



# ISCO NEWSLETTER

The Newsletter of the International Spill Response Community

Issue 391, 1 July 2013

[info@spillcontrol.org](mailto:info@spillcontrol.org) <http://www.spillcontrol.org>

## QUICK FINDER

Click on these links

[CONSULTANTS](#)

[EQUIPMENT & MATERIALS](#)

[RESPONSE ORGANISATIONS](#)

[TRAINING PROVIDERS](#)

Clicking on a company name or banner advertisement will display the advertiser's website.

## GET THE ISCO NEWSLETTER

[Join the ISCO Newsletter Mailing List](#)

## BECOME A MEMBER OF ISCO

ISCO aims to raise worldwide preparedness and co-operation in response to oil and chemical spills, to promote technical development and professional competency, and to provide a focus for making the knowledge and experience of spill control professionals available to IMO, UNEP, EC and other organisations.

There are many benefits for you in becoming a member and joining ISCO.

[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](#)

## International news

### ENVIRONMENTAL AWARDS AT OFFSHORE ARABIA 2014

Offshore Arabia 2014 has announced the "Environmental Awards" that will be running in conjunction with the Offshore Arabia Conference and Exhibition which will be held in 2014

The 'Environmental Awards' provide an opportunity to honour companies that have contributed towards the protection, safety and betterment of the environment. These awards have received acclaim on both regional and international levels.

The Environmental awards ceremony will take place on the evening of 27th February, as part of a prestigious dinner that will host regional and international VIP's, dignitaries and prominent leaders of the industry. This will be a truly high level event, celebrating the importance of working towards the environmental goals committed to by the industry.

The Award Categories are:

- **Excellence in Environmental Applications**

Documentation and special training in the field of HSEQ with a special emphasis on the process used and applied to ensure total workforce compliance, prevention measures and total reliability. The use of environmentally friendly products and the application of the industry's best-practices.

- **Excellence in Capability & Response**

Contingency planning, response strategies, preparedness in response to incidents, waste management and capability. Availability of in-house oil spill equipment, trained personnel and other logistics materials.

- **Excellence in Environmental Projects and Products**

Undertaking of sustainable projects in the environment, coastal protection, air pollution controls, renewables, general environment protection and conservation. Manufacturing, and/or specially designed projects/or products that help in minimizing environmental impact, and/or are more effective in eliminating any pollution

- **Excellence in Environmental Technology**

Manufacturing, and/or the utilization of the latest technologies, that attain the desired objectives of protecting the environment and helping to minimize any possible adverse impact. The use of state-of-the-art technology.

- **Excellence in Incident Command Structure**

The application of the various systems of oil spill management with clear and defined responsibilities for an effective Incident Command System(ICS).

- **Excellence in Environmental Media**

To the media that have had an important impact and made a positive contribution to the regions environment.

The deadline for submission of nominations for Environmental Awards is **1<sup>st</sup> October 2013**

[More info](#)

[Download the online form for submission of award nominations](#)

## Incident reports

### CANADA: MORE PIPELINE SPILL REPORTS

#### Oil spill reported in north Alberta

June 24 - Oil spilled from a pipeline near northwest Alberta province in Canada made its way into regional waters but was contained, pipeline company Enbridge said.

Enbridge said about 750 barrels of oil spilled from its so-called Line 37 pipeline. The company said oil spilled into a small creek and unnamed lake about 44 miles southwest of Fort McMurray. *UPI.com* [Read more](#)

#### Pipeline spills more than 5000 litres of oil in northern Alberta

June 23 - A pipeline operated by Pennwest Exploration has leaked more than 5000 litres of oil in northern Alberta and co-ordination of clean-up efforts is being hampered by [flooding](#) at the company's head office in Calgary.

The Lubicon Lake First Nation says Pennwest believes the spill took place on Saturday evening in an area that is the proposed location of future reserve lands. It says the company initially said the spill affected surface waters and muskeg lands over 2.5 square kilometres. *Global News* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

#### Second spill in as many weeks shuts Kinder Morgan pipeline

June 28 - As one Kinder Morgan crew worked on stemming an oil leak from its Trans Mountain pipeline in British Columbia on Thursday, another worked on winning over the province's reluctant public for a major expansion of the line.

It was the second time in as many weeks the company was forced to shut down the only pipeline linking the Alberta oilfields with a West Coast shipping port because of a leak, this one about 40 kilometres east of Hope. *The Vancouver Sun* [Read more](#)

---

### OMAN: NINE RESCUED FROM CYPRIOT SHIP NEAR SULTAN QABOOS PORT



*Photo: Omani Coast Guard officials cleaning up the coast in Muttrah, Muscat*

June 23 - A commercial Cypriot ship, Nisar R3, loaded with 816 tonnes of bitumen, sank just 1.4 nautical miles from Sultan Qaboos Port on Wednesday.

The sinking of the ship led to the death of the ship's Iranian captain, while nine of the ship's Indian crew members were rescued by the Omani Coast Guard and naval vessels. The rescue vessels also recovered some of the bitumen, which had spread to the shores of the wilayats of Muscat and Muttrah.

Meanwhile, Sulaiman Al Akhazami, director of the Department of Planning and Studies, which acts as a pollution operations centre at the Ministry of Environment and Climate Affairs, said a committee has been formed to tackle this incident.

Al Akhazami noted that the committee has activated a plan to combat oil pollution by forming field teams to conduct anti-pollution operations and recover the contents of the ship. It has also commissioned companies that specialise in combating oil pollution to clean up the pollution created by the incident. *Times of Oman* [Read more](#)

---

### INDIA: AFT SECTION OF MOL COMFORT SINKS

June 27 - In an update this morning [Mitsui O.S.K. Lines, Ltd.](#) reported that the aft part of the containership *MOL Comfort* sank in the open sea near the West Coast of India (14'26"N 66'26"E) in about 4,000m of water.

About 1,700 containers aboard the aft part sank with this section of the vessel. Some are confirmed floating near the site.

About 1,500 metric tons of fuel oil was estimated to be aboard in the tanks of the aft section, however no large volume of oil leakage is confirmed at this moment. *The Maritime Executive* [Read more](#) [Photos of the sinking from gCaptain](#)

## Incident reports (continued)

### INDIA: ANOTHER OIL LEAK IN NORTH CHENNAI, PIPELINE FIXED

June 24 - Sunday morning saw yet another oil leak in north Chennai, this time opposite the IOC bus terminus in Tondiarpet on Kathivakkam High Road.

The leak in the pipeline belonging to Indian Oil Corporation (IOC) was noticed by some local residents and a few policemen who then contacted the oil major.

According to an IOC official, there was also a pressure dip in the pipeline which caused it to pump out the lube oil that was being sent from Chennai Petroleum Corporation Limited to Chennai port. *The Hindu* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

---

### RUSSIA: CONFUSION REIGNS OVER MONTHS-OLD OIL SPILL IN NORTHWEST RUSSIA'S KOMI REPUBLIC

*Officials say a pipeline that ruptured as long ago as winter has been for the past several weeks clogging a Northwest Russian river that empties into the Arctic Ocean with oil. komionline.ru*

June 12 - Nearly 120 people including several volunteers from the local community were working to eliminate the residue of a months' old spill into local rivers in the Northwest Russian Komi Republic after pipelines owned by the Rusvietpetro sprang a leak as far back as winter, officials in the region reported Tuesday. [Charles Digges, Anna Kireeva](#), 12/06-2013

The spill, which has been hushed for days by the local administration in the Komi Republic, according to activists and independent journalists, was first noticed on May 22, when local residents of Kolva Village began to see huge slicks of oil flowing down the Kolva River toward the Pechora River, and further out to the Barents Sea.



A Bellona source within the Komi administration, who spoke anonymously because he was not authorized to discuss the event, said in an email interview that the leak has been stopped, but that reaching estimates on how much oil spilled, as well as establishing the reason for the spill, will be difficult.

Greenpeace International reported in a [June 4 posting](#) that 100 tons, or 730 barrels of oil had leaked into the Kolva river. *Bellona* [Read more](#)

---

### UK: 'FLYTIPPING' BEHIND WINDSOR RIVER THAMES OIL SPILL

June 23 - The Environment Agency suspects illegal fly tipping was behind an oil spill on the River Thames near Windsor.

About 150 swans were rescued from the spill between Windsor Bridge and Eton Bridge on Friday night. The birds are being cared for by charity Swan Lifeline which described the spill as "one of the worst it's ever seen".

Thames Water crews were called out to investigate the spill at 22:30 BST on Friday *BBC News* [Read more](#)

---

### USA: CARGO CONTAINERS HOLDING HAZARDOUS MATERIALS CATCH FIRE AT PORT ELIZABETH

June 24 - Two containers holding hazardous materials had to be extinguished this afternoon at Port Elizabeth after the machine carrying them caught fire, officials said.

The fire started on a straddle carrier at a port facility along Corbin Street, said Kelly Vence, an Elizabeth spokesperson. Straddle carriers are tall vehicles used to lift and transport containers. The fire then spread to two containers that were on board the carrier. Both contained hazardous material, though officials were unsure exactly what was inside, Vence said. *NJ.com* [Read more](#) [Thanks to ADR Training UK]

## USA: MAJOR OIL SPILL EXERCISE HELD AT VALDEZ

June 23 - Government and industry partners recently conducted a major oil spill response exercise at Valdez, where tankers load Alaska North Slope crude. The June 12-13 exercise involved the U.S. Coast Guard, the Alaska Department of Environmental Conservation, the city of Valdez and Alyeska Pipeline Service.... *Petroleum News* [Read more](#) (Subscription required)

---

## CANADA: EXPERIENCE MOVING OIL BY TANKER ON EAST COAST COULD BE APPLIED TO INCREASED WEST COAST TANKER TRAFFIC, IHS STUDY SAYS

June 27 - Canada has extensive experience moving crude oil by tanker, with policies and regulations similar to other major shipping nations, says a new IHS study that reviews oil tanker activity and regulations in light of proposed new pipeline projects to accommodate increased oil production led by the growth in oil sands. The proposed projects could more than double oil tanker traffic on Canada's West Coast.

Oil accounts for a third of all Canadian cargo, and it is the largest international commodity handled by the shipping industry. Canada is party to the same international agreements and rules – such as those set out by the International Maritime Organization – as many other major shipping nations, including the requirement for tug escort and pilotage. Further, if an oil spill were to occur, compensation in Canada exceeds what is available internationally.

The IHS CERA Oil Sands Dialogue study, *Assessing Marine Transport for Canadian Oil Sands on Canada's West Coast*, developed in conjunction with IHS Maritime, provides a review of oil tanker activity and regulations to better inform discussions surrounding potential tanker movements on Canada's West Coast. The study draws on the IHS Maritime extensive database of ship movements which includes global data on tanker movements, incidents and oil spills. *Oil & Gas Financial Journal* [Read more](#)

---

## USA: SCIENTISTS EXAMINE OIL SPILL'S IMPACT ON OYSTERS

June 24 - More than three years since the BP oil spill, an LSU AgCenter scientist is working to determine how oil impacted oysters, which have been struggling to recover since 2010.

Jerome La Peyre, a scientist who specializes in oyster diseases in the LSU AgCenter School of Animal Sciences, is studying the effect of oil by evaluating biomarkers that are used to assess oyster health.

These biomarkers include looking at the whole oyster performance down to its cells, proteins and genes.

La Peyre's research is part of a multi-national research initiative studying the impact of the oil spill. The work is being paid for by research money set aside by BP and administered independently through the Gulf of Mexico Research Initiative. *The Houma Courier* [Read more](#)

---

## USA: THREE YEARS AFTER OIL SPILL, A SLOW RECOVERY HAUNTS KALAMAZOO RIVER

June 24 - A canoe trip on the Kalamazoo River today provides sights of fish jumping, a heron on her nest, a turtle sunning on an exposed log. The river area has made a significant, undeniable comeback from the horrors of nearly three years ago, when the worst inland oil spill in U.S. history contaminated its waters, banks and floodplains.

But dip a canoe oar into some places on the river bottom, and a blue-green sheen and oily clumps still rise. Look closely enough at green river islands, and the last foot or two of some tree trunks wear a black stain, a remnant of the spill that cleanup crews couldn't remove.

Mixed among fishermen and kayakers are state and federal environmental crews and employees from Canadian oil transport giant Enbridge, continuing to test and skim and scoop. *Detroit Free Press* [Read more and watch video](#)

---

## NIGERIA: NAVY ARRESTS VESSEL WITH SUSPECTED TOXIC WASTE

June 21 - The Nigerian Navy Ship (NNS) Beecroft, a base under the Western Naval Command (WNC), Thursday handed over a vessel, MV Eurocargo Salerno, suspected to be laden with toxic waste to the Nigerian Maritime Administration and Safety Agency (NIMASA) for further investigation.

The vessel and its crew were apprehended on Wednesday, at Breakwater, where she was berthed and escorted to AMPL Terminal 12, Tincan Island Port, Apapa, Lagos, where the crew was questioned on the contents of the vessel.

*This Day Live* [Read more](#)

---

## Other news (continued)

### IRELAND: A DUMPING GROUND FOR HAZARDOUS WASTE

June 25 - Hazardous asbestos waste is being dumped in areas of Co Kildare by unscrupulous fly-tippers who most likely dump the waste at night before making a rapid getaway. Three incidents involving asbestos have been recorded recently, one of them very close to a residential area in Newbridge. *Kildare Nationalist* [Read more](#)

### CANADA: JAPANESE TSUNAMI VESSELS ARRIVE IN B.C. WATERS



*Photo: Denny Island resident Jean Marc Leguerrier stands next to a hard-rubber fender, used on ocean-going ships but found recently on the central coast and thought to have originated from the Japanese tsunami. Photo courtesy of Ian McAllister.*

June 25 - A bedraggled fleet — swamped, capsized, crawling with marine life and not a crewman in sight — continues to complete its journey across the North Pacific from the Japanese disaster

At least eight vessels suspected to be from the 2011 tsunami have now drifted into B.C. waters, everywhere from the northern tip of Haida Gwaii to Aristazabal Island and Klemtu, on the north and central coast, and to the west coast of Vancouver Island.

Large amounts of debris — not even officially being tracked by the province — are also making their way to the central coast

to be converted into floats by local residents. “We’re all competing because some of the stuff is really amazing,” Ian McAllister of the environmental group, Pacific Wild, said in an interview. *The Vancouver Sun* [Read more](#)

### USA: DRINKING WATER CONTAMINATED BY GAS NEAR FRACKING SITES IN US

June 24 - A study of 141 drinking water samples from bore holes in Pennsylvania found higher levels of methane, ethane and propane in those within a kilometre of shale gas fracking sites.

The gases were not found at concentrations that would affect health, but the findings will add to concerns of critics that the process could have unforeseen consequences for nearby residential areas.

The study will also raise concerns about the risk of explosions if pockets of methane are able to form in pipes.

British experts said the findings should not halt attempts to bring fracking to the UK, but highlighted the need for careful monitoring of water quality around drilling sites. *The Telegraph* [Read more](#)

### NORWAY: PLATFORMS RELEASE OIL SLICKS AT SEA

*Statoil's Troll C platform is among those seen with a large oil slick extending from it. PHOTO: Øyvind Hagen/Statoil*

June 17 - Offshore oil installations on the Norwegian Continental Shelf have spilled oil more than 40 times so far this year, according to an overview from Kystverket (The Norwegian Coastal Administration). It's in charge of oil spill preparedness and admits that oil installations send oil into the sea almost every day.

Newspaper Dagsavisen reported Monday that large quantities of oil are regularly released into Norwegian waters, sometimes with the approval of the authorities. The newspaper gained access to photographs from Kystverket's surveillance flights that clearly show oil slicks extending from platforms including Draugen, Troll C and Staffjord A during the past year alone.



The oil companies, however, have legal permission to release water that contains oil every year. The slicks registered by Kystverket and seen in the surveillance photos reportedly are within the allotted amounts, but environmental officials think they're set too high. *NEWSinENGLISH.no* [Read more](#)

## Other news (continued)

### USA & CANADA: IN KEYSTONE BOOST, U.S. STUDY SEES NO ADDED RISK FROM CANADA OIL

June 25 - The Keystone XL pipeline got a boost on Tuesday as a landmark U.S.-mandated report said heavy Canadian oil is no more likely to cause pipeline leaks than other crudes, knocking back one of the biggest objections to the project.

Following a series of high-profile pipeline leaks over the past three years, environmental groups raised the alarm over the prospect that Canada's growing stream of heavy bitumen crude, which is diluted with light fuel to flow through pipelines, could corrode the lines due to its acid and mineral content.

But the National Research Council report, an eagerly awaited study that U.S. regulators were ordered to conduct by a 2011 pipeline safety law, said the oil mix flowing through U.S. pipelines for 30 years was no different in wear and tear on pipelines than other crude oils. *Reuters* [Read more](#) [Another report in E&E Publishing](#)

---

### USA: BP MOUNTS OFFENSIVE IN SPILL SETTLEMENT DISPUTE

June 26 - With an ad blitz and a tersely worded letter, BP is mounting an increasingly aggressive campaign to challenge what could be billions of dollars in settlement payouts to businesses following its 2010 oil spill in the Gulf of Mexico.

In letters that started going out Tuesday, BP warns lawyers for many Gulf Coast businesses that it may seek to recover at least some of their clients' shares of the multibillion-dollar settlement if it successfully appeals a key ruling in the legal wrangling spawned by the nation's worst offshore oil spill.

"BP reserves whatever rights it may have to pursue any legal method to recover such overpayments," company attorney Daniel Cantor wrote in the letter.

James Roy and Stephen Herman, two of the lead plaintiffs' lawyers who helped broker the deal with BP, warned Cantor that his letter "misstates the law and violates BP's obligations under the Settlement Agreement." *The New York Times* [Read more](#)  
[Another report in The Maritime Executive](#)

---

### U.S., STATE OFFICIALS FILE LAWSUIT AGAINST EXXONMOBIL OVER ARKANSAS OIL SPILL



*Photo: An Exxon pipeline in Mayflower, Ark., ruptured and spilled oil in surrounding yards a river and lake. (Photo courtesy of Mayflower oil spill Facebook group).*

June 27 - Residents of Mayflower, Ark., want payment from ExxonMobil for the environmental damage done by an oil spill there in March. In fact, they're moving so fast they've forced the state and federal government to file suit against the company to seek fines and damages just a few months after the spill.

ExxonMobil, the federal government and the state of Arkansas have already begun battling in court over the crude oil spill from [a ruptured pipeline in Mayflower, Ark., on March 29.](#)

The lawsuits seek damages from ExxonMobil caused when 5,000 barrels of diluted bitumen spilled into the yards and homes of area residents. Some 22 residents were evacuated and a local river and lake were both contaminated.

Dustin McDaniel, the attorney general of Arkansas, said the lawsuit seeks penalties and damages provided for under the Clean Air Act, Clean Water Act and other laws pertaining to the handling of hazardous materials. *Public Radio International*  
[Read more and listen to audiotaped interview and comment](#)

---

### UK: MOD TOLD TO BEGIN CLEAN UP OF DALGETY BAY

June 30 - The Ministry of Defence (MoD) has been told to clean up Dalgety Bay after being found responsible for radioactive contamination on the Fife coast.

Local MP Gordon Brown and residents demanded immediate action from the MoD after the Scottish Environment Protection Agency (Sepa) released a report confirming what many have long suspected — that the MoD is solely to blame for radioactive radium-226 found on the shore at Dalgety Bay.

But the MoD has questioned Sepa's findings, to the dismay of Dalgety Bay Community Council. In a statement, the MoD said: "The MoD will consider the report findings in detail and respond to Sepa in due course, but (it) has concerns over the adequacy and validity of both Sepa's risk assessment and its approach to the Appropriate Persons Report." *The Courier* [Read more](#)

### VETERAN SALVAGE MASTER SHELBY HARRIS ASSUMES NEW LEADERSHIP ROLE WITHIN TITAN



Veteran Salvage Master Shelby Harris has been named [TITAN Salvage](#)'s new director of marine operations in Asia, where he will bring more than 15 years of experience responding to large-scale domestic and international salvage and wreck removal projects. He will be based out of the company's Singapore office and equipment depot, a 45,000-square-foot site west of the city, and report to TITAN's Director of Operations Patrick Keenan.

Harris will be in charge of spearheading operational efforts and continuing to strengthen the team in the region, where TITAN has continued to grow its presence, response and capabilities since opening there in 2009.

"Shelby is one of the most experienced, innovative and successful salvage masters in our industry," said Keenan. "His technical acumen and operational focus will blend perfectly with the commercial expertise of our Asia General Manager Chandran Mathavan. Their leadership will help us become an even more formidable force in the region for both wreck removal and marine emergency response." [www.titansalvage.com](http://www.titansalvage.com)

## ISCO News

### ISCO WELCOMES YET MORE NEW MEMBERS

Only two weeks ago we welcomed four new members (see Newsletter 389 of 17 June) but since then another five new members have joined ISCO.

We are pleased to welcome –

#### New Corporate Members

- Markleen Ltd. - an international engineering and manufacturing group of companies dedicated to oil spill response.
- ASCC – the Netherlands-based independent consultancy firm specialised in the field of oil and chemical spill response on inland waters, coastline and at sea.

#### New Individual Members

- Mr Thiago Rocha, Mr Lenilson Macedo and Mr Helvio Aventurato – all based in Brazil and on the staff of ISCO Corporate Member, Alpina Briggs Defesa Ambiental S/A.

---

### A REQUEST FROM THE EDITOR OF THE ISCO NEWSLETTER

One of ISCO's primary objectives is to disseminate knowledge that will help members to develop their capabilities and knowledge in oil and HNS spill response, both inland and marine.

We do this by publishing technical articles – such as serialised contributions written by acknowledged experts including Dr Douglas Cormack, Hon. FISCO, Dr Merv Fingas (Member of ISCO Council for Canada) and Mr Mark Francis (ISCO Member and Independent Oil Spill Response Consultant). Feedback from readers indicates that these articles are well received.

Another article, "Anatomy of An Oil Spill", which gave a blow by blow account of the response to a heavy oil spill at a remote highland distillery in Scotland, was deemed so useful by ISCO Member, Brian O'Connor of the Canberra and Regions Oil Industry Emergency Response Group (CROIERG) that he reprinted it as a booklet for internal training purposes.

I feel sure that amongst our members there must be many who have useful experience they could pass on to others. I am particularly interested in receiving case histories in which challenging response situations have been encountered and problems have been resolved by innovative applications of knowledge and experience.

One of the problems faced by many response organisations is the loss of hard-won know-how as their most experienced people reach retirement age. Much of this knowledge and experience gained over a lifetime simply isn't available in text books and needs to be passed on to a younger generation before being lost for ever.

As Editor, I would be delighted to receive and print contributions that describe how problems were overcome, the innovative answers that were developed and how they were implemented. Submissions don't have to be in perfect English – it's not a problem to edit grammar and spelling.

If you would like to help in this effort, please write to John McMurtrie, Balbithan House, Kintore, Aberdeenshire UK AB51 0UQ or email [john.mcmurtrie@spillcontrol.org](mailto:john.mcmurtrie@spillcontrol.org)

### RESCUE CONSORTIUM DEMONSTRATES TECHNOLOGIES FOR FIRST RESPONDERS

**A Joint R&D effort of Eight Israeli Communication Companies and Academic Research Groups Yields Unique Solutions for Rapidly Deployable Communication Infrastructure in the Event of Disaster.**

Although aimed primarily at assisting in rescue operations following on earthquakes, floods, fires, hurricanes, tsunamis or terrorist attacks, this technology could also be relevant in major oil or HNS incidents where there is a need to establish effective communications between all parties, public and private, involved in the response.

Major pollution events can accompany or arise from natural or man-made disasters which cause disruption of normal communications and, although the system described here may be only one of many available options for resolving communication problems it is useful to be aware of these problems and their potential solutions. Even an overload on local cell net phone networks can cause problems during response to major pollution events. Readers are invited to write in about their experiences and how they resolved their communication problems.

June 28 - Gilat Satellite Networks reports that the RESCUE consortium, which operates as part of the MAGNET Program in the Office of the Chief Scientist of Israel, demonstrated today a unique, new, integrated technology, that enables the rapid deployment of broadband communication infrastructure in the event of disaster.

The demonstration was held in the presence of the Chief Scientist, the director of the MAGNET Program, executives from the member companies and first responder and rescue force representatives.

The consortium demonstrated a number of scenarios that illustrated the effective and fast deployment of alternative, broadband communication infrastructure, which can replace infrastructure damaged or destroyed in case of disaster. This enables rapid connectivity between first responders and command forces in disaster areas.

Technologies developed by the RESCUE consortium allow rescue forces to share resources including video, location of forces, maps and other relevant information. This is made possible by incorporating terrestrial wireless and satellite connectivity and Ad-Hoc and mesh networks.

The solution is a result of the development and integration of diverse broadband solutions and routing technologies, such as bi-directional mobile and quick deploy satellite terminals, distributed control, Self-Organized Networks (SON), autonomous-routing, and self-forming capabilities.

The system allows seamless connectivity between varied access technologies including Wi-Fi, WiMax, 3G and LTE cellular networks, and P25/Tetra. It provides access to the most current data, improving the efficiency of first responder and rescue forces.

The Consortium members reached these achievements as a result of cooperation in research and development, and the integration of the technologies.

The technologies provide an excellent basis for commercial solutions to meet the increasing global demand for rescue force and rapid disaster recovery communications.

There is interest around the world for solutions of this kind including in the US, Europe and Japan. In the US, a designated association, FirstNet, was recently formed and funded by Congress to build a communication network for rescue forces.

Unique frequency bands have been devoted for FirstNet using LTE technology and complimentary connectivity solutions such as satellite communication. The network requirements are similar to the ones demonstrated by the RESCUE consortium.

"The technologies developed by the RESCUE consortium will enable the creation of communication networks that can be rapidly deployed in the event of disaster," said Ilan Peled, Director of the MAGNET Program, in the Office of the Chief Scientist of the Ministry of Economy of Israel.

"The consortium achieved MAGNET's objective to create added value from the cooperation between the companies. This enabled the technological achievements such as the significantly improved first response and rescue capabilities achieved by RESCUE.

"We are excited by the innovation of the integrated solution, reflecting the strength of the technological infrastructure in Israeli industry."

"The communication infrastructure required for the success of first responder and rescue forces are often damaged or destroyed after earthquakes, floods, fires, hurricanes, tsunamis or terrorist attacks," said Avi Gal, Director of Projects and Alliances at Gilat and Chairman of the RESCUE Consortium.

[Source article in TerraDaily.com](#)



In this issue of the ISCO Newsletter we are printing No. 133 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 133: KNOWLEDGE-BASED CONTINGENCY PLANNING

As to seaborne release response, the plan notes that while nothing can be done to recover released gases which dilute with entrained air to finally insignificant concentrations, these are variously transported in pressurised bottles/cylinders which are consequently of localised effect when damaged; that otherwise natural gas is transported in specialised ships' tanks none of which has so far been damaged; that flammable gases can be flared at source; that, un-flared plume size and movement-induced dilution to safe levels can be modelled and measured for direct confirmation or model-modification; and that while evacuation of downwind populations may be necessary, temporary window-closure would be adequate where dilution by entrained air is sufficiently advanced.

As to volatile floating layers of oils/HNS at the 0.1mm thickness of Fay's Phase II spreading,, the plan notes that evaporation will be complete within a few hours; that nothing can be done to recover such vapours; that their atmospheric concentrations are insignificant; and that while such layers may burn if ignited, there is no danger of explosion. As to non-volatile/non-soluble layers of HNS, the plan notes that these disperse faster than non-volatile/non-soluble oil components because the former have lower viscosities than the latter mixtures and do not form yet higher viscosity emulsions with water; that the vast majority of non-soluble HNS have viscosities  $\leq 5\text{cSt}$  and dispersion half-lives of no more than 4 hours similar to those of gasoline, kerosene and diesel of Oil Group I (articles 31-46) and thus do not normally call for response, only ~1% remaining after the lapse of 6-7 half-lives; that those with higher viscosities such as mono-isopropanolamine (750cSt), branch-chain alkyl benzene sulphonates (600-700cSt), di-isopropanolamine (200cSt at 45°C) and straight-chain alkyl benzene sulphonates (80-100cSt, would have half-lives of from 12 -24 hours were they emulsion-forming oils and be possible candidates for dispersant treatment or recovery As to solid HNS, the plan notes that only such as phthalic anhydride (mp 131.6°C), chloro-acetic acid (63°C), di-isoprolylamine (44°C), hexamethylenediamine (41°C) and phenol (40.9°C) would be possible candidates for recovery.

As to soluble HNS, the plan notes that rates of solution are determined by individual solubility values and mass transfer coefficients whether arising from floating layers, from neutrally buoyant compact volumes, or from sunken layers on the seabed, that seawater concentrations proximate to the dissolving phase can never be higher than those of their saturated solutions; that these dilute effectively to zero by diffusion and turbulence while the organic degrade to carbon dioxide and water and while the inorganic neutralise as solution proceeds to completion; that concentrations under floating layer thicknesses of 0.1 mm are never >100ppm even for complete solution; that while the concentrations arising from soluble sunken HNS layers are equally subject to these initial-limits, dilutions, degradations and neutralisations, time to complete solution depends on the localised surface-area : volume ratios imposed by seabed undulations; that while nothing can be done to recover dissolved HNS, recovery may be cost-effective where seabed hollows retain adequate layer thicknesses for direct pumping, though decrease in surface : volume ratio reduces the area over which solution or dispersion can occur, thus localising their effect while saturated concentrations dilute, degrade or neutralise as above.

As to packaged HNS, the plan notes that the individual volumes are smaller than those of bulk HNS shipment which in turn are smaller than those of the bulk shipment of oil; that while packages containerised on deck do enter the sea and may strand, the contents are not released unless their containment is damaged; that the quantities thus released are too small to have other than localised and transient effects; and that it behoves those who believe in species-extinction/ecological-disaster to reality-evaluate their beliefs against the known concentrations to which individual organisms can actually be exposed in the real environment.

As to potential response, the plan notes that oils are liquid or solid, floaters or sinkers, evaporators or dispersers, depending on their melting and/or pour points, densities, distillation-profiles and/or viscosities; that individual HNS are gases, liquids, evaporators or solids, floaters, sinkers, dissolvers and/or dispersers, depending on their boiling or melting points, densities, solubilities, and/or viscosities; that their rates of evaporation, dispersion and solution depend on the substance-specific values of the parameters on which these processes depend; that the first steps in any incident are to identify the oils/HNS involved and to obtain the values for their controlling parameters; and that only then is it possible to create the incident-specific plan for response to those aspects of the incident for which response is possible and necessary to restore the environment as quickly and as cost-effectively as possible (articles 16-30 and 31-46).

1 *The Rational Trinity: Imagination, Belief and Knowledge*, D.Cormack, Bright Pen 2010 available at [www.authorsonline.co.uk](http://www.authorsonline.co.uk)

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

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

## IN SITU BURNING: CHAPTER 25



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

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

### Summary of the Serial

This is the 25th of a series of articles on in-situ burning of oil spills. This series will cover in-situ burning step-by-step and will present the latest in knowledge on the topic.

### 25. Fire-resistant booms – Towing

The size of boom required for an in-situ burn depends on the amount of oil to be burned. Generally, the oil in the boom should fill no more than one third of the area of the catenary. If the boom is too long, it will be difficult to control and the stress on the boom may be too great. If the boom is too short, the catenary may not be large enough to contain the burned oil. In general, the length of boom used ranges from 150 to 300 m.<sup>1</sup> Most commercial booms come in standard lengths of 15 or 30 m. The overall height of the boom should be equal to the maximum expected wave height (short period waves, not swell) from peak to trough.

An important factor when containing oil is the direction and speed at which the boom is being towed. The distance from the burn to the tow vessels should be far enough that the burn does not pose any danger to the tow vessel or personnel onboard the vessel. Temperature profile tests performed during trials showed that the air and water temperature ahead of the burn levels off very quickly.<sup>1</sup> Therefore, unless the tow line was very short (only a few meters), the heat from the fire would not be an issue. As well, since the boom is being towed upwind, the smoke from the burn should not reach the tow vessels.

Tow lines from tow boats should generally be at least 75 m long. The boom must always be towed into the wind so that the smoke will go behind it. As tow speeds are measured relative to the current, the boom may have to be towed very slowly or even downwind to maintain a low enough speed relative to the current while towing into the wind. If the boom is towed too slowly, however, the burn will begin to move up towards the tow lines.

In general, the boom must be towed at a speed of less than 0.4 m/s (0.7 knots) relative to the current in order to prevent the oil from splashing over the boom or becoming entrained beneath the boom. The towing speed may have to be increased periodically if the burn begins to fill more than two-thirds of the boom catenary.<sup>1</sup> If contained oil does become entrained in the water column below the boom or splash over the boom, it will resurface or pool directly behind the apex of the boom. This oil could be reignited by burning oil inside the boom or by burning oil that splashes over the boom.

Another important factor in ensuring that the oil is properly contained for burning is the configuration of the boom. Booms can be towed in various configurations, depending on the equipment available and the weather and sea state conditions. The various conventional configurations for towing oil spill booms are shown in Figure 28.

The standard configuration is a length of fire-resistant boom connected with tow lines to two vessels at either end of the boom to tow the boom in a catenary or U shape, as shown in Figure 28 (a). This was the configuration used during the Deepwater Horizon burns. As an alternative, a tether line or cross bridle may be secured to each side of the boom several metres behind the towing vessels to ensure that the boom maintains the proper U shape, as shown in Figure 28 (b). This tether line or cross bridle is very useful in maintaining the correct opening on the boom tow as well as preventing the accidental formation of the J configuration. The tether line can also be attached to the vessels as shown in Figure 28C. The advantage of this method is that boat operators can detach the tether line very quickly in case of an emergency.

When using the standard U configuration, it can be difficult to ensure that the two towing vessels maintain the same speed. To overcome this problem and to increase control over the boom configuration, three vessels can be used as shown in Figure 28 (d). One vessel tows the boom by pulling from the centre using tow lines at each end of the U, while the other two vessels pull outward from the ends of the boom to maintain the U shape. This configuration was used during the NOBE tests in 1993. During these tests, 210 m of boom was towed in a modified U configuration. A 45-m tether line or cross bridle was attached across the ends of the U. One vessel towed the boom using two 120-m lines attached to the ends of the U. The U was kept open by lines towed from two other vessels in an outward direction at an approximately 45° angle. The towing speed was maintained at 0.25 m/s (0.5 knots) throughout the burn

Bitting and co-workers tested a number of these configurations and found that many of the proposed configurations in this subsection were viable.<sup>68</sup>

## Special feature – In situ burning (continued)

If the oil is near shore, a boom or booms can be used to divert it to a calm area, such as a bay, where the oil can be burned. An example of this method using two booms is shown in Figure 28 (e). Diversion booms must be positioned at an angle relative to the current that is large enough to divert the oil, but not too large that the current would cause the boom to fail. The boom must be held in place either by anchors, towing vessels, or lines secured to the shoreline.

In nearshore situations, anchors can be used to secure booms in a stationary position. It is important, however, that a proper anchor is used particularly in high currents, to ensure that the boom will stay in place for the duration of the burn. Various types of anchors suitable for anchoring containment booms are available.<sup>1</sup>

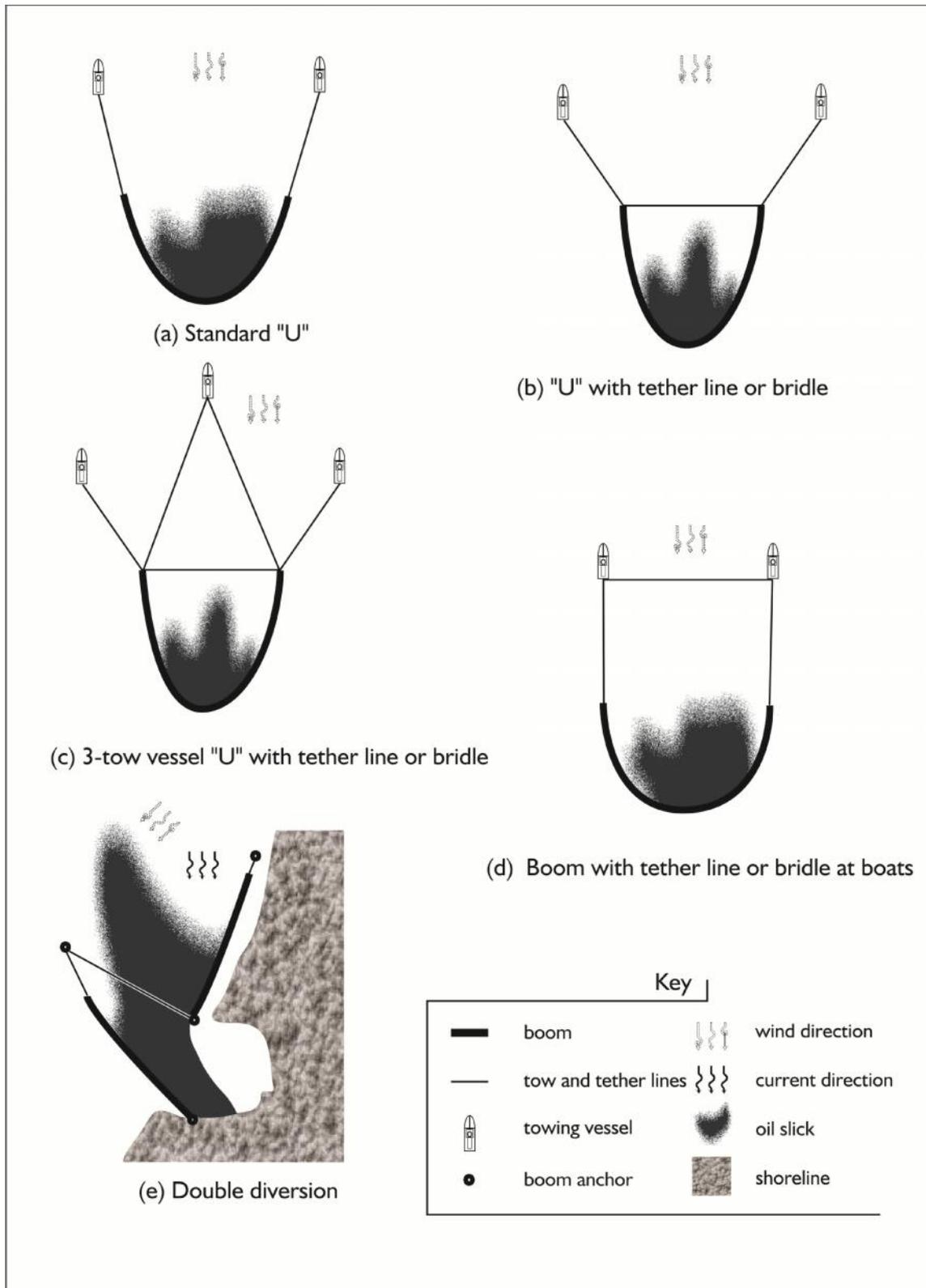


Figure 28 Possible tow configurations for fire-resistant booms

## Special feature – In situ burning (continued)

### References

- 1 Fingas, M., "In-situ Burning", Chapter 23, in *Oil Spill Science and Technology*, M. Fingas, Editor, Gulf Publishing Company, NY, NY, pp. 737-903, 2011
- 68 Bitting, K., J. Gynther, M. Drieu, A. Tideman and R. Martin, *In-situ Burning Operational Procedures Development Exercises, AMOP*, 695, 2001

*To be continued*

## Publications

### FOR YOUR INTEREST – LINKS FOR RECENT ISSUES OF PERIODICALS

<a href="#">ASME EED EHS Newsletter</a>	News and commentary on HSE issues from George Holliday	Most recent issue
<a href="#">Bow Wave</a>	Sam Ignarski's Ezine on Marine & Transport Matters	Current issue
<a href="#">Cedre Newsletter</a>	News from Cedre in Brittany, France	May 2013 issue
<a href="#">The Essential Hazmat News</a>	Alliance of Hazardous Materials Professionals	June 10 issue
<a href="#">USA EPA Tech Direct</a>	Remediation of contaminated soil and groundwater	June 1 issue
<a href="#">USA EPA Tech News &amp; Trends</a>	Contaminated site clean-up information	May 2013 issue
<a href="#">Technology Innovation News Survey</a>	From US EPA - Contaminated site decontamination	May 1-15 issue
<a href="#">Intertanko Weekly News</a>	International news for the oil tanker community	No. 26 2013
<a href="#">CROIERG Enews</a>	Canberra & Regions Oil Industry Emergency Response Group	June 2013 issue
<a href="#">Soil &amp; Groundwater Product Alert</a>	From Environmental Expert	June 24 issue
<a href="#">Soil &amp; Groundwater Ezine</a>	Articles, papers and reports	May 2013 issue
<a href="#">Soil &amp; Groundwater Newsletter</a>	From Environmental Expert	Jun 27 issue
<a href="#">Soil &amp; Groundwater Events</a>	Upcoming events compiled by Environmental Expert	June 2013 issue
<a href="#">IMO Publishing News</a>	New and forthcoming IMO publications	May-Jun 2013
<a href="#">IMO News Magazine</a>	News from the International Maritime Organization	No 1, 2013
<a href="#">Pollution Online Newsletter</a>	News for prevention & control professionals	June 26 issue
<a href="#">EMSA Newsletter</a>	News from the European Maritime Safety Agency	June 2013 issue
<a href="#">JOIFF "The Catalyst"</a>	Int'l Organisation for Industrial Hazard Management	April 2013 issue
<a href="#">Int'l Environmental Technology</a>	Environmental Monitoring, Testing and Analysis	April 2013 issue
<a href="#">HELCOM Newsletter</a>	Baltic Marine Environment Protection Commission	May 2013 issue

### NEW CONCAWE REPORT: PERFORMANCE OF EUROPEAN CROSS-COUNTRY OIL PIPELINES

Statistical summary of reported spillages in 2011 and since 1971 [Download the report](#)

### NEW ISSUE OF THE OHMSETT GAZETTE – SPRING/SUMMER 2013

News of equipment tests and other recent events at the Ohmsett testing facility. [Download](#)

### NEW ISSUE OF AMSA ABOARD

News from the Australian Maritime Safety Authority. [Download](#)

## Events

### IOSC 2014 – CALL FOR PAPERS

**Deadline: Monday, July 15, 2**

#### General Conference Information

As an internationally recognized technical and policy forum, the International Oil Spill Conference (IOSC) is seeking thematically related papers and posters for its next convening in Savannah, Georgia, on May 5-8, 2014. The "Call for Papers and Posters" will be open from January 25, 2013 to July 15, 2013. The paper and poster presentations are the backbone of the IOSC's technical program and contribute to the vast canon of oil pollution knowledge shared between the government, industry, and academia. Invited authors present their respective papers or posters during speaker platform or interactive sessions scheduled during the IOSC. In addition, authors will have their work published in our new online IOSC Proceedings – an impressive repository of over 3,000 papers and articles that have been presented in the IOSC since 1969 covering a vast array of topics related to oil spill preparedness, response, and restoration. All content in the online IOSC Proceedings is free for the public to access and gives authors widespread visibility for their work.

#### 2014 IOSC Abstract Submission Process

Before a paper or poster is invited for presentation at the IOSC, an author must first submit a comprehensive abstract for consideration through the IOSC's online manuscript management system. With the exception of a small number of speakers invited by the IOSC to submit "cornerstone" papers on specific topics, the majority of papers and posters accepted to the IOSC are

## Events (continued)

developed from abstract submissions evaluated by volunteer subject matter experts from industry, government, and academia. Abstracts are double-blind reviewed – the evaluators are not provided the author names and vice versa. Prospective authors can choose to submit an abstract to develop a paper or a poster for the IOSC. Authors whose abstracts are selected by the IOSC's review panels will be invited to prepare technical papers with 20-minute platform presentations or static posters with interactive discussions depending on the presentation medium that the author requested and the Program Committee has approved.

While all oil pollution-themed submissions will be considered, please note that the IOSC has identified specific focus categories that are desired for the 2014 Conference. You can review these categories in the "[Call for Papers and Posters](#)" brochure available [here](#).

## USA: INTERAGENCY COORDINATING COMMITTEE ON OIL POLLUTION RESEARCH (ICCOPR)

### Conferences and Workshops

This page contains a catalog of both oil pollution and/or Interagency Committee related conferences and workshops. The conferences listed are key R&D information sharing venues that the Interagency Committee members attend in order to identify new initiatives and advertise completed R&D projects. Members of the Interagency Committee often play key roles in these conferences by either serving on their program or planning committees, or by presenting on a particular R&D subject.

The workshops listed are initiatives that Interagency Committee members are intimately engaged in and/or workshops that other agencies, academia, or committees are working on that the Interagency Committee has interest.

Both the conference and workshops are categorized by date and title. A link is given for the conference or workshop if available.

## Training

### USA: OHMSETT - OIL SPILL RESPONSE STRATEGIES AND TACTICS TRAINING

When an oil spill occurs, your team needs to know how to set up an incident command system, what strategies to use, and what equipment to deploy for successful response operations.

Learn this and more at OHMSETT's **Oil Spill Response Strategies and Tactics Training, August 13-16, 2013**.

This 3 1/2-day training session will take place at OHMSETT in Leonardo, NJ. It will emphasize practical experience in full-scale oil recovery operations in the OHMSETT outdoor wave tank. You will increase your proficiency using boom and skimmers while practicing removing spilled oil.

The course is presented in partnership with Texas A&M National Spill Control School.

At the completion of the course, you will receive a NSCS Certificate of Completion. [More info](#)

## Correction

Apologies for the missing link for accessing the article in *Climate Central* on a potential pollution threat to the Mackenzie river basin in Canada. Readers who wanted to read this can now do so by clicking [HERE](#)

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

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](http://www.spillcontrol.org)