



# ISCO NEWSLETTER

The Newsletter of the International Spill Response Community  
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## 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.

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

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**Oil Spill India 2014**  
International Conference & Exhibition  
18-20 September 2014, Holiday Inn Resort, Goa



## International news

**International Forum on Group V (Non-buoyant) Heavy Oils**  
9-10 September, 2014  
Detroit, Michigan, USA

**REGISTRATION NOW OPEN FOR INTERNATIONAL FORUM ON GROUP V (NON-BUOYANT) OILS**

Go to [www.spillcontrol.org](http://www.spillcontrol.org) and click on "Registration" on the Forum 2014 menu on the right hand side of this page.

Here you will find details of attendance costs, including discounted rates for ISCO members and government agencies, cost for exhibitors and an online booking form.

See more updated information on the Forum on Page 7

## CALLS FOR ACTION ON PORTS OF REFUGE

John M Lyras, Chairman of the London P&I Club, has called for concerted international action on the provision of places of refuge for ships involved in casualties.

Writing in the club's 2014 Annual Report, Mr Lyras says, "Nearly twelve years after the Prestige disaster, it is particularly disappointing to receive reports of other shipping casualties where efforts to mitigate pollution or other risks have

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## International news (continued)

been hampered by a reluctance to provide the ships involved with a place of refuge." The Maritime Executive [Read more](#)

## LAST OF SYRIAN CHEMICAL WEAPONS ABOARD SHIP

The Joint Mission of the Organization for the Prohibition of Chemical Weapons and the United Nations (OPCW-UN) announced that the removal of Syria's chemical weapons material is now complete.

The removal of the most critical material for destruction began in early January, in line with an agreement brokered by Russia and the United States, by which Syria renounced its chemical weapons material and joined 1992 Chemical Weapons Convention. *The Maritime Executive* [Read more](#)

## OIL SPILL RESPONSE GLOBAL INITIATIVE - SOUTH EAST ASIA UPDATE

The latest edition of *Changing Tides* – the newsletter of the GI SEA Programme, has been published. This quarterly publication provides updates on recent GI SEA activities, plans for the future, and progress towards expanding the programme's membership. Features in this issue include highlights from the International Oil Spill Conference (IOSC) 2014, the launch of the ITOPF film series on response to marine oil spills and progress on building a national framework for oil spill preparedness and response in Indonesia. [Download the newsletter.](#)

## IOPC FUNDS: REGIONAL WORKSHOP, HURGHADA, EGYPT

At the invitation of the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA), the IOPC Funds conducted a Regional Workshop on the International Liability and Compensation Regime for Oil Pollution Damage from 16-18 June 2014. The workshop took place at the Center for Emergency Mutual Aid in the Red Sea and Gulf of Aden in Hurghada and was attended by participants from six of PERSGA's member countries (Egypt, Sudan, Djibouti, Yemen, Saudi Arabia and Jordan). [Read more](#)

## OSPAR COMMITS TO REDUCING MARINE LITTER AND PROTECTING VULNERABLE SPECIES AND HABITATS IN THE NORTH-EAST ATLANTIC

In Cascais (Portugal), the OSPAR Commission has adopted a landmark Regional Action Plan on Marine Litter along with measures to protect 16 vulnerable species and habitats. The Regional Action Plan on Marine Litter will enable OSPAR countries to substantially reduce marine litter in North-East Atlantic. The Plan will address litter from both land and sea based sources and will result in a reduction in marine litter on coasts and beaches.

The Plan supports the global effort to achieve significant reductions in marine debris by 2025 as agreed by Heads of States at Rio+20. It provides a regional contribution to the European Union's Marine Strategy Framework Directive. The plan also invites international organisations, the private sector and the non-governmental organisations to cooperate in its implementation.

The meeting also agreed on measures to protect and conserve 11 species and 5 habitats identified by OSPAR as being particularly vulnerable within the North-East Atlantic. These include cod, European eel, 5 species of shark and 2 species of ray along with 5 important marine habitats including seagrass meadows and deep sea hydrothermal vents.

A biologically diverse North-East Atlantic is vital for the proper functioning of marine ecosystems as well as supporting human health and the millions of livelihoods that depend on it. The measures agreed today demonstrate OSPAR countries' willingness to take active steps to protect biodiversity in the region.

Mr Victor Escobar (Spain), Chairman of the OSPAR Commission said "I am proud of the coordinated effort OSPAR Contracting Parties have made to adopt these measures. We have firmly committed to tackling marine litter, an important concern for the health, economy and human enjoyment of our seas and to protecting vulnerable habitats and species. We have taken these significant steps to protect the marine environment of the North-East Atlantic as it is an essential resource which must be safeguarded for all". [www.ospar.org](http://www.ospar.org)

## International news (continued)

### ADIPEC AWARDS OPEN FOR NOMINATIONS (INCLUDING ENVIRONMENTAL CATEGORY)

Oil and gas companies across the region can now enter the industry-setting ADIPEC Awards 2014, organisers have announced.

All award entries will close on 1 August 2014, with the shortlist announced on 13 October 2014. Winners and runners-up will be announced at the ADIPEC Gala Awards Dinner at Emirates Palace on ADIPEC's opening night, 10 November 2014. *Pipeline Magazine* [Read more](#)

## Incident reports from around the world

### INDONESIA: PRODUCT TANKER ATTACKED IN SOUTH CHINA SEA

July 7 - Local authorities are once again hunting a missing product tanker, a likely target of pirates. On Friday, the Honduras registered product tanker Moresby 9 carrying 2,200 metric tonnes of MGO was boarded by unknown number of attackers 34 nautical miles from the Anambas Islands, Indonesia in the South China Sea. *The Maritime Executive* [Read more](#)

### JAPAN: LEAK AT FUKUSHIMA NUCLEAR PLANT THREATENS DANGEROUS MELTDOWN

July 7 - Trouble is looming at Japan's Fukushima nuclear plant, as a leak has forced the shutdown of a cooling system that could cause temperatures to exceed dangerous levels.

Fukushima operator Tokyo Electric Power Company (TEPCO) was forced to switch off the cooling system at Reactor Unit 5, after engineers discovered it had been leaking water. If the system is not repaired within the next nine days, temperatures are expected to soar, Russian news site RT reported Sunday. *Fox News* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

### USA: ESTIMATED 1M GALLONS OF SALTWATER LEAKS IN NORTH DAKOTA BAY

July 9 - Around 1 million gallons of saltwater spilled into a North Dakota bay, causing some environmental damage but sparing a nearby lake that provides drinking water for an American Indian reservation, company and tribe officials said Wednesday. *The Washington Post* [Read more](#)

### USA: NAVY SHIP SPILLS 11,000 GALLONS OF OIL INTO BOSTON DRY DOCK



*Photo: Coast Guard pollution responders from Sector Boston survey the spilled oil from the USNS Fisher July 10, 2014. The ship spilled 11,000 gallons but was contained by the dry dock. U.S. Coast Guard Photo*

July 10 - The U.S. Coast Guard is responding to a spill of approximately 11,000 gallons of oil inside a Boston dry dock facility, but luckily no oil has reached the surrounding waters.

The Coast Guard says that the oil spill was reported Wednesday night at around 9 p.m. in a dry dock at the Boston Ship Repair facility that is currently housing the USNS Fisher, a roll-on/roll-off cargo ship belonging to the U.S. Navy.

*gCaptain* [Read more and view more photos](#)

## Other news reports from around the world

### NEWS REPORTS FROM USA

#### June 27 - Bureau of Public Health Releases Chemical Spill Data

The West Virginia Department of Health and Human Resources Bureau for Public Health released Friday [information](#) from physicians who reported seeing patients outside of the ER for symptoms possibly associated with the Elk River Chemical Spill

The Bureau reached out to 800 health care providers across the 9 counties affected by the Jan. 9 chemical spill. *West Virginia Public Broadcasting* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

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

### NEWS REPORTS FROM USA (continued)

#### July 4 - New map shows California emergency teams not in best position for oil train response

A map put together by multiple state agencies in California shows that the location and capability of emergency response teams don't always align with the biggest risks presented by an expected increase in crude oil shipments by rail in the coming years. *The Sacramento Bee* [Read more](#)

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#### July 6 - Hauling danger: More nasty chemicals are spilling on roads and rails

Millions of gallons of formaldehyde, explosive crude oil, sulfuric acid, xylenes and other dangerous chemicals make their way daily across the nation's and region's highways and railroads, carried just yards from other motorists and homes.

What's troubling is that more of those substances are being spilled during transit, according to a Cincinnati Enquirer analysis of national accident data. *Mansfield News Journal* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

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#### July 7 - Hazmat spills on the rise in Ohio

Ohio leads the country in hazardous material transportation accidents, according to a four-month Enquirer investigation. Indiana and Kentucky also are in the top 12 states for hazmat spills.

More than a quarter of Ohio's overall incidents occurred in Greater Cincinnati. Our area experienced a hazmat spill every day on average in 2013. *Cincinnati.com* [Read more](#)

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#### July 7 - Court Interprets Provision in Pollution Insurance Policy to Contain No Limits on Defense and Investigation Indemnification

In a recent decision from the Southern District of New York, Judge Kaplan held that an insurance provider's "contractual obligation under the policy to reimburse [the insured] for costs incurred and to be incurred by [the insured] in the investigation and defense of all claims asserted against [the insured] as the result of an oil spill incident continues until all such costs are reimbursed, regardless of whether other indemnity limits under the policy have been reached." *American Commercial Lines LLC v. Water Quality Insurance Syndicate*, Docket No. 09 Civ. 7957 (LAK) (S.D.N.Y. March 29, 2010). *Chalos & Co. PC* [Read more](#) [Thanks to Marc K. Shaye, Hon.FISCO, Member of ISCO Executive Committee]

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#### July 9 - Trains loaded with explosive crude oil roll through Michigan & Metro Detroit - cloaked in secrecy?

Explosive crude oil is being carried on freight trains rolling through Michigan and Metro Detroit.

A 7 Action News Investigation finds people who live and work near the tracks and even many first responders are not being informed. The trains are loaded with the Bakken Crude Oil in North Dakota and travel through several states and Canada. *WXYZ Detroit* [Read more and watch video](#) [Thanks to Bill Hazel of Marine Pollution Control]

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#### July 10 - U-M computer model shows Straits pipeline break would devastate Great Lakes

A rupture of 61-year-old, underwater oil pipelines running through the Straits of Mackinac would be "the worst possible place" for a spill on the Great Lakes, with catastrophic results, according to a University of Michigan researcher studying potential impacts of a spill.

David Schwab, a research scientist at the U-M Water Center, retired from the National Oceanic and Atmospheric Administration, where he studied Great Lakes water flows and dynamics for more than 30 years. He's the author of a new study done in collaboration with the National Wildlife Federation looking at different scenarios for potential oil spills in the Straits from Canadian oil transport giant Enbridge's Line 5. *Detroit Free Press* [Read more](#) [Thanks to Mike Rancilio of Marine Pollution Control]

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#### July 11 - Enbridge completing Michigan oil spill cleanup

Cleanup efforts following the leak of about 800,000 gallons of crude from an underground pipeline in western Michigan are nearly complete, according to the Canadian oil company that owns the pipeline.

Contaminated soil is expected to be removed from the Morrow Lake delta near Comstock Township in Kalamazoo County by mid-to late summer, *Enbridge Inc.* spokesman [Jason Manshum](#) told the Kalamazoo Gazette (<http://bit.ly/1y4ePle>) for a story Friday.

## NEWS REPORTS FROM USA (continued)

Crews will keep restoring riverbanks this fall. Last year, the [U.S. Environmental Protection Agency](#) ordered Enbridge to dredge sections of the Kalamazoo River to remove sediments tainted by oil from the massive spill. [Seattlepi.com](#) [Read more](#)  
[Thanks to Mike Rancilio of Marine Pollution Control]

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## NEWS REPORTS FROM CANADA

### June 29 - Hazardous goods on Canada's rails exposed in emergency guide

Emergency guide says diesel fuel was the most common hazardous good originating in Canada, with more than 42,500 carloads - Public interest in what is trundling by rail past their homes has ignited in the wake of the July 6, 2013, derailment in Lac-Mégantic, Que., when a runaway oil train skipped the tracks and exploded, killing 47 people.

It's a rare glimpse into the dangerous goods that are travelling Canada's rails.

The federal government and railroad companies have long kept secret information on the types and amounts of hazardous materials transported by rail in the country. But an American railroad's emergency guide that lists the top 25 most common dangerous goods transported on the continent sheds some light on what is plying Canada's rails — materials such as chlorine, crude oil, methanol and propane.

The guide, published by American railroad giant CSX, includes statistics for the U.S., Canada and Mexico in 2012 that are compiled — though not released publicly — by the industry group the American Association of Railroads [TheStar.com](#) [Read more](#)  
[Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

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### July 4 - No cleanup in sight for Hamilton north end toxic barrel site 1 year later

It's been more than a year since hundreds of barrels filled with toxic waste were found hidden behind a wall in a north end industrial site — and a ministry-ordered cleanup is still languishing with no end in sight

The Ministry has ordered that past owners as far back as the 1980s clean up the site. But the owners are appealing the order, and say the onus isn't on them. Preliminary test results on the substance in the barrels confirmed that it's waste products from coal tar processing. [CBC Hamilton](#) [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

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## NEWS REPORTS FROM UK

### Feb 21 - Oil Removal from RFA Darkdale Shipwreck



The tanker which sank in 1941 and now lies submerged in 45m of water off the South Atlantic island of St Helena, is believed to contain up to 5,000 m3 of fuel oil.

Action is required to remove the oil remaining onboard. A detailed survey of the wreck was carried out in 2012. The intention is to perform the hot tap removal of the oil using air divers though other technically viable, cost effective alternatives to air diving may be considered.

The UK MoD's Salvage and Marine Operations team will deploy a team of divers to carry out the hot tap operation, however industry support is required to this activity. It is anticipated that this will

include, but not necessarily be limited to providing an additional dive team and supporting services, chartering a suitable platform for diving operations, chartering a vessel for the recovered oil to be stored and transported in, and managing the disposal of oil. [Subsea World News](#) [Source article](#) [Thanks to Bob McWhinnie BEM] [Note from editor – Bob, (formerly with Alba International and Briggs Marine) has a special interest in wreck oil removal, having been involved in many such operations, including the *Exxon Valdez* (Alaska) and the battleship *Royal Oak* (Scapa Flow). He understands that the UK MOD has short-listed a number of contractors for the oil removal from *RFA Darkdale*. If you Google *RFA Darkdale* you can find a lot more information about the history of this event.]

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### July 7 - Study reveals fracking risk to drinking water

New underground maps from the British Geological Survey (BGS) and the Environment Agency (EA) have discovered that many shale gas deposits overlap with major water aquifers

## NEWS REPORTS FROM UK (continued)

The series of maps provide a new way to visualise geological data and assess the potential of fracking to contaminate drinking water with methane in England and Wales.

They show the depth to each shale gas and oil source rock below principal groundwater aquifers, which provide 30% of the UK's drinking water and up to 70% of the drinking water in South East England. *Edie Water* [Read more](#)

### July 11 - MoD will clean up radiation at Dalgety Bay beach



Photo: Some 800 aircraft were dumped near Dalgety Bay. Picture: Ian Rutherford

THE Ministry of Defence is to pay an estimated £10 million to clean up radiation on a Fife beach, following a campaign by local residents concerned about health risks.

Some 3,500 radioactive particles have been found at Dalgety Bay over the past two decades.

The material is thought to date back to when parts of Second World War aircraft, including their radiated instruments, were dumped at the site.

Defence chiefs have now confirmed that work will include removing the particles from the beach, and building a wall and slipway to prevent other radioactive material from reaching the area. *The Scotsman* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

## NEWS REPORTS FROM MALAYSIA

### July 8 - Recent Tanker Hijackings Add to Problems in the South China Sea

Photo: Malaysian marine police officers inspecting a Singapore-owned tanker hit by pirates in April. Credit Lai Seng Sin/Associated Press

Add another problem to the rising tensions in the South China Sea this year: a mysterious spate of tanker hijackings since late April, as armed bands of men have boarded and commandeered the ships, siphoned their cargoes of diesel and gasoline onto barges or other tankers, and fled into the night.

Complicating matters is the fact that two of the hijackings took place near the heart of Malaysia's offshore oil and gas production, in waters where China is making an increasingly forceful claim to sovereignty. *International New York Times* [Read more](#) [Thanks to Mike Rancilio of Marine Pollution Control]



## NEWS REPORTS FROM JAPAN

### July 11 - Agent Orange ingredients found at Okinawa military dumpsite



Photo: Excavation of the former U.S. military dump in January uncovered 61 barrels, some of which bore markings of the Dow Chemical Company. | NAOYA KUWAE

Dozens of rusting barrels unearthed on former U.S. military land in Okinawa City have been identified as containing chemical precursors to defoliant Agent Orange, a toxic compound used widely in the Vietnam War and blamed for poisoning that has resulted in birth defects and other health problems.

Dug up more than five months ago, the 61 barrels contain three signature components of Agent Orange: the herbicides 2,4,5-T and 2,4-D, and the highly toxic TCDD dioxin, according to two independent teams of experts representing Okinawa City and the Okinawa Defense Bureau respectively. *The Japan Times* [Read more](#)

## People in the news

### SEA ALARM SAYS GOOD-BYE AND GOOD LUCK TO JOY BRUCE-RADCLIFFE



Sea Alarm is sorry to announce that our Office Manager, Joy Bruce-Radcliffe, is leaving. Joy joined Sea Alarm in January of 2013, bringing her financial and administrative skills to our team and implementing much needed, more efficient office systems and procedures.

[Read more...](#)

## ISCO News

### INTERNATIONAL FORUM: ADDITIONAL HOTEL PARTNER ANNOUNCED

Forum organiser, Mike Rancilio, has negotiated discounted rates for Forum Delegates at another Detroit hotel near to the forum venue – MGM Grand Hotel in Downtown Detroit is a Host Hotel for the International Forum on Group V Oils. Room reservations at the MGM Grand Hotel should be made no later than 8th August.

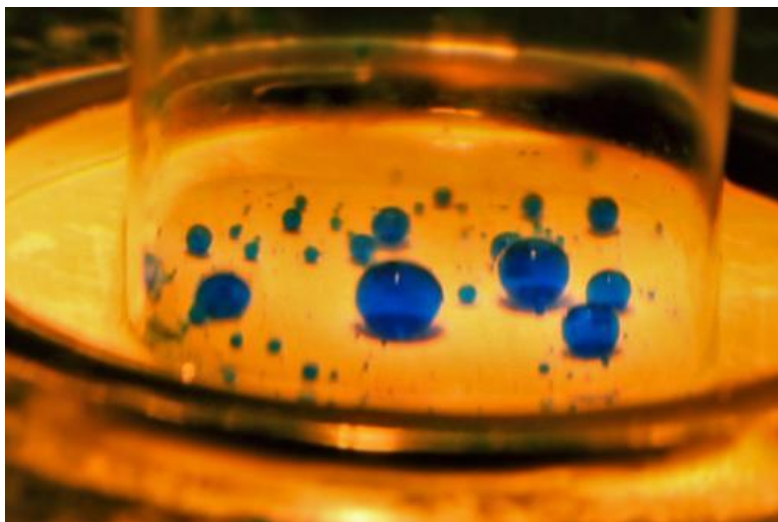
Transportation: Prompt and courteous transportation has been arranged to and from the Forum meetings at the Detroit Wayne County Port Authority facility. The hotel provides complimentary shuttle service to designated areas in downtown within a 5 mile radius

This adds to the discounted travel and accommodation rates already negotiated with Delta Airlines and the Roberts Riverwalk Hotel.

You can find all the details and how to make bookings at <http://www.spillcontrol.org/accommodations-travel>

## Science and technology

### NEW MEMBRANE CAN SEPARATE EVEN HIGHLY MIXED FINE OIL-SPILL RESIDUES



*Picture: Tiny droplets of water, colored blue, are suspended in water on top of a membrane developed by the MIT team. Thanks to the membrane's tiny pores, with a special coating that attracts water and repels oil, the droplets shrink as they pass through the membrane, ultimately leaving just pure oil behind. A similar membrane with a different coating can do the reverse, allowing oil droplets to pass while blocking water. Credit: Courtesy of the researchers*

Whenever there is a major spill of oil into water, the two tend to mix into a suspension of tiny droplets, called an emulsion, that is extremely hard to separate—and that can cause severe damage to ecosystems. But MIT researchers have discovered a new, inexpensive way of getting the two fluids apart again.

Their newly developed membrane could be manufactured at industrial scale, and could process large quantities of the finely mixed materials back into pure oil and water. The process is described in the

journal *Scientific Reports* by MIT professor Kripa Varanasi, graduate student Brian Solomon, and postdoc M. Nasim Hyder.

In addition to its possible role in cleaning up spills, the new method could also be used for routine drilling, such as in the deep ocean as well as on land, where water is injected into wells to help force oil out of deep rock formations. Typically, Varanasi explains, the mixed oil and water that's extracted is put in large tanks to allow separation by gravity; the oil gradually floats to the top, where it can be skimmed off.

That works well when the oil and water are "already large globs of stuff, already partly separated," Varanasi says. "The difficulty comes when you have what is called an emulsion, with very tiny droplets of oil stabilized in a water background, or water in an oil background. The difficulty significantly increases for nanoemulsions, where the drop sizes are below a micron

The new approach developed by Varanasi's group uses membranes with hierarchical pore structures. The membranes combine a very thin layer of nanopores with a thicker layer of micropores to limit the passage of unwanted material while providing strength sufficient to withstand high pressure and throughput. The membranes can be made with contrasting wetting properties so their pores either attract oil and repel water, or vice versa. *Phys.org* [Read more](#)



In this issue of the ISCO Newsletter we are printing No. 181 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 181: CONCLUDING REMARKS

As to the period, October 1975 to March 1979 (c.f. article 180), WSL sought to create a repository of knowledge on oil/HNS release-response by reality-evaluating the belief in dispersed oil being the cause of species-extinction/ecological-disaster to the knowledge that oils disperse from layer thicknesses of ~0.1mm; that while water-in-oil emulsion formation may increase thickness to 0.4mm, the oil per unit area remains unchanged; that were these thicknesses to disperse instantaneously with retention in the top metre of the water column, the resulting concentration would be 100ppm; that oils with high rates of natural dispersion such as Ekofisk crude, disperse completely while producing top metre concentrations of no more than 1 – 2 ppm; that these dilute further with diffusion and turbulent mixing throughout the entire water column in which they are biodegraded by the micro-organisms involved in the ultimate biodegradation of the entire marine biomass; that such natural dispersion proceeds to completion at slick half-lives dependent on their viscosities unless interrupted by stranding; that diluting/biodegrading concentrations at depths of 10 - 15metres are ~ 0.05ppm while top metre concentrations beneath naturally dispersing micron thickness sheens surrounding the main slick are in the range 0.1 - 0.01ppm; that were the oil to be the cause of species-extinction/ecological-disaster, it would need to be toxic at these concentrations; and that the standing concentrations of hydrocarbons in coastal waters average around 0-01ppm.

Again, WSL reality-evaluated the belief in dispersant-induced concentrations being the cause of species-extinction/ecological-disaster to the knowledge that 5 minutes after dispersant-application, those in the top metre of the water column average 20ppm, while after 10 minutes and within an hour they average 5ppm and 2ppm respectively. Yet again, belief was reality-evaluated to the knowledge that volatile oil components and volatile HNS cannot reach saturated vapour pressure because they dilute into the atmosphere and degrade by photolysis or biodegrade in the sea after rainout as do non-volatiles directly. However, WSL already knew, as a matter of public record, that believers in species-extinction/ecological-disaster measured LC values for oils and dispersants without regard to concentration/biodegradation in the sea; that to measure LC values for the early hydrocarbon-based dispersants, the UK Ministry of Agriculture Fisheries and Food simply exposed the test organism Crangon crangon to concentration high enough for long enough; that when the toxicity of the later water-based concentrates became too low to be thus measurable, the test organisms were exposed to 1000ppm of oil (fresh Kuwait crude) dispersed in seawater with 1000ppm of the dispersant or with 100ppm of the later concentrates; that while the earlier test ensured acceptance of only the least toxic dispersants, the later testing revealed a reluctance to recognise the non-toxicity of the new concentrates and a desire to continue measuring the 'toxicity' of dispersed oil despite the risk of thus accepting only the least effective dispersants; and that neither test took any account of the concentrations in the sea as directly measured, nor indeed of the total absence of extinction/disaster at all incidents to-date.

Thus, we can confidently conclude as a matter of definitive knowledge that the thinness of floating layers of oil, their rates of natural dispersion and the increases induced by dispersant-use are such as to ensure the concentrations in the top metre, let alone at deeper levels, are too low to produce toxicity in the water column; that oil released to the sea is not a biocide in respect of the micro-organisms which biodegrade it; that consequently the banning or restriction on dispersant-use; the banning of the discharge of recovery process-water, and the prohibition of safe haven cargo/bunker transfer arise from belief and not from knowledge; and that the duration of net-fishing bans owes more to belief than to knowledge while filter-feeding shellfish may be freed of oil droplets by routine pre-sale depuration.

As to belief in exposure to HNS being the cause of species-extinction/ecological-disaster, this too was treated by WSL as a hypothesis for reality-evaluation in light of the knowledge that some disperse, dilute and biodegrade as do oils; that others dissolve, dilute and biodegrade; that some evaporate including the volatile components of oils; that yet others are neutralised by the inorganic-content of seawater; that the behaviours of all of them together with identifiable non-dispersing/non-soluble solid exceptions are predictable from the known values of their relevant physicochemical properties as are those of all the oils; that whether they are the components of oils or individual HNS, all with boiling points < 250C evaporate in < 5 hours to the extent of 25 - 30% or 100% respectively; that atmospheric concentrations with respect to altitude are similar to those of dispersers/dissolvers in the sea with respect to depth; that evaporators simply evaporate; that while water-in-oil emulsions naturally disperse at half-life rates dependent on their measurable viscosities, floating non-volatile HNS have slick thicknesses no more than 0.1mm, do not form emulsions and disperse at half-life rates dependent on their known viscosities; that these are generally in the gasoline-diesel range (< 5cst at 15C) which disperse naturally without dispersant-inducement; and that all HNS which thus disperse, dissolve or evaporate need neither dispersants nor recovery, these being pointless/impossible for all such.

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.



## Events

### OIL SPILL INDIA 2014

India has more than 7500 kms of coastline; the coastline of Indian mainland is surrounded by Arabian Sea in the west, Bay of Bengal in the east, and Indian Ocean in the south. The increasing energy requirement of a large country like India is generally transported through ships. Though in recent years Indian waters have witnessed few minor oil spill incidents, there is no end to the preparedness but a training and practice to achieve zero accidents in future. Oil spills can cause a catastrophic damage to the environment of a region & country at large. Any spills be in onshore or offshore needs to be challenged seriously and mitigation methods be applied to minimise the damages.

Spill Association of India (SAI) is organising Oil Spill India 2014 with a universally relevant theme of "Practice to Perfection" is the region's leading global forum that highlights the causes of oil spill, mitigation methods, regulations, guidelines, technological innovations in equipments & training needs to the people for damage control in time.

Scheduled from 18-20 September 2014 at Holiday Inn Resort, Goa, India, OSI 2014 will provide some of the answers through its well researched presentations by global professionals having wide experience on Oil spill prevention & management. The concurrent exhibition will showcase a host of international exhibitors displaying the latest technology & equipments, solutions for prevention and response to an Oil spill including Logistics, Communication, Safety Health and Environmental aspects of Oil Spills.

The event will bring together key players in the oil & gas, safety & health, HSSE services & equipment industries providing unprecedented opportunities for business growth, technology transfer, joint ventures and identifying potential customers in the areas of Oil Spill prevention, preparedness, response & restoration. [More info](#)

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### UK: FRACKING NORTH CONFERENCE

Govtoday and Securing the Future are delighted to announce Fracking North: Continuing the Debate on Hydraulic Fracturing for Gas. Due to the high demand and huge success of this event in London in May this year, this conference now moves to the North of England. The Conference will be held on Thursday 25th September at MediaCity Uk, Manchester. [More info](#)

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### WEST AND CENTRAL AFRICA: UPCOMING GIWACAF MEETINGS

11 August 2014 – Angola [National exercise to test and update the National Oil Spill Contingency Plan](#)

22 September 2014 - Guinea-Bissau [National workshop on contingency planning](#)

6 October 2014 – Benin [Bilateral exercise](#)

20 October 2014 – Gabon [Sub-regional workshop on liability and compensation](#)

3 November 2014 – Senegal [National exercise to test and update the NOSCP](#)

1 December 2014 – Ghana [Sub-regional workshop on Shoreline Cleanup and Assessment Techniques \(SCAT\) and waste management](#)

8 December 2014 - Côte d'Ivoire [National workshop on sensitivity mapping](#)

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## Publications

### POLLUTION AND REMEDIATION: SOIL POLLUTION - ORIGIN, MONITORING & REMEDIATION

By Mirsal, Ibrahim. Springer Science. [More info](#)

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### OCIMF ANNUAL REPORT 2014

The Oil Companies International Marine Forum Annual Report is now available. [Link for downloading](#)

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

[ASME EED EHS Newsletter](#)

[Bow Wave](#)

[Cedre Newsletter](#)

[The Essential Hazmat News](#)

[USA EPA Tech Direct](#)

[USA EPA Tech News & Trends](#)

[Technology Innovation News Survey](#)

[Intertanko Weekly News](#)

News and commentary on HSE issues from George Holliday

Sam Ignarski's Ezine on Marine & Transport Matters

News from Cedre in Brittany, France

Alliance of Hazardous Materials Professionals

Remediation of contaminated soil and groundwater

Contaminated site clean-up information

From US EPA - Contaminated site decontamination

International news for the oil tanker community

Most recent issue

Current issue

June 2014

June 23 issue

July 1 issue

May 2014 issue

May 16-31 2014

No 28 2014

## Publications (continued)

<a href="#">CROIERG Enews</a>	Canberra & Regions Oil Industry Emergency Response Group	June 2014 issue
<a href="#">IMO Publishing News</a>	New and forthcoming IMO publications	June 2014
<a href="#">IMO News Magazine</a>	News from the International Maritime Organization	No 1, 2014
<a href="#">Pollution Online Newsletter</a>	News for prevention & control professionals	July 9 issue
<a href="#">EMSA Newsletter</a>	News from the European Maritime Safety Agency	July 2014 issue
<a href="#">JOIFF "The Catalyst"</a>	Int'l Organisation for Industrial Hazard Management	July 2014 issue
<a href="#">Environmental Technology Online</a>	Environmental Monitoring, Testing & Analysis	July 2014 issue
<a href="#">OCIMF Newsletter</a>	News from the Oil Companies International Marine Forum	June 2014 issue
<a href="#">IPIECA eNews</a>	Int'l Petroleum Industry Environmental Conservation Assoc'n	February 2014 issue
<a href="#">WMU Newsletter</a>	From the World Maritime University in Malmö, Sweden	May 2014 issue
<a href="#">AMSA Aboard</a>	News from the Australian Maritime Safety Authority	May 2014 issue
<a href="#">Sea Alarm Foundation Newsletter</a>	News from the Sea Alarm Wildlife Protection Organisation	Summer 2014 issue

## Training

### EMERGENCY FILM GROUP - RADIATION MONITORING

News of Tepco releasing 560 tons of radioactive water from its crippled nuclear reactor into the Pacific Ocean, with plans to release another 790 tons, is just another reminder of how vulnerable we are to radiation exposure.

Radiation Monitoring DVD training video teaches emergency personnel in mission specific Operations Level competencies regarding monitoring for radiation at WMD events as well as natural disasters and industrial accidents. This training video is designed for emergency personnel, including law enforcement, hazmat teams, firefighters, emergency management and others who might become involved in monitoring for radiation. [More info](#)

### UK: BRIGGS ENVIRONMENTAL SERVICES TRAINING CALENDAR

BESL has just released its Training Calendar for the second half of 2014. As many of you are aware, we do need a minimum of 7 delegates for the course to run, so these dates are not set in stone. However, we will do our very best to help accommodate your needs.

These courses can be run on Client Premises or at our Training Facility here in Aberdeen.

With regards to the DECC Level courses, there has been no dates set aside for these as they tend to only run as Client Assigned. Please contact us if you wish to discuss booking DECC Level courses.

For the calendar and more information on courses, i.e. prices, descriptors, please email: [training@briggsevenvironmental.com](mailto:training@briggsevenvironmental.com)

### WORLD MARITIME UNIVERSITY - OPEN ENROLLMENT COURSES

Maritime Casualty Investigation 08 - 12 September 2014

Created for maritime professionals who are new to accident investigation, this annual course aims to enhance knowledge about the framework of maritime casualty investigation and to add specific expertise on issues such as legal considerations, maritime casualty investigation process, data analysis and the Human Element. [More info](#)

### SEA ALARM – UPCOMING OILED WILDLIFE RESPONSE TRAINING COURSES

**BELGIUM:** Still time to sign up for October Oiled Wildlife Response Planning course in Belgium. There are still places available at a two-day Oil Spill Response (OSRL) course which will introduce participants to the issues specific to responding to wildlife during a spill. The course will be held in Ostend, Belgium on 9-10 October 2014 [More info](#)

**BRUNEI:** Oiled Wildlife Response Planning Course in Brunei - In June, Hugo Nijkamp and Claude Velter provided Sea Alarm's two-day Wildlife Response Planning Course to emergency response officers from Oil and Gas Operators in Brunei. This course looks at the various challenges that oil spills could pose to wild animals, and the various wildlife incident scenarios that could occur. [More info](#)

## Contracts & Tenders

### USA: EMERGENCY & RAPID RESPONSE SERVICES

On behalf of Region 2, U.S. EPA's Region 1 office intends to issue at a future date a competitive small business set-aside solicitation to provide Emergency and Rapid Response Services for time-critical removals and rapid remedial actions within the

## Contracts & Tenders (continued)

geographic areas of New York, New Jersey, and the territories of Puerto Rico and the U.S. Virgin Islands. The synopsis, amendments, and related information will be posted on <https://www.fbo.gov> and <https://www.fedconnect.net>. It is the Government's intent to award two or more performance-based, indefinite-delivery, indefinite-quantity contracts, consisting of a 24-month base period, a 24-month award term period, and a 12-month award term period. The NAICS code for this acquisition is 562910, Environmental Remediation Services. The closing response date will be 30 calendar days after issuance of the solicitation. Proposals will be submitted through FedConnect. <https://www.fbo.gov/spg/EPA/OAM/Regl/SOL-R2-14-00003/listing.html>

## Job Vacancies

### UK: ITOPF - VACANCY FOR SENIOR CLAIMS CO-ORDINATOR AT ITOPF

An international, not-for-profit organisation providing the maritime industry with objective technical advice, expertise, assistance and information on effective response to oil and chemical spills in the marine environment is seeking a new Senior Claims Coordinator to join its small London-based team. ITOPF's work is varied and challenging. Further details of ITOPF's activities can be found on the web site at [www.itopf.com](http://www.itopf.com)

ITOPF works with the insurers of ships and other bodies to advise on the technical merits of claims. For this senior role we are seeking applicants with a demonstrable track record of at least 3-5 years processing claims for compensation related to economic and environmental damage. Candidates should possess, as a minimum, a degree in a scientific, engineering or related discipline. Good written and oral presentation skills, strong interpersonal abilities and computer literacy are all vital. [More info](#)

### MALTA: REMPEC - RECRUITMENT OF PROGRAMME OFFICER (PREVENTION) (P3 LEVEL)

As part of the restructuring process of REMPEC on the 2 July 2014, the International Maritime Organization (IMO), which administers REMPEC, in liaison with UNEP/MAP, has published a vacancy announcement to recruit a Programme Officer (Prevention) at P3 level at REMPEC. The vacancy announcement is accessible from IMO's website on [Vacancies in the Professional Category](#) and the deadline for applications is the 1 August 2014.

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)