



ISCO NEWSLETTER

The Newsletter of the International Spill Response Community

Issue 428 31 March 2014

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 organisations.

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 Paul Pisani** (Malta), **Mr Simon Rickaby** (UK), **Mr Li Guobin** (China), **Captain Bill Boyle** (UK) and **Mr Dennis van der Veem** (Co-opted Member, The Netherlands)

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

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 Psarafitis** (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 www.spillcontrol.org

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

REGISTER NOW FOR IOISC 2014!
International Oil Spill Conference
Savannah, Georgia | May 5-8 | www.ioisc.org

ISAA
Oil Spill Training Days
Castle Archdale, 28-29 April 2014

Premium Conference : June 4th. Book Now

International news

ISO MEMBERS VOTE TO ADVANCE THE REVISION OF ISO 14001

“ISO 14001:2004 sets out the criteria for an environmental management system and can be certified to. It does not state requirements for environmental performance, but maps out a framework that a company or organization can follow to set up an effective environmental management system. It can be used by any organization regardless of its activity or sector. Using ISO 14001:2004 can provide assurance to company management and employees as well as external stakeholders that environmental impact is being measured and improved”.

March 25 - The latest draft ("CD2") of the revised ISO 14001 was circulated to ISO's members at the end of 2013, for comment and to vote on whether the work should proceed to the next stage. A substantial majority (45 votes for and 6 against) of those countries responding were in support of the working group continuing to develop a "Draft International Standard".

The latest draft ("CD2") of the revised ISO 14001 was circulated to ISO's members at the end of 2013, for comment and to vote on whether the work should proceed to the next stage. A substantial majority (45 votes for and 6 against) of those countries responding were in support of the working group continuing to develop a "Draft International Standard". *Edie.net* [Read more](#)

NEW DATABASE FOR OIL / CHEMICAL TANKER INCIDENTS

The Oil Companies International Marine Forum (OCIMF) has started work on developing a new database which will act as a repository for incident reports from the oil and chemical tanker industry.

The concept of this database was developed together with the INTERTANKO Vetting Committee and the SIRE Focus Group and is envisioned to greatly help

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 ISCO Newsletter

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

International news (continued)

reduce the administrative burden that reporting of incidents and their follow-up brings on the owners and operators.

This repository will be hosted by OCIMF and incidents reported into the database will be accessible by all OCIMF members and SIRE recipient members.

The vision of such a centralised database is to eliminate, in the long-term, reporting of incidents and their close-outs to individual oil companies by allowing all OCIMF members and SIRE recipient members to directly access the incident reports as and when required.

This database will also increase transparency and standardisation in incident investigations and reporting as well as increase the dissemination of any lessons learnt within the industry.

It is expected to be launched sometime in May 2014. [Thanks to ISCO Industry Partner, INTERTANKO] <https://www.intertanko.com/>

SOUTH-EAST ASIA REGIONAL MEETING ON OIL SPILL PREPAREDNESS AND RESPONSE

The IOPC Funds Director, accompanied by the Head of the External Relations Department, took part in the first meeting of the national authorities responsible for oil spill preparedness and response in the South Asia region, from 26 to 28 February 2014 in Colombo, Sri Lanka. This meeting was jointly organised by the South Asia Co-operative Environment Programme (SACEP) and IMO as the first step in a three-year project aimed at facilitating the effective implementation of the OPRC Convention, including the existing Memorandum of Understanding for regional cooperation in case of emergency between the five maritime States of the region (Bangladesh, India, Maldives, Pakistan and Sri Lanka).

A significant part of the workshop was dedicated to the risk of oil pollution from shipping and the Funds were invited to present on the topic of the international regime for oil pollution compensation. The workshop covered a number of important issues and most importantly approved the programme of activities for the next three years.

The delegations of Bangladesh and Pakistan expressed an interest in a possible workshop or seminar concerning the benefits of ratifying and implementing the 1992 Civil Liability and Fund Convention.

Representatives from ITOPF, IPIECA and OSRL also took part in the workshop as industry experts. Source: [IOPC Funds](#)

ENERGY INSTITUTE'S ENVIRONMENTAL AWARD 2014 COMPETITION

Now in its 15th year, the Energy Institute (EI)'s awards competition celebrates excellence and innovation demonstrated by individuals and organisations across all sectors of the global energy industry. If you think you or your company make a significant contribution to the energy industry and the wider society, why not enter this prestigious competition to get the recognition you deserve?

Judging criteria • Demonstrable benefit to the environment • Management commitment • Good prospects for wider application • Sustainable benefit. Environmental considerations are an increasingly important driving force for the energy industry and the sustainability of activities is key to success. The judges for this Award will consider projects and products that enhance environmental considerations, and will be looking for examples of intelligent and sustainable responses from the energy industry.

[More info](#)

Incident reports

AUSTRALIA: CLEAN-UP UNDERWAY AFTER TAR BALLS WASH UP ON NINETY MILE BEACH

March 18 - Esso is using aircraft to check for signs of oil leaks from their offshore pipelines after oil and tar balls were washed up on the Ninety Mile Beach on the weekend. The Department of Transport has about 50 people cleaning up the spill on a seven-kilometre stretch of coast at Golden Beach near Sale. [ABC.net.au](#) [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

USA: CLEANUP CREWS BATTLE ‘SIGNIFICANT’ OIL SPILL IN HOUSTON SHIP CHANNEL



Report in gCaptain on March 23 [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group and to ADR Training UK]

Update 2 (8:40 p.m. EST Sunday): Governor Rick Perry has directed all necessary state resources to assist with the cleanup. The barge has been moved to a local shipyard and is no longer at the scene of the spill. The Houston Ship Channel has been closed to traffic, and the Bolivar Ferry has been suspended until the spill is contained. The incident is under investigation by the NTSB.

RELATED: Photos Show Extent of Houston Ship Channel Oil Spill

Update (5:00 p.m. EST Sunday): Lightering operations to transfer remaining oil from the damaged barge are expected to be complete today.

Approximately 35,000 feet of boom has been deployed in containment efforts and to mitigate the

affect on the environment, the Coast Guard said. The area immediately surrounding the damaged barge was quickly boomed on Saturday afternoon. The maximum capacity of the breached tank is 168,000 gallons of marine fuel oil, but the amount of released product still being assessed.

Note from Editor: Further to the report in last week’s ISCO Newsletter ... There are thousands of press reports on this incident and these continue to appear as the situation develops ... Rather than devote several pages to this incident I am giving below a selection of links to reports from different sources with dates of publication. This will enable you to follow the incident as the scenario has developed over the last few days. Several of these reports contain video and commentaries.

March 22	<i>The Maritime Executive</i>	[Update] Barge Leaks Oil After Collision In Houston	Read more
March 23	<i>Houston Chronicle</i>	Ship Channel remains closed after oil spill	Read more
March 24	<i>Reuters</i> <i>Houston Chronicle</i> The Maritime Executive DesMogBlog.com	Houston ship lane to have 'tapered' reopening; Exxon cuts output Oil spill puts wildlife in harm's way [Update] USCG Eyes Opening Houston Channel Following Collision, Spill Imperiled Migratory Birds in Path of Galveston Oil Spill	Read more Read more Read more Read more
March 25	gCaptain <i>Newser.com</i> <i>The Guardian</i>	Photos Show Extent of Houston Ship Channel Oil Spill and Cleanup Crews scour for tar balls and use cannon booms to scare birds Houston Ship Channel reopens as oil spill cleanup continues	Read more Read more Read more
March 26	<i>KHOU.com</i> gCaptain	Galveston County officials release updated map of safety zones Coast Guard Reopens Houston Ship Channel in All Directions	Read more Read more
March 27	Aljazeera	Galveston oil spill damage could be more than meets the eye	Read more
March 28	Houston Chronicle Chicago Tribune	Investigation far from over in Houston oil spill Texas responders extend oil cleanup in Matagorda Bay after spill	Read more Read more

USA: OHIO PIPELINE SPILL TWICE AS LARGE AS ORIGINAL ESTIMATE



March 25 - 20,000 gallons of crude oil spilled from a damaged pipeline into a nature reserve in southwest Ohio — double the initial estimates — according to officials with the U.S. Environmental Protection Agency.

The crude oil leached into the 374-acre Glen Oak Nature Preserve, 20 miles north of Cincinnati. Wildlife officials said thus far small animals have been impacted by the spill but thanks to the cold weather, fewer large animals are moving through the contaminated area.

The spill came from a five inch crack in the Mid-Valley Pipeline, running 1,000 miles from Texas to Michigan *ClimateProgress* [Read more](#)

Incident reports (continued)

USA: BP CONFIRMS OIL SPILL INTO LAKE MICHIGAN FROM WHITING REFINERY

March 25 - Less than a year after BP started up a new unit to process Canadian tar sands at its Whiting refinery, the company reported today that a malfunction allowed a slug of crude oil into Lake Michigan a few miles away from the Chicago city limits.

It remains unclear how much oil spilled into the lake or how long the discharge continued. Workers at the refinery reported an oil sheen on the water about 4:30 p.m. Monday, and an official from the U.S. Environmental Protection Agency said the leak was plugged by the time he arrived at 9 p.m. *ChicagoTribune* [Read more](#) [Thanks to ISCO Committee Member, Marc K. Shaye HonFISCO]

More news reports on this incident –

March 25	<i>FuelFix</i>	BP, feds cleaning up oil spill in Lake Michigan	Read more
March 27	<i>The Maritime Executive</i>	Cleanup Operations Continue in BP Refinery Spill	Read more
March 28	<i>Chicago Tribune</i>	BP more than doubles estimate of Lake Michigan oil spill	Read more

NIGERIA: SHELL DECLARES 'FORCE MAJEURE' ON NIGERIA CRUDE EXPORTS

March 26 - Anglo-Dutch oil giant Shell said Wednesday it had declared a "force majeure" on crude oil exports from Nigeria as it struggles to repair a sabotaged pipeline.

Shell's subsidiary in Nigeria said the force majeure was effective from Tuesday "due to ongoing repairs on the 48-inch crude export line at Forcados Terminal in the Western Niger Delta". *GlobalPost* [Read more](#)

USA: HIKERS FIND UNREPORTED OIL SPILL INTO GRAND STAIRCASE MONUMENT

March 26 - Federal officials are investigating an apparent spill from an aging Garfield County oil field that has contaminated a wash flowing into Grand Staircase Escalante National Monument.

The Bureau of Land Management's Utah state office, which administers the monument, sent a team to examine the leak Wednesday, a day after receiving photographs from hikers who discovered oil damage over a 4-mile stretch of Little Valley Wash. The spill, which may have occurred years ago, is the second time in as many years officials have looked into oil escaping the Upper Valley oil field, operated by Citation Oil and Gas Corp. *The Salt Lake Tribune* [Read more](#)

Other news reports from around the world

NEWS REPORTS FROM USA

March 24 - NY asks feds to update oil spill response plans

New York officials asked the Environmental Protection Agency on Monday to update a contingency plan for dealing with oil spills amid the rapid expansion of rail shipments of crude oil from North Dakota across New York to coastal refineries.

State Department of Environmental Conservation Commissioner Joe Martens sent a letter Monday to EPA Administrator Gina McCarthy. He said under the Oil Pollution Act of 1990, the EPA is responsible for creating Inland Area Contingency Plans to improve preparedness for oil spills. *The Wall Street Journal* [Read more](#)

March 24 - BP oil spill linked to heart defects in tuna and amberjack, new study says

Oil from **BP's Macondo** well has again been linked to heart defects in embryonic and newborn **bluefin** and **yellowfin tuna** and in **amberjack**, key commercial, open water fish that were spawning in the Gulf of Mexico at the time of the catastrophic blowout, according to a peer-reviewed lab study released Monday by the **National Oceanic and Atmospheric Administration**. *The Times Picayune* [Read more and watch video](#)

March 24 - On Exxon Valdez's 25th anniversary, National Wildlife Federation comments on Galveston Bay spill

On **the 25th anniversary of the Exxon Valdez oil spill** Monday (March 24), National Wildlife Federation president **Larry Schweiger** commented on **the recent Galveston Bay spill**, saying in part that "impacts of oil spills continue long after the TV cameras have gone home."

The Exxon Valdez oil tanker ran aground on March 24, 1989, spilling an estimated 10.8 million gallons of crude oil into Prince William Sound. On Saturday, an oil barge collided with a ship in Texas' Galveston Bay, spilling more than 168,000 gallons of oil. *The Times Picayune* [Read more](#)

NEWS REPORTS FROM USA (Continued)

March 24 - Exxon Valdez: what lessons have we learned from the 1989 oil spill disaster?



Photo: Staining the vista of the Chugach Mountains, the Exxon Valdez lies atop Bligh Reef two days after the grounding on 25 March 1989. Photograph: Natalie B Fobes/NG/Getty Images

It's been 25 years to the day since human error allowed the Exxon Valdez tanker to run aground in the pristine waters of Prince William Sound in the Gulf of Alaska, dumping 11 million gallons of crude oil in what would become the greatest environmental disaster for an entire generation.

Even after the recent Deepwater Horizon incident in the Gulf of Mexico — a much larger accident in terms of the amount of oil released — the spectre of Exxon Valdez remains fresh in the minds of many Americans old enough to remember

the wall-to-wall media coverage of crude-smothered rocks, birds, and marine mammals.

In the quarter century since the Exxon Valdez foundered, changing economic and climatic conditions have led to increased Arctic shipping, including increasing volumes of petroleum products through the Arctic. Sadly, apart from a few areas around oil fields, there is little to no capacity to respond to an accident — leaving the region's coastal indigenous communities and iconic wildlife at risk of a catastrophe. *The Guardian* [Read more](#)

March 24 - Exxon Valdez - Changed a Nation 25 Years Later

On March 24, 1989, the worst oil spill of its time began when the supertanker Exxon Valdez, ran aground on Bligh's Reef in Prince William Sound. About 257,000 barrels (35,000 metric tons) were spilled when the ship's hull was ripped open after midnight on the 24th. The U.S. Coast Guard was notified within an hour of the accident, as was the general manager of the Alyeska Pipeline Company in Port Valdez, a joint venture between major oil companies, but, he simply sent an underling to see how bad the accident was and went back to bed.

It was not until daylight the follow morning that the magnitude of the accident was revealed. Huge amounts of oil were seeping into the sound during spring when wildlife was returning to the region. Alyeska, who was responsible for maintaining oil reponse equipment, spent the day loading booms and oil cleaning equipment onto several barges, which were buried under the snow. But, more than 12 hours after the of loading the gear onto vessels, it all had to be unloaded because it was the wrong equipment. So, it took about 36 hours after the accident before the first booms were deployed to contain the oil discharge of the disabled tanker's cargoes. *The Maritime Executive* [Read more](#)

March 26 - West Virginia Chemical Spill Into Elk River Contaminating Air and Water Quality, According to Study

In the more than two months since the Jan. 9 chemical spill into West Virginia's Elk River, new findings reveal the nature of the chemicals that were released into the water and then into the air in residents' houses.

"Based on our increasing understanding of the chemicals involved in the water crisis, the complexities and implications of the spill keep growing," said Andrea Dietrich, professor of civil and environmental engineering at Virginia Tech. "People are still afraid to drink the water; odors persist in schools, residences, and businesses; data are still lacking for the properties of the mixture of chemicals in the crude MCHM that spilled." *Newswise* [Read more](#)

March 26 - BSEE Opens Comment Period for National Preparedness for Response Exercise Program Guidelines

The Bureau of Safety and Environmental Enforcement (BSEE) published a notice in the Federal Register yesterday inviting public comment on the updated National Preparedness for Response Exercise Program (PREP) Guidelines. This notice is being published by BSEE on behalf of the National Schedule Coordination Committee (NSCC), a collaborative effort comprised of representatives from the U.S. Coast Guard (USCG), Environmental Protection Agency (EPA), the Pipeline and Hazardous Materials Safety Administration (PHMSA) under the Department of Transportation, and BSEE under the Department of Interior.

The Oil Pollution Act of 1990 (OPA 90) requires that industry representatives and government officials conduct oil spill response exercises to ensure that personnel and equipment are ready to respond to oil spills. The PREP is a voluntary program developed to

Other news reports from around the world (continued)

NEWS REPORTS FROM USA (Continued)

provide a mechanism for compliance with the OPA 90 exercise requirements. The first PREP Guidelines were published in August 1994 and provide useful information, including the Federal government's plan to conduct six government led and 14 industry led large scale exercises annually. They also communicate the federal government's plans to ensure that at least one exercise is conducted in each of the 42 USCG Captain of the Port zones and each of EPA's 10 Regions every three years. *BSEE* [Read more](#)

March 28 - Team to re-enter New Mexico nuclear waste site after radiation leak

An investigative team plans to re-enter an underground nuclear waste site in New Mexico next week for the first time since an accidental release of unsafe levels of radiation there last month, a U.S. Energy Department official said Thursday. *Global Post* [Read More](#)

NEWS REPORTS FROM CANADA

March 22 - Kevin Gardner: Spill Response in Burrard Inlet



Photo: The vessel Burrard Cleaner No. 9 demonstrates how its booms surround oil spills so they can be cleaned up.

How quickly would an oil spill be cleaned up in Burrard Inlet? This is rightly an important question for communities surrounding the inlet. As one of four spill-response organizations in Canada, and the only one on the West Coast, it is our responsibility to respond to oil spills in the inlet.

Western Canada Marine Response Corporation (WCMRC) began operations in 1976 as an industry co-op under the name Burrard Clean. At the time, our duty was to provide spill response within Port Metro Vancouver's waters. We are now responsible for spills along the entire B.C. coastline. We currently have large warehouses in Burnaby, Duncan and Prince Rupert and equipment caches all along the coast, concentrated where shipping traffic is heaviest.

Response organizations in Canada are regulated by Transport Canada and funded by the shipping and oil industries. Response times, capacity and planning standards were enshrined in law in amendments made to the Canada Shipping Act in 1995. As a Transport Canada certified response organization we need to demonstrate our ability to respond to spills on a regular basis to maintain our certification. Annually Transport Canada audits WCMRC equipment, reviews training commitments and attends both Oil Handling Facility and WCMRC exercises. *The Province* [Read more](#) [Thanks to Gerald Graham, World Ocean Consulting]

Other news reports from around the world (continued)

AUSTRALIA: BOTANY OIL SPILL HITS WILDLIFE, LOCAL ANGLERS SAY

The pollution has been described as a 'sheen' rather than a 'spill'. Photo: Recreational Fishing Alliance

March 25 - Fish and birdlife in Botany Bay have been "devastated" by an oil spill from the Caltex Kurnell Refinery with the pollution washing up on the shore of a nearby national park, a local fishing group claims.

Caltex, though, said the pollution was caused by heavy rain triggering an overflow from containment areas. The spill was a small one and was quickly contained by crews from the Sydney Ports Corporation, the company said.

Stan Konstantas, president of the South Sydney Amateur Fishing Association and a local resident, said local anglers had started calling the Environment Protection Authority after 3pm after a slick began spreading across the bay. Clean-up vessels took hours to arrive, he said. *The Sydney Morning Herald* [Read more](#)



Other news reports from around the world (continued)

NIGERIA: PIPELINE VANDALS STRIKE AGAIN IN YENAGOA

March 26 - Illicit activities of oil pipeline vandals have left holes on a pipeline belonging to the Nigerian Agip Oil Company (NAOC) and resulted in crude oil spills in Ikarama community, Yenagoa, Bayelsa State. The damaged pipeline in Ikarama oil fields was said to be spewing oil from three points into the environment after vandals attacked it.

Ikarama is known as a hotbed for pipeline sabotage in the Niger Delta region with Agip raising the alarm that 90 per cent of the spills that had occurred so far in the area were the handiwork of oil thieves. *Daily Times NG* [Read more](#)

THAILAND: EXPERT URGES OIL SPILL ACTION

March 28 - Better oil spill prevention measures are needed to protect Thai waters from chemical pollution, Chulalongkorn University's engineering faculty says. Lecturer Pisut Painmanakul said authorities have failed to learn any lessons from last year's PTT Global Chemical oil spill crisis off the coast of Rayong.

"We have not adopted any measures to create more efficient prevention measures, and have not adopted any measures to create more efficient prevention measures, and have not succeeded in the environmental remediation process," he said.

He was referring to the pipeline operated by PTTGC Plc which burst while transferring oil to a tanker on July 27 last year. An estimated 50,000 litres of crude leaked into the sea near Map Ta Phut. The incident was one of at least 10 oil spills reported in Thailand since 1997, said Mr Pisut, who is also a member of the National Committee on the Prevention and Combating of Oil Pollution. *Bangkok Post* [Read more](#)

ISCO News

YOUR EDITOR NEEDS YOUR FEEDBACK

1. As in most weeks many of our members will be thinking "there's no news from where I am". With members in over 45 countries the news content of **your** Newsletter should be more balanced. With limited time available, I struggle to find interesting news reports from non-English-speaking countries. You can help me to correct this by sending me news (in English language) from your part of the world.
2. I do try, but sometimes don't succeed, in keeping the size of the Newsletter down to about 10 or 12 pages at most. Keeping news reports brief helps. The intention is that you can scan the Newsletter quickly and use the links provided in a selective way to access those news reports that you want to read in full. However, it does appear that some readers make little use of the provided "Read more" links and I wonder if some readers find this difficult.
3. It has been some time since the Newsletter published a series of technical articles – for example those on **In-situ Burning** and on **Remote Sensing** (contributed by Dr Merv Fingas) and **Response to Inland Oil Spills** (contributed by Mark Francis). With limited feedback from readers it is difficult to know how well these articles were received but their inclusion is certainly aligned with ISCO's aims to disseminate practical knowledge. If you would like more articles of this kind, please let me know.
4. Your feedback on Newsletter content that you like and find most useful would be appreciated. I am always looking to improve the ISCO Newsletter and your comments will be welcomed.
5. Contributions by way of news and articles are particularly welcome. Contributions will be acknowledged in the newsletter.
6. Currently, the Newsletter is delivered free of charge via email to some 1,400 subscribers and is also circulated internally by many companies and organisations. We aim to increase this circulation and your help in introducing new readers **and new members** is greatly appreciated. ISCO needs membership income to continue its work, including the publication of this newsletter.

John McMurtrie john.mcmurtrie@spillcontrol.org

Science and Technology

"SUPER BACTERIA" CLEANING UP AFTER OIL SPILLS

Norwegian researchers in Trondheim have achieved surprising results by exploiting nature's own ability to clean up after oil spills.

March 10 - We all know that [marine bacteria](#) can assist in cleaning up after [oil spills](#). What is surprising is that given the right kind of encouragement, they can be even more effective.



"We think that the data obtained from these experiments will be of considerable importance to the oil companies", says Roman Netzer at SINTEF. Credit: Thor Nielsen/SINTEF

"We know that oil spills happen – and that they will happen again", says Roman Netzer, a researcher and biologist at SINTEF. "We also know that this can have a major negative impact on the natural environment. This is why we've been studying a series of chemical and biological analytical techniques to assess the levels of seriousness of oil spills. We also wanted to find out whether so-called bioremediation represents an effective approach to cleaning up after such accidents", he explains.

Bioremediation is nature's way of cleaning up. Plants, bacterial decomposers or enzymes are used to remove contaminants and restore the balance of nature in the wake of pollution incidents.

When we clean up after an oil spill of a given size, such as along our shorelines, we start by applying mechanical methods using spades and brooms, combined with chemicals. However, we shouldn't deceive ourselves, even when the worst of the spill has been cleared away. The surface usually conceals oil buried deeper in the sediment.

"It is here that biological, or bioremediation, methods, come into their own", says Netzer. "This approach can make cleaning up operations even more thorough, and cost-effective. We wanted to find out what works – and how. And not least to gather data that can be used to support decision-making processes in situations where nature needs that little extra help" he explains.

So the researchers set up a number of experiments in the marine laboratory. Their aim was to look into how the microscopic residents of the oceans, such as bacteria and other microbes, can assist us in cleaning up pollutants, and whether they are capable of restoring the natural balance afterwards. And not least, to determine the limiting factors involved in this process. It was only after they had failed to achieve any significant response from their initial experiments, causing them to change the experimental parameters, that their sensational results emerged. *Phys.Org* [Read the complete text of this article](#)

Case study

INCIDENCE OF CHLORINE LEAKAGE AND CONTROL

Incidence of Chlorine leakage at Govindpura Industrial Area on 05th and 06th March 2014 Leak Control and Neutralization Mission successfully accomplished by ERC, MPPCB, Bhopal

Posted by Gunwant Joshi on March 23, 2014 and reproduced here with acknowledgement to the Indian Environment Network

A Gas leak was reported at Govindpura Industrial Area from the premises of a scrap dealer by the Regional officer, Bhopal at about 7 PM . The premises was identified to be at Plot No. 7/7, Sector 'H'. while cutting the scrapped Chlorine cylinder with a Gas cutter. Similar incidence is reported to have occurred on 12th Februry at Firozpur, Punjab, where a junk dealer tried to cut a chlorine cylinder. Both the incidences are in blatant violation of Gas Cylinder Rules, 2004.

The local fire brigade and the Officials of Department of Industrial Health & Safety were informed by the OIC Emergency Response centre who also moved to the site for taking the stock of the situation. The scrap dealer informed that he had received a scrap consignment in which a tank with a valve was there and his men attempted to cut that tank at about 5PM when some pungent gas started leaking from the tank. All the men fled from the scene and there was a panic in the neighborhood. Some of his men started splashing water on tank which resulted in thick white cloud and aggravated the situation.

By the time the officers of DIHS & ERC reached the site there were no lights in the work area and it was not possible to reach anywhere in the vicinity of the source of the leak but it could be ascertained that the gas was chlorine. Since none of the first responders reached the site, the BHEL safety officer was requested over phone to dispatch the CISF fire & safety response unit to reach the site with SCBA facility so that the assessment of the leak can be made and some action can be taken. The CISF men reached the site at about 9 PM and it was decided that men with SCBA shall reach and find out the size of the leak so that further action may be decided. By this time the leak had also reduced as there was quite some ice. A water screen was set-up by the CISF fire brigade and dragon lights were put on to improve visibility and access to the tank and after some feedback from the scrap dealer's men involved in the cutting operation, the site of hole could be traced to be circular and of about a 10 rupee coin. A wooden peg was carved and then it was sent with the CISF men to be put in the gaping hole. The situation seemed to be under control and there did not seem immediate grave concern and it was thought that the issue may be resolved next day with the. One more visit to site by 1 am confirmed that everything was OK.

INCIDENCE OF CHLORINE LEAKAGE AND CONTROL (Continued)

Next day, ie. 06/03/2014 morning, the local Industrial Association office bearer informed that only some pungent smell was there and there was no concern. The leakage of chlorine gas from a scrapped cylinder in the premises on 5th evening had created panic in the area and affected the workers in the surrounding industries. A CISF personnel & two workers were also affected and were sent to the hospital for first aid after coughing and vomiting problem. The ERC scientist was deputed to visit the place with Regional Office officials to take the stock of situation and to get the paperwork & other relevant documents, permissions and license etc. of the Occupier/Scrap vendor. The Joint Director, DIHS informed the ERC on phone that the occupier does not attract any of their concern as it is a scrap dealers premises and not a factory and hence they shall not attend it any more.

There was pungent and penetrating smell of chlorine inside the premises at the time of inspection. The details about manufacturer, supplier or test date etc. were not visible on the cylinder. The cylinder was lying in open on soil surface. Fortunately there was some ice formation on the outer surface of the cylinder forming a good insulation which helped in reduction of vaporization by restricting transmission of external heat into the cylinder. As the Sun advanced chlorine emission rate increased due to rise in ambient temperature. There fore this was informed to the ERC, The district administration, Nagar Nigam chief engineer and BHEL officials were requested to send the help respond the situation. Communication was also made to 108 Ambulance to reach the site. Since the chlorine concentration started rising vary rapidly it was decide to get the leaking gas neutralized on the spot as any attempt to shift Chlorine cylinder seemed counter productive and hazardous as the nearest help capable to deal chlorine issue was at Nagda about 300 kilometers away and would have taken at least six more hours to reach the site.

In the given situation a JCB machine was called to excavate a pit to accommodate the leaked cylinder for nutralization. The pit was filled with water to which Alkali solution was added and cylinder was lowered vertically in the pit with the help of hydra machine. The level of lime and caustic solution for speedy absorption and neutralization was maintained in the pit as some quantity was seeping underground to the nearby drain. Precaution was taken to ensure that the cylinder does not float in the pit by putting some extra weight on the top. Looking to the quantity of sodium hydroxide and lime consumed in the operation, the quantity of chlorine in the cylinder would have been not less than 300 kg. About 50 kg sodium hydroxide and 500 kg of lime was used in the form of slurry during the neutralization operation. Since it was a scrap cutting and fabrication unit, it did not have any safety equipment, neutralizing system or cylinder handling machines, therefore, everything required for tackling the crisis was to be pooled up from outside.

The entire operation could be completed successfully with the sincere support extended by BHEL & CISF officials and also by local Industries Association's office bearers. CISF responded to the call on both the days and reached at the site with required breathing apparatus, Their Personal Protective Equipments and fire brigade was critical to leak control and in lowering down the leaking chlorine cylinder in the make shift neutralization pit and to establish water curtain. The Medical Help Line (108) also promptly responded to the call. Technical guidance provided on phone by Mr. H.S. Sehgal, Chlorine Expert, Vadodara, proved to be very useful during entire neutralization operation which lasted for about 6 hours. Emergency Response Centre gratefully acknowledges the sincere, selfless and timely help of all the concerned in meeting the crisis during Leak control and Neutralization activity.

The photographic record of some steps taken during the activity are loaded on ERC web site www.ercmp.nic in under recent emergency tackled. [Source article](#) Website of the Indian Environment Network : <http://www.paryavaran.com/>

Products and Services

Editor: The primary purpose of this Section in the ISCO Newsletter is to help Corporate Members of ISCO to share news about new products and services that they have recently developed. In the absence of such news, your editor may, from time to time, report on other products and services that he comes across and thinks may be of interest to our readers.

SAMPSON DOUBLE BARREL FILTER HOUSINGS



The Double-Barrel filter line is the new way to do hydrocarbon removal for in-situ applications because of their light weight and ease of manipulation compared to the standard carbon drum. Use the MAGNUM media cartridges to meet the requirements of your application.

Their unique light body design and ease of maintenance makes them ideal for on site applications or closed space environments and processes.

Features:

1. All the parts of this filter series are made of uPVC
2. uPVC material has a good corrosion resistance
3. Lightweight design and very easy to install
4. The inlet and outlet are in line
6. Cartridges are easy to install and replace
7. The lid and the body are connected using flanges to ensure the housing can withstand higher pressure

[More info](#) [View video](#)



In this issue of the ISCO Newsletter we are printing No. 169 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 169: THE NEW RESPONSE PLANS AND THEIR USES

Articles 163-168 summarised my new knowledge-accepting/belief-rejecting contingency plan, the knowledge thus accepted having been reviewed in articles 1-147 and the beliefs thus rejected having been reviewed in articles 103-106, 116-130 and 147-162.

Accordingly, this article now shows how incident-specific values of the physicochemical properties identified in the new contingency plan can determine whether or not incident-specific releases of oils/HNS will float, sink, evaporate, dissolve or disperse, and the responses/non-responses appropriate thereto at sea, in inshore waters and on the shoreline types with which they may potentially interact (c.f. articles 92-102 and 137-140).

Thus, when a liquid or solidifying release arises from an impact-damaged casualty, the new contingency plan acknowledges that the first step is to avoid subsequent weather-damaged releases; that the second is to ascertain the values of the physicochemical properties identified by the plan and the specific incident as being relevant to its cargo and bunkers; that the third is to note the fates and effects of any releases in terms of floating or sinking, fractional or total evaporation, total solution, or progressive dispersion according to the half-life/viscosity relationship previously tabulated for crude oils and bunkers (c.f. articles 31-46); that the fourth is to calculate the fractional evaporative loss from any incident-specific crude oil cargo from its fractional distillation profile as tabulated (*ibid*), this being usually 25-30% in < 5hours; that the fifth is to calculate the time to reach shore from the vector sum of 100% of the tidal vector and 3% of wind vector and to apply the respective dispersion half-lives of the non-volatile fractions of cargo/bunker oils and of non-volatile insoluble HNS to the quantified releases and to the time to reach shore, in order to estimate the quantities likely to arrive onshore and to identify the shoreline types at this location; and that the sixth is to consider, on the basis of known viscosities and half-life dispersion rates, whether dispersants or recovery, both or neither, should be applied at sea, there being no need to enhance or prevent dispersion which of itself will prevent any onshore arrival (c.f. articles 31-61, 70-102 and 131-140).

Thus, incident-specific response is to be derived from the new contingency plan by applying incident-specific values to the relevant physicochemical properties acknowledged by the contingency plan as the determinants of fate, effects and response in general.

Again, when a soluble HNS is released from an impact-damaged casualty, the new contingency plan acknowledges that this will dilute and biodegrade or neutralise; that the viscosity of insoluble liquid HNS will be < 5cSt with very few readily identifiable exceptions; that dispersion half-life will thus be < 4 hours; that there is no need to assist these natural processes; that there is no possibility of recovery; but that with respect to known toxicity-concentration relationships their decreasing concentrations in seawater may be monitored by progressive measurement down-tide of the source; and that warnings as appropriate should constitute the sole incident-specific response in such cases.

Yet again, when a gas is released from an impact-damaged casualty, the new contingency plan acknowledges that it will naturally disperse and dilute downwind of the source in an expanding diluting plume; that there is no need for assisted dispersion; and that there is no possibility of recovery, but that its concentration in the atmosphere and issuance of guidance to downwind populations as indicated by such progressive measurement should constitute the incident-specific response in these cases also.

As to the banning of net- and line-fishing, the new contingency plan acknowledges that fish never contact floating slicks unless they break the surface; that the water column in which they swim never contains dispersed oil droplets equivalent to molecular concentrations > 10-20ppm in the top metre; that these decrease rapidly with depth; that such concentrations are consistent with the absence of taint reported by taste panels served with fish caught in seawater concentrations exemplified by such as the Ekofisk blow-out; and that in respect of releases of dispersing or soluble oils/HNS such measurements of concentration, with or without panel-tasting, ought to decide the need for and duration of fishing bans.

As to banning the sale of shellfish, the new contingency plan acknowledges that oil-coated shellfish on shores and on tidal cultivation stakes are as un-sellable as would be fish drawn in nets through floating slicks; but that these must be differentiated from depurated shellfish previously in contact with oil at concentrations in the ppm-ppb ranges; and that such differentiation would reduce compensation claims which arise more from bans *per se* than from actual contamination.

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.

ENVIRONMENTAL MONITORING OF MARINE SPILLS – THE 2ND PREMIAM CONFERENCE

4th June 2014, SOAS, London.

Spills of oils and chemicals in the marine environment remain a significant threat. Therefore, the requirement for response capability, improved preparedness and effective post-incident monitoring and assessment remains undiminished. PREMIAM is an initiative aimed at improving post-spill environmental monitoring practices through the application of sound science and effective management and coordination. Premium is co-ordinated by emergency response and impact assessment experts from Cefas (Centre for Environment, Fisheries and Aquaculture Science) and is now in its 5th year. It has wide support from all relevant UK government stakeholders and fully engages the scientific, emergency response and industry communities in delivering its aims. The conduct of effective environmental monitoring in the event of marine spills of oil or chemicals is essential in order to understand environmental damage, the effectiveness of response and mitigation activities and the hazards to response workers and the general public.

The 1st Premium conference (2012) explored the relevance and importance of an effective monitoring programme to a range of stakeholders. This 2nd conference will provide an opportunity for stakeholders to understand and debate the key issues around being ready to undertake prompt monitoring and the factors that need to be in place. How can we be better prepared? How can we ensure that the effort is well coordinated and managed? And how can we ensure the necessary funds and support are in place when they are needed?

The aim of the Premium conference is to provide a forum for scientists, regulators, industry environment leads and other professionals working in the field of marine oil/chemical spill monitoring to share experience, best practice and knowledge to the wider marine emergency response community. This meeting will cover the importance of preparedness, coordination and identified funding/support to the effective conduct of marine environmental monitoring in an emergency context and will investigate the status of existing arrangements and aims to provide an essential forum for debate. Please join an excellent list of expert speakers from organisations including Defra, ITOPF, Oil and Gas UK, BP, OSRL, Marine Scotland, Maritime and Coastguard Agency, the conservation agencies and two international guest speakers, for what promises to be an excellent day.

The booking details are outlined in the full programme and can be accessed at <http://cmscoms.com/?p=1326> For any queries about the wider Premium initiative or aims please contact Mark Kirby at mark.kirby@cefas.co.uk



INTRODUCING YOUR PRESENTERS AT THE FORTHCOMING TRAINING DAYS AT CASTLE ARCHDALE ON 28-29 APRIL 2014



Chris King
Technical Director Celtic Technologies



Steve Guy
Head of Training
Briggs Marine Environmental



Paul Mullan
Managing Director
Mullan Drilling

CHRIS KING

As Technical Director for Celtic Technologies Ltd and Biogenie Site Remediation Chris is responsible for the management of teams designing, delivering and validating Celtic's groundwater remediation contracts and maintaining and deploying Celtic's multi million pound remediation equipment asset base.

Events (continued)

INTRODUCING YOUR PRESENTERS (Continued)

With over eighteen years working in the Contaminated Land Sector as both a Consultant and a Contractor, Chris has a broad range of technical competencies gained through the completion of over 100 remediation contracts to the satisfaction of all stakeholders and a similar number of contaminated land consultancy service contracts from field implementation through to commercial leadership. With direct experience in the application of over 14 remediation techniques Chris has a proven track record in the detailed design, practicable implementation and verification of achievable remediation strategies.

STEVE GUY

An experienced senior operations supervisor and senior trainer with excellent communication and presentation skills. Steve has gained experience over 23 years of responding to both marine and terrestrial incidents.

Experience in training has been gained over the last 12 years as senior trainer / training coordinator organising and delivering courses both nationally and internationally.

As well as the development and delivery of accredited marine courses Steve has undertaken the development and delivery of a considerable number of OPRC oil spill response training exercises at all levels for clients around the United Kingdom.

PAUL MULLAN



Paul began his site investigation career as a soils laboratory technician, in a well-known geotechnical company. In the following years he worked up in every section of the industry including rig manager and Health & Safety.

In 2008 Paul established Mullan Drilling Services, providing drilling and pitting with testing for both geotechnical and contaminated land investigations. A Dando Terrier window sampling rig was mainly used. Since then a geotechnical soils laboratory has been opened, and two Cable Percussion drill rigs purchased.

As part of the introduction to Land Drilling at Castle Archdale, Paul intends to sink a narrow diameter borehole using a Window Sampling rig (see picture left) with soil sample recovery in plastic liners. These can then be broken up for viewing by participants. Also on display will be well installations with associated products and different drill casing systems.

This year the ISAA Training Days are on Monday 28th and Tuesday 29th April 2014 and the event will take place at Castle Archdale, Enniskillen, Northern Ireland.

The facilities at the Castle Archdale Country Park, provided by arrangement with the Northern Ireland Environment Agency, include the marina on the beautiful Lough Erne.

Only a limited number of places are available – Bookings should be made ASAP.

This year trainees are being offered a choice of four options -

- (1) A two-day MCA Level 2 Oil Spill Response Training Course on 28 and 29 April. Satisfactory completion of the course will result in award of an MCA Level 2 Course Certificate.
- (2) Attendance at Day 2 only (29 April) of the MCA Level 2 Course covering deployment and recovery of oil spill response equipment. Note that this option does not qualify trainees for award of an MCA Level 2 Course Certificate but an ISAA Course Attendance Certificate will be issued.
- (3) A one day Introduction to Contaminated Soil and Groundwater remediation on April 28 only. An ISAA Course Attendance Certificate will be issued.
- (4) As a 4th Option you can choose to attend the Contaminated Soil and Groundwater Introduction on April 28 AND the Practical Oil Spill Response Equipment Deployment and Recovery Exercise on April 29. ISAA Course Attendance Certificates will be issued and you save £20 on the cost of booking the courses separately.

[View the detailed Training Programme](#)

[Download the online booking form](#)

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	February 2014
The Essential Hazmat News	Alliance of Hazardous Materials Professionals	March 18 issue
USA EPA Tech Direct	Remediation of contaminated soil and groundwater	March 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	Feb 1-15 2014 issue
Intertanko Weekly News	International news for the oil tanker community	No 13 2014
CROIERG Enews	Canberra & Regions Oil Industry Emergency Response Group	February 2014 issue
IMO Publishing News	New and forthcoming IMO publications	March 2014
IMO News Magazine	News from the International Maritime Organization	No 4, 2013
Pollution Online Newsletter	News for prevention & control professionals	March 26 issue
EMSA Newsletter	News from the European Maritime Safety Agency	February 2014 issue
JOIFF "The Catalyst"	Int'l Organisation for Industrial Hazard Management	January 2014 issue
Environmental Technology Online	Environmental Monitoring, Testing & Analysis	March 28 2014 issue
OCIMF Newsletter	News from the Oil Companies International Marine Forum	January 2014 issue
IPIECA eNews	Int'l Petroleum Industry Environmental Conservation Assoc'n	February 2014 issue
WMU Newsletter	From the World Maritime University in Malmo, Sweden	February 2014 issue

USA: PRINCE WILLIAM SOUND REGIONAL CITIZENS' ADVISORY COUNCIL – PROJECT STATUS REPORT

Description of Project - Objectives: Through this program, PWSRCAC develops positions and recommendations on oil spill response technologies, reviews state and federal contingency plans (C-Plans) and plan-related issues, promotes compliance with and enforcement and funding of existing environmental regulations, and promotes the incorporation of local knowledge of sensitive areas in contingency planning.

SAC News [Download the March 2014 Project Status Report](#)

You can also view details of the Exxon Valdez [25th Anniversary Commemoration Events](#) being held in Alaska.

Company news

ISCO CORPORATE MEMBER, IMBITITIVE TECHNOLOGIES HAS PRODUCED A VIDEO ON A SEVEN-YEAR HAZARDOUS & NOXIOUS SPILL RECOVERY STUDY

Japanese maritime authorities commenced a worldwide search for methodologies that could be used to more effectively mitigate the impact of HNS releases at sea. Working in cooperation with the Japanese Coast Guard, the Maritime Disaster Prevention Centre --MDPC, (Yokohama), was the lead Japanese agency tasked with the evaluation. This 7 year study tested numerous spill response scenarios with 162 of the most imported/exported HNS in Japan, only 1 technology was able to effectively capture, contain and greatly reduce the risk of vapor release, IMBIBER BEADS®.

[Read more and view the video](#)

[Imbititive Technologies Website](#)

Equipment for sale

EX-DEEPWATER HORIZON RESPONSE EQUIPMENT

We are selling \$50 million in oil response equipment from Gulf Spill see video at

<https://www.youtube.com/watch?v=E7xJs5icXTs&list=UUTz3ZqBOR-S-Uf6YMeuTNq>

Terrance Jacobs, Machinery & Equip. Asset Management Services; Auctioneer; Appraiser; Strategic Negotiations - CEO - TCL Asset Group Inc.

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 www.spillcontrol.org