management System and Event Driven Based Communication Infrastructure for wide range of spatial data, remote sensing and other observational technologies and monitoring instrumentation. The technology plays innovative rule for oil and gas pipeline accidents monitoring and management.

The event based communication model is based on real time publish/subscribe mechanism in which client will automatically receive data immediately after generation from the data sources including remote sensors, devices or other data publishers deployed on pipeline infrastructure. Internet-based Temporal GIS and Mobile Emergency Asset Management System will support emergency response by producing early warning, hazard location map, hazard extent map, real time location of mobile emergency assets "Ships or vehicles or emergency players" to facilitate the accidents response. Early warning and other disaster products will be generated and transact to the authorities in real time and without supervision using event based communication model. Hazard location map will be simulated by hydrodynamic modeling of the pipeline and the hazard extent will be extracted from remotely sensed data processing. Monitoring of the hazard extent in underground and underwater will be produced by detection of natural gas and hydrocarbon spills using hyperspectral image, and using Laser Induced Fluorescence LIDAR.

Other advantage of event based model is its adaptability which makes its services for unlimited data sources; event based model is intelligent that makes its services to many-to-many data communications style. Integration capability of event based model makes its configurations easy within the networks and different application software and heterogeneous systems.

As this project required to be multidisciplinary and networked between universities, governments and industries for each specific goal of the projects, we are now looking for industries partner for collaboration. Collaborations require cash and in kind supports. If you interested in collaborating please write to me and cc to the flowing emails for further information:

Dr. Hamid Assilzadeh: hassilza@ucalgary.ca

Dr. Yang Gao: ygao@ucalgary.ca

Sincerely,
Hamid"

COMMENT FROM YOUR EDITOR

At the recent IMO OPRC-HNS TG Meeting in London, Capt. Richard Gabrielle of Malta raised the matter of decanting settled-out water during oil spill recovery operations at sea. His point was that in the event that shipboard containment capacity is full, it makes sense to decant some of the settled-out water to create space rather than simply stop oil recovery operations. Discharge of oily water with oil content above MARPOL permitted levels is illegal – but in such a situation a net environmental benefit would surely be achieved by decanting water and continuing productive oil recovery.

In a previous existence your editor has been guilty of doing this on several occasions – and in harbour waters too. It often isn't easy to quickly mobilize additional recovered oil capacity – in the middle of the night or at a remote location. In mitigation I can say that I did discharge settled-out water into a boomed area from which oil was being skimmed.

When rules governing discharge of oily water were formulated I don't think this kind of situation was considered for exemption. Captain Gabrielle's comments were well made and it is good to know that his proposal to develop an IMO Guideline for discharge of settled-out water during skimming operations will be taken further.

Legal disclaimer: Whilst ISCO takes every care to ensure that information published in this Newsletter is accurate unintentional mistakes can occur. If an error is brought to our attention, a correction will be printed in the next issue of this Newsletter. Products and services featured in the ISCO Newsletter and/or the ISCO website, including the International Directory of Spill Response Supplies and Services, have not been tested, approved or endorsed by ISCO. Any claims made by suppliers of products or services are solely those of the suppliers and ISCO does not accept any liability for their accuracy.
