

## **ISCO NEWSLETTER**

The Newsletter of the International Spill Response Community Issue 472 2 March 2015

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



## ISCO & THE ISCO NEWSLETTER

The ISCO Newsletter is published weekly by the International Spill Control Organisation, a not-for-profit organisation supported by members in 45 countries. ISCO has Consultative Status at IMO, Observer Status at IOPC Funds and 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 organisation.

## ISCO COMMITTEE & COUNCIL

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), M. Jean Claude Sainlos (France), Mr Kerem Kemerli (Turkey), Mr Simon Rickaby (UK), Mr Li Guobin (China), Captain Bill Boyle (UK) and Mr Dennis van der Veen (The Netherlands).

The Register of ISCO Members is maintained by **Ms Mary Ann Dalgleish (**Membership Director) and the list of members is on the website at <a href="http://www.spillcontrol.org">http://www.spillcontrol.org</a>

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 Psaraftis (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).

For more info on Executive Committee and Council Members go to <a href="https://www.spillcontrol.org">www.spillcontrol.org</a>

## FIND THE HELP YOU NEED

Click on these links to view websites

CONSULTANTS

EQUIPMENT & MATERIALS

RESPONSE ORGANISATIONS

TRAINING PROVIDERS

For more information on the events featured below, click on the banners



and Vessel Transport

#### International news

CONFERENCE & EXHIBITION

#### ISCO AGM - CHANGE OF LOCATION

**British Columbia** 

The ISCO AGM being held during INTERSPILL at 5 p.m. on Wednesday 25<sup>th</sup> March 2015 will now be located in Room D302, on the 3rd floor of the Elycium Building, adjacent to the RAI Convention Centre.

See more details under ISCO News on Page 7

## THE POLAR CODE, THE IMO AND THE ARCTIC COUNCIL



Koji Sekimizu, Secretary-General of the International Maritime Organization speaks about Oil Pollution Prevention, Spill Response and other matters in an interview with Port News

February 25 - We spoke with Koji Sekimizu, Secretary-General of the International Maritime Organization, about the Polar Code, the IMO and the Arctic Council...

Q: In your view, what are the main challenges of increased shipping in Arctic waters and how will the Polar Code help address these?

A: The receding sea ice in the Arctic Ocean provides an excellent opportunity for shorter sea passages – which means reduced costs. But it also takes shipping into an environment that is not only extremely harsh and challenging for ships to operate in, but which also lacks - or has limited - infrastructure for safe navigation on which safe and green shipping relies, including up-to-date hydrographic charts, provision of navigational information, search and rescue, oil spill response and so on. The infrastructure challenges need to be addressed in order to ensure that support systems are in place for Arctic voyages.

#### BECOME A MEMBER OF ISCO

Enjoy all the benefits of membership of this worldwide organization and support the continuing publication of the ISCO Newsletter Application Form

#### PROFESSIONAL MEMBERSHIP

Advance your career by gaining Professional Recognition

Professional recognition is a visible mark of quality, competence and commitment, and can give you a significant advantage in today's competitive environment.

All who have the relevant qualifications and the required level of experience can apply for Professional Membership of ISCO.

The organization offers independent validation and integrity. Each grade of membership reflects an individual's professional training, experience and qualifications.

You can apply for Student Membership, Associate Membership (AMISCO), MEMBERSHIP (MISCO) OR FELLOWSHIP (FISCO)

All about Professional Membership
Application Form

#### To receive the free ISCO Newsletter

Go to <a href="http://www.spillcontrol.org">http://www.spillcontrol.org</a> and enter your name and email address in the Registration Form (located on the right hand side of the home page) then click on "SUBSCRIBE"

## International news (continued)

IMO's Polar Code aims to provide the regulations needed to safeguard shipping and protect the environment in such inhospitable conditions and therefore covers the full range of shipping-related matters relevant to navigation in waters surrounding the two poles — ship design, construction and equipment; operational and training concerns; search and rescue; and, equally important, the protection of the unique environment and ecosystems of the polar regions. Ships and crew must be fully prepared for Arctic and Antarctic voyages.

The Polar Code (safety elements) have now been adopted by the Maritime Safety Committee (MSC) in 2014, and the environmental elements are expected to be adopted by the Marine Environment Protection Committee (MEPC), at its next session in May 2015, together with associated MARPOL amendments. The Polar Code is expected to enter into force on 1 January 2017 under the International convention for the Safety of Life at Sea (SOLAS) and the International Convention for the Prevention of Pollution from Ships (MARPOL).

However, the Polar Code alone does not and cannot address the infrastructure challenges.

With regards to charts, the International Hydrographic Organization (IHO), which has worked closely with IMO in developing the Polar Code, has noted that systematic and complete hydrographic surveys have not been carried out in many polar areas due to their extensive, remote and inhospitable nature, while the presence of ice throughout much of the year limits the ability to conduct hydrographic surveys, although increasingly large unsurveyed areas may be becoming available for navigation due to the melting of glaciers and sea ice. The IHO has assessed that 95 per cent of the Antarctic region is unsurveyed and appropriate scale chart coverage is generally inadequate for coastal navigation, while the situation is similar in the Arctic region

The IHO has been working through the Arctic Regional Hydrographic Commission (ARHC) to improve the situation but it could take many years for a full range of adequate charts to be available.

In the meantime, I welcome the efforts of countries in the region to boost their efforts to carry out surveys, to work towards producing relevant charts and to provide aids to navigation, including the Russian Federation, via the Northern Sea Route Administration (established in 2013).

The communications infrastructure also presents a challenge. The expansion of the World-Wide Navigational Warning System (WWNWS) into Arctic waters was achieved in 2011 with full operational status in the five designated NAVAREAs areas established for the purposes of coordinating the broadcast of navigational warnings) and METAREAs (areas established for the purposes of coordinating the marine metrological information), with Canada, Norway and the Russian Federation assuming responsibility for coordinating the dissemination of maritime safety information, including weather warnings and other relevant maritime safety information. (The areas are: NAVAREA/METAREA XVII – Canada; NAVAREA/METAREA XVIII – Canada; NAVAREA/METAREA XVIII – Canada; NAVAREA/METAREA XXIII – Russian Federation).

This was a significant step. However, the present Global Maritime Distress and Safety System (GMDSS) service provider (Inmarsat), recognized under the GMDSS, utilises geostationary satellites that cannot provide full coverage in the Polar regions, so high-frequency narrow-band direct printing has to be used as an alternative means of promulgation of maritime safety information.

In order to provide comprehensive coverage of GMDSS using polar orbiting satellites, the Iridium mobile satellite system is currently being evaluated for recognition under the GMDSS.

If an accident or oil spill were to occur in the Arctic then search and rescue facilities and oil spill preparedness of the States concerned would be highly tested. In this context, the Arctic Council has already prepared a multi-lateral agreement for providing SAR services in the Arctic region. Similar proposals are afoot for the Antarctic region.

Meanwhile, there is good cooperation among members of the Arctic Council's Emergency Prevention, Preparedness and Response Working Group (EPPR), which is addressing various aspects of prevention, preparedness and response to environmental emergencies in the Arctic. Further, in 2013 the Arctic states (who are also IMO Member States) signed the legally-binding Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic, which will enhance response capacity in the region.

Arctic Council Members have also contributed to the development of IMO's Guide on oil spill response in ice and snow conditions, which is expected to be finalized at the next session of its Sub-Committee on Pollution Prevention and Response (PPR 3), in 2016.

Read the complete text of this interview in the latest issue of Port News

## Incident reports from around the world (in chronological order)

# JAPAN: FRESH LEAK OF HIGHLY RADIOACTIVE WATER DETECTED AT FUKUSHIMA NUCLEAR POWER PLANT

February 22 - Sensors at the Fukushima nuclear plant have detected a fresh leak of highly radioactive water into the sea.

Tokyo Electric Power Co (TEPCO) said the sensors, which were rigged to a gutter that pours rain and ground water at the Fukushima Daiichi plant to a nearby bay, detected contamination levels up to 70 times greater than the already-high radioactive status seen at the plant campus.

ABC News

Read more

#### NEW ZEALAND: OIL SPILL SPREADS 10KM FROM RAROA PLATFORM

February 23 - Vigorous seas are reducing the chance of tar balls washing ashore after a split pipe at an offshore platform caused 250 litres of oil to spill into the sea.

The slick has spread 10km from the Raroa platform site off the Taranaki coast since Friday. The spill happened when oil company OMV was transferring oil from Raroa to the oil tanker Nectar.

The New Zealand Herald

Read more

## USA: AGENCIES RESPOND TO AUKE BAY, ALASKA, OIL SPILL

February 23 - The U.S. Coast Guard and the state are working to contain an oil spill in Statter Harbor at Auke Bay.

The spill was reported around 7:30 p.m. Sunday. Responders from the Coast Guard and the Alaska Department of Environmental Conservation arrived on scene Sunday night and estimated a spill area of approximately 500 feet by 1,000 feet. City and Borough of Juneau Portmaster Carl Uchytil said the spill was "federalized" and the Coast Guard is now taking the lead. *Juneau Empire* Read more

## USA: FOUR OIL-RELATED SPILLS REPORTED IN NORTH DAKOTA, THE LATEST IN A WEEK OF OIL MISHAPS

February 23 - Four "significant" oil-related spills, including two that impacted wetlands, were reported by North Dakota state officials this week.

It's the fourth time this week that a big mishap involving the North American oil industry has occurred. On Monday, a train carrying 3 million gallons of crude oil derailed and exploded in West Virginia. On Wednesday, another explosion occurred at the ExxonMobil oil refinery in Torrance, California, injuring at least three people. And this weekend, a crude oil train derailed, spilled, and caught fire in Ontario, Canada. 

UK Progressive

Read more

# USA: THOUSANDS OF GALLONS OF OILY-WATER MIXTURE RECOVERED FROM TRENCHES ALONG KANAWHA RIVER, WEST VIRGINIA

February 23 - Approximately 36,000 gallons of oily-water mixture had been recovered from containment trenches where the Kanawha River meets Armstrong Creek as of Monday morning, after a CSX oil train derailed in Fayette County last week. The joint information center established after the train derailed said on Sunday a "small" amount of oil entered the Kanawha River as ice melted and water levels changed Sunday morning. Saturday Gazette-Mail Read more

## **UK: FUEL OIL TRANSFER FROM LYSBLINK SEAWAYS BEGINS**



February 25 - According to UK MCA, the ship to ship transfer of the fuel oil from the 'Lysblink Seaways', which went aground on February 18th, looks set to begin sometime today morning. Better weather conditions mean there is a window to do this work between 3am and midday (25th February). In total 153 tons of fuel will be pumped from the 'Lysblink Seaways' onto the tug 'Kingdom of Fife.' Safety4Sea Read more

## February 26 - Lysblink Seaways safely anchored in Sound of Mull

The cargo ship which ran aground off the west coast last week is now safely anchored off Mull. And the Lysblink Seaways is expected to remain at Scallastle Bay for some time because of

## Incident reports from around the world (continued)

poor weather forecast in the area. The vessel arrived at Mull last night after being towed 17 miles by the tug, Kingdom of Fife, supported by the Forth Jouster. Aberdeen Press & Journal Read more

#### February 27 - Lysblink Seaways Salvage Continues in Scotland

According an update Friday from the UK Maritime and Coast Guard Agency, preparations to tow the ship to a repair facility continue at anchor at Scallastle Bay in the Sound of Mull.

Svitzer Salvage has had a team onboard 24 hours a day as part of the preparations, while the owners of the vessel are in discussion with several ship repairers. A final passage plan will not be agreed until the final decision on the destination has been determined, the MCA said. 

\*\*gCaptain\*\* Read more\*\*

## USA: 9,600 GALLONS OF HYDROGEN PEROXIDE SPILLED FROM TANK AT PORT OF OLYMPIA

February 25 - A recent chemical spill at the Port of Olympia was larger than first reported, according to state Department of Ecology documents obtained through a public records request.

The documents also shed light on the strength of hydrogen peroxide that spilled from a tank at the port's marine terminal about noon on Jan. 28.

The spill led to a large emergency response. Several businesses within a quarter-mile of the marine terminal were evacuated; some employees were asked to stay indoors. The Olympian Read more

#### ISRAEL: LARGE OIL SPILL DISCOVERED IN KISHON BASIN

February 26 – A large fuel spill, almost half a dunam (.12 acre) in size, was found in the basin of the Kishon River. Inspectors from the Kishon Stream Authority went to the location of the spill to take samples, as well as to pump out the oil to stop it spreading.

The inspectors believe the oil spilled from one of the ships that were anchored at Kishon port. A representative of the Environment Protection Ministry arrived on the scene to launch an investigation.

The Times of Israel

Read more

## Other news reports from around the world (countries in alphabetical order)

## CANADA: PREVENTING DISASTER WHEN OIL SPILLS OCCUR



February 27 - Without a doubt, deep-water oil spills are messy and dangerous. Cleanup efforts can take anywhere from days to years, with huge environmental impacts. What if we could lessen the cleanup time and increase efficiency? What if there were accurate models to predict where oil will spread so cleanup efforts can be directed to specific areas?

That's exactly what one Faculty of Agriculture researcher is working on.

Haibo Niu of the Department of Engineering has always had an interest in the environment. He began his career with a Bachelor of Engineering from Xi'an University of Architecture and Technology in China, specializing in water and wastewater engineering.

After that, he completed his masters in environmental engineering and a PhD in Environmental Engineering at Memorial University in Newfoundland. It was his research that led him to Dalhousie in 2012. Now, Dr. Niu is looking at ways to improve oil spill models that are used for predicting the spread of oil in the ocean after a deep-water oil spill. Dr. Niu is conducting experiments that will help him to develop computer models to predict the trajectory of deep-water oil spills.

Dal News

Read more

## IRELAND: VIDEO: PROVOS' NEW 'DIRTY WAR' ON 60,000 HOUSEHOLDS

February 22 - Shocking pictures show poisonous slurry seeping into border reservoir. These images prove beyond doubt that Provo fuel launderers are feeding lethal toxic waste into the main drinking water reservoir for 60,000 people living on both sides of the border. Four 1,000- litre cubes of deadly poison were dumped overnight last Tuesday into a drain that feeds directly into Lough Ross, which supplies all the drinking water to Dundalk in Co Louth and to the Provos' own heartland of Crossmaglen in south Armagh.

Irish News Video Watch the video [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

## Other news reports from around the world (continued)

#### NAMIBIA: OIL SLICKS - A COMMON OCCURRENCE IN NAMIBIA

February 26 - Ships dumping waste oil at sea is a global problem and Namibia is a hotspot. A thousand kilometres of desolate coast line and a 300 kilometre wide Economic Exclusion Zone with no surveillance is the ideal scenario for illegal dumping.

Studies estimate half of all oil in the world's oceans comes from deliberate dumping, and the cumulative effect of these small-scale dumping events outweighs the pollution from major disasters like the Prestige, Exxon Valdez and BP Deepwater Horizon combined.

Namibia is home to abundant marine animals such as seals and penguins which function like thousands of drones testing the ocean for pollutants and bringing back samples to land, notifying vigilant scientists there is a problem at sea.

For many years the biologist Jessica Kemper has studied the African Penguin colonies near Lüderitz and rescued oil-covered penguins. Most likely these oily penguins encountered oil slicks from illegal dumping at sea. Her valuable records demonstrate that oil slicks are a common occurrence in Namibia and also provide the first step toward identifying the culprits. AllAfrica.com Read more

# NIGERIA: OIL PIPELINE BURSTS IN NIGERIA: GOV DICKSON AND AGIP'S "THIRD PARTY" OBJECTIONABLE EXCUSES

February 25 - Whether anybody wants to hear this or not, those puncturing crude oil pipelines in the state are ljaws and natives of Bayelsa at least those operating within the state as it would be far easier for a whole cow to pass through the eye of a needle than for a stranger (who is not ljaw) to enter ljaw communities to tap crude oil for days/weeks/months without the locals confronting him. It is alright to pretend the problem is not as grave as painted but the truth is that the nonchalance of our today leaders in government and even in the communities will be dearly paid for tomorrow by our people including children yet unborn. *Nigeria Exchange News* Read more

#### **URUGUAY: CIRCULAR 4/15: UPDATE - OIL SPILL RESPONSE CONTRACT REQUIREMENTS**

This is an update to Circular 3/15: Oil Spill Response Contract Requirements - Uruguay

February 20 - We refer to the recent Circular 3/15 in which we informed Members of the entry into force on 20 February 2015 of the new Uruguayan Disposición Marítima No. 149 ("the Regulation"), requiring vessel owners to enter into contracts with local Oil Spill Response Organisations (OSROs).

The International Group has been informed that the Uruguayan Coast Guard has decided to suspend the entry into force of the Regulation pending clarification of certain issues with the OSROs. The Coast Guard will meet with the OSROs to discuss the position and to determine a future date for the entry into force of the Regulation, which is not expected to be before the 15 March 2015.

Until the date of entry into force of the Regulation is determined, we suggest that Members trading to Uruguay should liaise with local agents, the Club or the Club's Uruguayan Correspondents to check the current situation. For more information: Members requiring further information should contact Dr. Chao Wu at <a href="mailto:chao.wu@thomasmiller.com">chao.wu@thomasmiller.com</a> or telephone +44 20 7204 2157. Related Articles: Circular 3/15: Oil Spill Response Contract Requirements – Uruguay

[Thanks to ISCO Member, Carlos Sagrera, MISCO. In an accompanying note, he advised – "I just read in your last Newsletter the news about Uruguay and the new regulations about the OSROs. Let me say that the last news here about this says that the Coast Guard has postponed its application at least for one month more".]

#### USA: FED PREDICTS UP TO 10 DERAILMENTS A YEAR OF FUEL-HAULING TRAINS

February 22 - The federal government predicts that trains hauling crude oil or ethanol will derail an average of 10 times a year over the next two decades, causing more than \$4 billion in damage and possibly killing hundreds of people if an accident happens in a densely populated part of the U.S.

The projection comes from a previously unreported analysis by the Department of Transportation that reviewed the risks of moving vast quantities of both fuels across the nation and through major cities. The study completed last July took on new relevance this week after a train loaded with crude derailed in West Virginia, sparked a spectacular fire and forced the evacuation of hundreds of families.

Monday's accident was the latest in a spate of fiery derailments, and senior federal officials said it drives home the need for stronger tank cars, more effective braking systems and other safety improvements. "This underscores why we need to move as quickly as possible getting these regulations in place," said Tim Butters, acting administrator for the Transportation Department's Pipeline and Hazardous Materials Safety Administration.

Star Tribune

Read more

## Other news reports from around the world (continued)

## USA: PRESIDENT OBAMA VETOES KEYSTONE BILL; GOP PLANS OVERRIDE VOTE



February 24 - President Barack Obama vetoed the Republicans' Keystone XL pipeline bill Tuesday, rejecting Congress' attempt to take the project's fate out of his hands — and leaving the GOP on track for an override vote that will most likely fail.

Obama's veto message was delivered within hours of the legislation arriving on his desk, the latest step in six years of pushing and pulling over a Canada-to-Texas oil pipeline that has become a symbol in the debate over jobs versus the environment. Even before Obama whipped out his veto pen, Senate Majority Leader Mitch McConnell vowed to hold an override vote, which the Republican leader's office said would occur no later than March 3.

That gives the GOP a small window to search for the Democratic votes they still need in order to push the bill past Obama. About 20 more Democratic votes in the House and four in the Senate are required to enact the bill, judging from the votes the Keystone bill got when Congress passed it last month.

In a veto message to Congress, Obama rejected the Keystone legislation as an attempt to "circumvent longstanding and proven processes for determining whether or not building and operating a cross-border pipeline serves the national interest." The bill would have declared the pipeline approved, ending the administration's review of the project.

Politico Read more

#### February 24 - Obama's Keystone pipeline veto opens a new chapter in his presidency

With the quick swipe of a pen on the way from one meeting to another, President Obama unceremoniously opened a fourth chapter of his presidency Tuesday — the veto era.

Obama's rejection of a bill that would have ordered approval of the controversial Keystone XL pipeline came with minimal fanfare. The White House did not even publicly release word of the decision, which was widely anticipated, until after Senate officials announced they had received the veto message.

Nonetheless, the moment marked a milestone. Until Tuesday, Obama had vetoed only two bills in more than six years. Already this year, the White House has issued more than a dozen veto threats. LATimes Read more

## **USA: BP CHALLENGES RULING OVER SIZE OF 2010 OIL SPILL**

February 24 - BP is challenging a January ruling over the size of the 2010 Gulf of Mexico oil spill as it seeks to lower its civil penalty for the disaster. BP faces up to \$13.7 billion in federal fines.

The notice of appeal, filed Monday (Feb. 24) in New Orleans, comes days after U.S. District Judge Carl Barbier rejected BP's attempt to lower the maximum fine for the spill.

Barbier ruled Jan. 15 that 3.19 million barrels of oil spilled into the Gulf of Mexico during the 87-day gusher. The ruling was based on evidence presented in October 2013 in the civil trial over the spill.

BP argued only 2.45 million barrels spilled during the disaster, while the federal government claims 4.19 million barrels spilled.

Barbier has not yet ruled on how much BP owes in fines under the Clean Water Act, the primary federal law governing water pollution. A ruling could come at any time.

The Times Picayune

Read more

## People in the news

## SEACOR ANNOUNCES NEW EXECUTIVE APPOINTMENTS

Seacor Holdings has announced that Oivind Lorentzen stepped down as Chief Executive Officer, but will continue as a director and non-executive Vice Chairman of the Board of Directors. Charles Fabrikant, Executive Chairman, assumed the position of Chief Executive Officer. In addition, the Company appointed John Gellert and Eric Fabrikant as co-Chief Operating Officers.

Gellert will oversee Offshore Marine Services and Eric Fabrikant will oversee Transportation Services, Witt O'Brien's and Cleancor Energy Solutions.

Matthew Cenac, Chief Financial Officer, and Paul Robinson, Chief Legal Officer, have been elevated to the position of Executive Vice President. Bruce Weins, formerly Controller, has been appointed Chief Accounting Officer and Senior Vice President.

The Maritime Executive Read more

#### ISCO AGM - SAME TIME - SAME DAY - BUT IN A DIFFERENT ROOM



The ISCO AGM being held during INTERSPILL at 5 p.m. on Wednesday 25th March 2015 will now be located in Room D302, on the 3rd floor of the Elycium Building, adjacent to the RAI Convention Centre.

Your Secretary advises – The Interspill Event is being held in Hall 10 and you need to follow the green line to find the Elycium Building.

Hopefully it will be well signposted but it might still be a good idea to have a preliminary recce to check out the location of Room D302.

Please try to get there by 5 p.m. Time is always short and we will be aiming to finish in good time in order to allow those of you who may be planning to join social events in the evening.

Tea, Coffee, Soft Drinks and Snacks will be provided but I do need to tell the caterer how many are coming – so do please drop me an email at john.mcmurtrie@spillcontrol.org

I'm looking forward to seeing you!

## SPECIAL ISSUE OF THE ISCO NEWSLETTER FOR DISTRIBUTION AT INTERSPILL

Around 25 of our Corporate Members will be exhibiting at Interspill and other Members will be speaking during the Conference.

Your Editor is planning to publish a special issue of the Newsletter featuring Members attending Interspill.

In short paragraphs you can highlight any new products you will be introducing at Interspill and pass on other messages. Members who are giving papers or posters can inform our readers where and when they will be presenting.

Please send information for publication no later than Thursday 12 March to john.mcmurtrie@spillcontrol.org

#### ISCO MEMBERSHIP PLACARDS FOR DISPLAY ON BOOTHS OF CORPORATE MEMBERS

As usual, ISCO will distribute ISCO Member Placards for display on the booths of its Corporate Members.

Displaying the ISCO Membership Placard on your booth indicates your support of an organization dedicated to improving worldwide co-operation and preparedness.

These placards are quite expensive to produce, so please help ISCO by retaining them for future re-use. You can help the organization by displaying them on your booths at other events you are planning to attend.

#### ISCO BROCHURES AND MEMBERSHIP APPLICATION FORMS

Unfortunately ISCO will not have a booth at Interspill 2015 but brochures and membership application forms will be available in the Ruby lounge.

This is in the area upstairs, between the exhibition and the conference rooms

## **Science and Technology**

# CU-BOULDER TECHNOLOGY COULD MAKE TREATMENT AND RE-USE OF OIL AND GAS WASTEWATER SIMPLER, CHEAPER

Oil and gas operations in the United States produce about 21 billion barrels of wastewater per year. The saltiness of the water and the organic contaminants it contains have traditionally made treatment difficult and expensive.

Engineers at the University of Colorado Boulder have invented a simpler process that can simultaneously remove both salts and organic contaminants from the wastewater, all while producing additional energy. The new technique, which relies on a microbe-powered battery, was recently published in the journal Environmental Science Water Research & Technology as the cover story.

"The beauty of the technology is that it tackles two different problems in one single system," said Zhiyong Jason Ren, a CU-Boulder associate professor of environmental and sustainability engineering and senior author of the paper. "The problems become mutually beneficial in our system—they complement each other—and the process produces energy rather than just consumes it."

The new treatment technology, called microbial capacitive desalination, is like a battery in its basic form, said Casey Forrestal, a CU-Boulder postdoctoral researcher who is the lead author of the paper and working to commercialize the technology. "Instead of the traditional battery, which uses chemicals to generate the electrical current, we use microbes to generate an electrical current that can then be used for desalination."

This microbial electrochemical approach takes advantage of the fact that the contaminants found in the wastewater contain energy-rich hydrocarbons, the same compounds that make up oil and natural gas. The microbes used in the treatment process eat the hydrocarbons and release their embedded energy. The energy is then used to create a positively charged electrode on one side of the cell and a negatively charged electrode on the other, essentially setting up a battery.

Because salt dissolves into positively and negatively charged ions in water, the cell is then able to remove the salt in the wastewater by attracting the charged ions onto the high-surface-area electrodes, where they adhere.

Not only does the system allow the salt to be removed from the wastewater, but it also creates additional energy that could be used on site to run equipment, the researchers said.

"Right now oil and gas companies have to spend energy to treat the wastewater," Ren said. "We are able to treat it without energy consumption; rather we extract energy out of it."

Some oil and gas wastewater is currently being treated and reused in the field, but that treatment process typically requires multiple steps—sometimes up to a dozen—and an input of energy that may come from diesel generators.

Because of the difficulty and expense, wastewater is often disposed of by injecting it deep underground. The need to dispose of wastewater has increased in recent years as the practice of hydraulic fracturing, or "fracking," has boomed. Fracking refers to the process of injecting a slurry of water, sand and chemicals into wells to increase the amount of oil and natural gas produced by the well.

Injection wells that handle wastewater from fracking operations can cause earthquakes in the region, according to past research by CU-Boulder scientists and others.

The demand for water for fracking operations also has caused concern among people worried about scarce water resources, especially in arid regions of the country. Finding water to buy for fracking operations in the West, for example, has become increasingly challenging and expensive for oil and gas companies.

Ren and Forrestal's microbial capacitive desalination cell offers the possibility that water could be more economically treated on site and reused for fracking.

To try to turn the technology into a commercial reality, Ren and Forrestal have co-founded a startup company called BioElectric Inc. In order to determine if the technology offers a viable solution for oil and gas companies, the pair first has to show they can scale up the work they've been doing in the lab to a size that would be useful in the field.

The cost to scale up the technology also needs to be competitive with what oil and gas companies are paying now to buy water to use for fracking, Forrestal said. There also is some movement in state legislatures to require oil and gas companies to reuse wastewater, which could make BioElectric's product more appealing even at a higher price, the researchers said.

Ren and Forrestal have received funds from the National Science Foundation to work on scaling up the water treatment cell. The grant came after the pair participated in NSF's Innovation Corps Program—aimed at pushing NSF-funded research beyond the lab—and took first place in their class.

Ren and Forrestal also worked with researchers Zachary Stoll and Pei Xu at New Mexico State University. Stoll and Xu are also coauthors of the article.

Source document The study can be found at <a href="http://pubs.rsc.org/en/content/articlepdf/2015/ew/c4ew00050a">http://pubs.rsc.org/en/content/articlepdf/2015/ew/c4ew00050a</a>

## Correspondence

## THE ISSUE OF DECANTING DURING OIL SPILL CONTAINMENT-RECOVERY OPERATIONS

The article in issue 470 of the ISCO Newsletter (16 February 2015) has (so far) only produced a rather disappointingly small number of responses. Your Editor hopes that more readers will want to comment – You can access the article in by clicking on <a href="http://www.spillcontrol.org/2013-02-05-11-11-41/2013-02-05-11-26-54">http://www.spillcontrol.org/2013-02-05-11-11-41/2013-02-05-11-26-54</a> Open ISCO 470 Newsletter and look at Page 2.

Member of ISCO Council for India, Capt. D. C. Sekhar, wrote -

"I sincerely appreciate your efforts at getting the guidelines for decanting in place. But looking at the response, I believe it will be left to the wisdom of the port state regulators to understand and take a clear and prudent stand on the issue during the emergency period. You cannot be accused of not trying! I have earlier discussed the matter with the regulators in India, and will again take it up. It may help awareness and save some valuable time in an emergency".

Member of ISCO Executive Council, Dennis Van der Veen, wrote -

"I would like to give you my opinion in the hope that it will help the discussion on decanting water in oil spill recovery.

I am very much in favour of changing the rules and legislation in such a manner that the 15 ppm threshold will no longer be under discussion in oil spill recovery. As you know, the Netherlands have done very well in international spills, removing up to 85% of oil during the Prestige. There is no better alternative because dispersants and in situ burning only move the oil to other environmental compartments (respectively water and air/water). Therefore, holding on to the current MARPOL rule is nothing else but a big mistake in case of oil spills".

Please send your views to john.mcmurtrie@spillcontrol.org

## **New Products and Services**

# ISCO CORPORATE MEMBER, DESMI LAUNCHES NEW OIL SPILL RECOVERY PRODUCT - MAKES SINGLE-VESSEL CLEAN-UP MORE EFFICIENT, LESS COSTLY



A new oil-spill recovery product makes it easier to clean up spills with just one vessel rather than two, leading to easier, faster and more cost-effective clean-up, according to DESMI, manufacturer of the recovery product.

Deploying and coordinating two vessels to operate an oil spill recovery boom between them is more expensive and logistically challenging than one, but one-vessel solutions have been severely limited by problems associated with size, weight, and the comparatively slow speed at which they operate, says DESMI. A new aquatic device, DESMI RO-Vane, replaces the functions of a second vessel; combined with the DESMI SpeedSweep boom and the DESMI RO-Skim, the company says its system is faster, easier and more cost-effective to deploy.

The RO-Vane component of the single-vessel system, deployed behind the recovery boom, helps keep the shape of the sweep, while the RO-Skim skimmer located at the apex removes the contained oil from the apex. At the same

time, the heavy-duty, rubber SpeedSweep boom with its multiple permeable barriers boosts the speed at which oil can be recovered from the industry standard of 0.7 knots to as much as 3 knots – a lift of more than 350%.

\*\*Environmental Leader Read more\*\* More info from Desmi\*

## Links for recent issues of other publications

ASME EED EHS Newsletter
Bow Wave
Cedre Newsletter
The Essential Hazmat News
USA EPA Tech Direct
USA EPA Tech News & Trends
Technology Innovation News Survey
Intertanko Weekly News
CROIERG Enews
IMO Publishing News
IMO News Magazine
Pollution Online Newsletter
EMSA Newsletter

News and commentary on HSE issues from George Holliday Sam Ignarski's Ezine on Marine & Transport Matters News from Cedre in Brittany, France Alliance of Hazardous Materials Professionals Remediation of contaminated soil and groundwater Contaminated site clean-up information From US EPA - Contaminated site decontamination International news for the oil tanker community Canberra & Regions Oil Industry Emergency Response Group New and forthcoming IMO publications
News from the International Maritime Organization News for prevention & control professionals
News from the European Maritime Safety Agency

Most recent issue Current issue January 2015 February 2 issue March 1 2015 issue Fall 2014 issue January 1 -15 2015 No 9 2015 February 2015 issue February 2015 No 4, 2014 February 25 issue February 2015 issue February 2015 issue

## Links for recent issues of other publications (continued)

JOIFF "The Catalyst
Environmental Technology Online
OCIMF Newsletter
IPIECA eNews
AMSA Aboard
Sea Alarm Foundation Newsletter

Int'l Organisation for Industrial Hazard Management Environmental Monitoring, Testing & Analysis News from the Oil Companies International Marine Forum Int'l Petroleum Industry Environmental Conservation Assoc'n News from the Australian Maritime Safety Authority News from the Sea Alarm Wildlife Protection Organisation January 2015 issue February 2015 issue January 2015 issue February 12 issue December 2014 issue Winter 2014 issue

## **Events**

## FRANCE: OIL SPILL STUDIES, LA ROCHELLE, 11 MARCH 2015

ISDAMP pleased to announce the programme of the upcoming Oil Spill Studies Conference at EIGSI La Rochelle (March 11th, 2015). This conference marks the end of the ISDAMP project, and is the 6th edition of Oil Spill Studies. Speakers will include experts in the field of pollution preparedness, response, and impacts.

More info

## NIGERIA: 4th OIL SPILL CONFERENCE NIGERIA 2015

Nigeria has recorded the highest number of oil spills globally, an estimated 600 spill incidents annually.

Oil spills in Nigeria have caused unimaginable and unacceptable level of environmental pollution and concomitant severe degradation and effects in the oil producing areas of the Niger Delta Nigeria.

This is why we are consistently using the conference forum to create awareness of the effects of oil spills, how best to prevent, respond and restore the oil -impacted areas and mitigate the effects on the people, aquatic community and the environment. Everyone that attends our Conference is expected to be a participant in the conference proceedings

With PRP in Nigeria, a new spill prevention, preparedness, response and remediation program has started.

We therefore recommend PRP deployment for effective cleaning of both old and new spills and restoration of Niger Delta environment now. Remember, currently the world attention is on oil spill remediation. More info

## **Training**

# OSRL LAUNCHES NEW DECC 1 - ON-SCENE COMMANDER (OIM OFFSHORE INSTALLATION MANAGER) E-LEARNING

Oil Spill Response Limited (OSRL) has launched a new improved Department of Energy and Climate Change (DECC) 1 On-Scene Commander (OIM Offshore Installation Manager) e-learning course.

Designed specifically for Offshore Installation Managers (OIMs) and other offshore personnel working in the UK Continental Shelf, the course incorporates the latest DECC Oil Pollution Emergency Plan (OPEP) guidance released in January and industry good practice guides. More info

## USA: OIL SPILL PREPAREDNESS AND RESPONSE WORKSHOP - MARCH 7, SAN JUAN COUNTY

Residents of the San Juan Islands who are concerned about oil spills along the coastline are invited to a community workshop on oil spill response and readiness sponsored by the Northwest Straits Foundation and the San Juan County Marine Resources Committee.

The free workshop on Community Engagement in Oil Spill Response and Readiness will be held from 1 to 4 p.m. on Saturday, March 7, in the Commons building at Friday Harbor Labs, 620 University Road, Friday Harbor.

More info

## **INTERSPILL: SHORT COURSES, MONDAY 23RD MARCH 2015**

Taking place the day before the 2015 Interspill Conference and Exhibition opens its doors, these sessions are designed to provide an education and training environment with leading industry professionals.

The cost to attend a session is 120 euros plus VAT. Register for the conference and exhibition and select which short course you would like to attend. More info

# ISCO CORPORATE MEMBER, BRIGGS ENVIRONMENTAL SERVICES LTD. (BESL) GAINS ISAA ACCREDITED STATUS AWARDS FOR OIL SPILL RESPONSE



After successfully completing a rigorous assessment process conducted by the International Spill Accreditation Association (ISAA), BESL's Aberdeen Oil Spill Response Base has been awarded top grades in 5 Oil Spill Response disciplines.

The awards and disciplines in which they were given are as follows -

Freshwater Oil Spill Response -Level 3 Marine Oil Spill Response – Level 3 Shoreline Clean-up – Level 3 On-land Spill Response - Level 3 Tanker Rollover – Level 3

## ISCO CORPORATE MEMBER, IMBIBITIVE TECHNOLOGIES GETS ENVIRONMENTAL RECOGNITION



Imbibitive Technologies is extremely proud, and honoured to announce it has been selected as the 2014 Niagara Entrepreneur of the Year Award for the Environmental category.

Imbibitive Technologies (@imbiberbeads) is proud to have participated and presented at the Queen's University Global Innovation Conference (QGIC).

## **ELASTEC INTRODUCES NEW 1.5 METER BOOMVANE**

The latest addition to ELASTEC'S arsenal of oil spill response equipment is the 1.5 m BoomVane™, designed to quickly deploy heavier oil boom in coastal and open waters in advancing sweeping and skimming applications - with only one towing vessel.

Shon Mosier, ELASTEC sales manager explains the advantage of the new 1.5 m BoomVane. "When oil is spilled in open water, it tends to spread, and then it gets thinner making the oil more difficult to recover. To thicken the oil for removal, it must be swept, much like sweeping dirt into a pile with a broom. In oil spill response jargon, we sweep (concentrate) the oil traditionally with two boats towing a boom between them to gather the oil for skimming."

This traditional oil sweeping method is not only expensive but also difficult to manoeuvre the boats and the boom in tandem. Additional limitations involve the sweep arm. The arm extends from the side of the boat to hold the boom, which limits the sweep swath to the length of the arm.

The 1.5 m BoomVane solves these problems. It can quickly deploy boom, eliminating the need for a second towing vessel - and the manpower needed to crew it. No longer limited by the length of a sweep arm, wider boom swaths can be configured with the unharnessed power of the BoomVane to tow the boom into position. BoomVane also solidly holds the swath configuration in place, manoeuvred by the boat's captain.

More info

# SWS ENVIRONMENTAL SERVICES GAINS RECOGNITION AS AN OSRO WITH GROUP V CAPABILITIES

Following inspections and a recent update for SWS Environmental Services (SWSES) through the Coast Guard's RRI system, SWSES is certified in Group V capabilities. As of January 2015, there are only 15 out of 116 OSROs that the Coast Guard has classified as an OSRO with Group V capabilities.

#### Last words

Politicians and diapers have one thing in common. They should both be changed regularly, and for the same reason.

Two atoms are walking down the street. One says to the other: "I think I lost an electron!" "Are you sure?" "Yes I'm positive!"

What did the digital clock say to the analogue clock? Look, no hands!

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. Subscription is subject to acceptance of ISCO's Terms and Conditions as published on the website <a href="https://www.spillcontrol.org">www.spillcontrol.org</a>