

CARIBBEAN GOVERNMENTS GAIN NEW LEGAL WEAPON IN COMBAT AGAINST MARINE POLLUTION

In the wake of the Deepwater Horizon disaster, the world's largest accidental marine oil spill, countries from the States and Territories bordering the Caribbean Sea and the Gulf of Mexico recently demonstrated their political commitment to the protection of the marine environment from land-based sources and activities, by bringing into force the Land Based Sources of Marine Pollution Protocol, known as LBS. Read more: <http://www.cep.unep.org/press/press-releases/caribbean-governments-gain-new-legal-weapon-in-combat-against-marine-pollution>

SOUTH KOREA: RUSSIA TO SEEK ADOPTION OF CONVENTION ON OIL SPILL PREVENTION AT NEXT G20 SUMMIT - MEDVEDEV



November 12 - Russia will seek the adoption of a convention on oil spill prevention at the next G20 summit, Russian President Dmitry Medvedev said on Friday.

"I was informed that we will come back to this issue next year, including the possibility of adopting a convention dedicated to the consequences of oil spills," Medvedev said at a press conference after the G20 meeting in South Korea.

The current international legal base does not effectively prevent such consequences, evidence of which became the [oil spill in the Gulf of Mexico](http://en.rian.ru/russia/20101112/161302626.html), Medvedev said. More: <http://en.rian.ru/russia/20101112/161302626.html> [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group]

USA: EPA PROPOSES GUIDANCE FOR UNDERGROUND STORAGE TANKS

As part of its commitment to help ensure that biofuels, such as ethanol and biodiesel, are safely stored in underground storage tanks (USTs), the U.S. Environmental Protection Agency (EPA) released draft guidance for UST owners and operators who wish to store these fuels. EPA is requesting comments on the proposed guidance that clarifies how an UST owner or operator can comply with the federal compatibility requirement for UST systems storing gasoline containing greater than 10 percent ethanol, and diesel containing a percent of biodiesel yet to be determined. After reviewing comments, EPA intends to issue the final guidance in early 2011. More information on the guidance: <http://www.epa.gov/oust/altfuels/compatproposal.htm> [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group]

USA: HIGHLY CONTAMINATED SOIL FOUND AT HANFORD

Workers have found a nasty surprise beneath a Hanford building just north of Richland -- highly contaminated soil from an undiscovered leak. "This is extremely high radiation. Nothing else compares in the river corridor," said Mark French, Department of Energy project director for environmental cleanup in the river corridor, the 75 square miles of Hanford along the Columbia River. Radioactivity has been measured at 8,900 rad per hour, which would be about 10 times the lethal dose on contact, according to Hanford officials. The building where the leak was found is about 1,000 feet from the Columbia River. Read more: <http://www.thenewstribune.com/2010/11/18/1429455/highly-contaminated-soil-found.html#ixzz15ec0uGig>

UK: OFFICIALS FIGHT TO REMEDIATE CONTAMINATION UNDERNEATH MAIN OLYMPIC SITE

A heavily contaminated site formerly used for chemical storage in East London provides an expensive lesson in urban brownfield remediation for government officials preparing the city for the upcoming 2012 Olympic Games.

As construction continues on the London Olympic Stadium, the centerpiece of the 2012 Summer Olympic Games, so do a variety of innovative efforts to clean up extensive pollution underneath the stadium stemming from a significant amount of toxic industrial solvents in the groundwater and bedrock below. According to officials from the Environment Agency, the chemicals are believed to have been leached from a storage facility that formerly occupied the site. The facility, which was owned by Banner Chemicals Group, has now been bulldozed to make way for the stadium but the pollution below is so severe that the remediation process will continue long after the Games are over. Read more: <http://www.planetizen.com/node/46915>

INDIA: FIVE OIL TANKERS DERAILED CAUSING MASSIVE OIL SPILL

November 11 - Thousands of litres of diesel were spilled and train services on the Sitapur-Delhi route were disrupted after five oil tankers of a goods train derailed in Uttar Pradesh's Shahjahanpur district on Thursday, officials said. No casualty was reported. The mishap took place two km from the Roja junction and resulted in a massive spillage from the derailed tankers that contained diesel. "Thousands of litres of the oil have leaked following the derailment. On an average, one tanker has the storage capacity of 75,000 litre," a railway official said. More: <http://www.hindustantimes.com/Five-oil-tankers-of-goods-train-derailed-in-UP/Article1-624706.aspx> [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group]

CHINA: WORLD BANK OVERVIEW OF THE CURRENT SITUATION ON BROWNFIELD REMEDIATION AND REDEVELOPMENT

This report provides an overview of the current situation of brownfield management in China for World Bank staff and relevant government officials in order to help raise awareness of land contamination and help develop remediation activities. Read more: http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&seArchMenuPK=64187511&entityID=000333037_20101118233821&cid=3001_3

APOLOGY – M. KEREM KEMERLI'S POWER POINT PRESENTATION

Editor - Readers have complained that the link in last week's Newsletter for looking at Kerem's presentation at the recent Black Sea event didn't work – I don't know why – but you should be able to view it by clicking on http://www.spillcontrol.org/Joomla/index.php?option=com_docman&task=cat_view&gid=20 Alternatively, go to the website at <http://www.spillcontrol.org> and look in the DOWNLOADS page.

TECHNOLOGY

LISTENING FOR OIL SPILLS

When the *Deepwater Horizon* oil spill erupted into the Gulf of Mexico last April, the only view researchers and citizens had of the gushing oil was the video feed controlled by BP. A team of scientists says it has now found a better way to track oil spills: sonar.

The researchers, from the University of New Hampshire's (UNH's) Center for Coastal and Ocean Mapping (CCOM) in Durham and the National Oceanic and Atmospheric Administration (NOAA), wanted to try sonar because its wide view can look at entire swaths of ocean at the same time. But no one had shown how to use the technology to map or track oil spills. "We were really doing crisis science. ... There were no proven methods for doing this," says team member Thomas Weber, an acoustician at CCOM. More: <http://news.sciencemag.org/sciencenow/2010/11/listening-for-oil-spills.html?ref=hp>

REMEDICATION TECHNIQUES FOR POLLUTION CAUSED BY MINING

This powerpoint presentation reviews approaches to mine pollution remediation in England and Wales through case studies illustrating three major remediation techniques.

http://www.hsph.harvard.edu/mining/files/UK_cases.ppt Other related papers can be found at: http://www.hsph.harvard.edu/mining/remediation_techniques.html

CAPT CONRAD SALDANAHA TO LEAD AUSMEPA



At the recent Annual General Meeting of the Australian Marine Environment Protection Association (AUSMEPA), its members elected Captain Conrad Saldanha, Marine Manager of Origin Energy, as the new Chairman of AUSMEPA. Captain Saldanha has been actively involved in AUSMEPA since its early days as a Board Member and since December 2006 as Deputy Chairman. Read more: <http://ausmepa.blogspot.com/>

PRODUCTS & SERVICES

CHEMICAL SPILL KITS – NEW RANGE ANNOUNCED BY YELLOW SHIELD

Yellow Shield has announced the launch of a new generation of neutralising spill kits. The new products include: • Acid neutralising chemical spill kits • Alkali neutralising chemical spill kits • Bleach neutralising chemical spill kits • Battery acid spill kits • Water treatment plant spill kits • Mercury spill kits • Sanitary spill kits • Body fluid spill kits.

Once the chemical is neutralised, absorbent pads are used to clean down the area. The residue is safe, being pH neutral, giving greater protection to operators and the environment, and can be disposed of as a general waste or via the sewage system. The neutralising spill kits come in all sizes from the 50 litre shoulder bag spill kit to the 250 litre wheeled bin spill kit. More info: <http://www.pressdispensary.co.uk/releases/c992860/Chemical-Spill-Kits---New-Range-Announced-by-Yellow-Shield.php>

EVENTS

For more comprehensive information on upcoming events & training courses click [HERE](#) and select "Events"

USA: CALL FOR ABSTRACTS FOR AHMP 2011

AHMP 2011, the AHMP National Conference, the environmental, health, safety and security (EHS&S), hazardous materials and waste management industry's essential forum for national and international information exchange and networking.

AHMP encourages abstracts from individuals in federal, state and local agencies in both the United States and abroad; first responders; engineers; scientists; project managers; military staff; college and university students; and EHS professionals in all areas related to hazardous materials. If approvals or authorizations will be needed for your presentation, please verify these prior to submitting your abstract. Authors of approved abstracts are expected to attend the conference and deliver their presentations as scheduled. [AHMP 2011 Call for Abstracts Information](#)

PUBLICATIONS

NEW EVIDENCE GATHERING HANDBOOK FROM THE NAUTICAL INSTITUTE

The Nautical Institute has launched an important new influential loss prevention publication to help seafarers gather evidence in the event of accidents and incidents. *The Mariner's Role in Collecting Evidence – Handbook* was launched at a Mariner and the Maritime Law seminar organised by the Institute's North East England Branch in Newcastle.

The Handbook, written by a team from the North of England P&I Association, augments another, larger book published by the Institute: *The Mariner's Role in Collecting Evidence – in the Light of ISM* by Dr Phil Anderson, also of the Institute's North East England Branch. Read more: http://www.nautinst.org/press/docs/MRiCE_HandbookReleaseNov2010.doc

TECHNOLOGY INNOVATION NEWS SURVEY

The October 1-15, 2010 *Technology Innovation News Survey* has been posted to the CLU-IN web site. The Survey contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. The latest survey is available at: <http://www.clu-in.org/products/tins/>

AN FOSC'S GUIDE TO NOAA SCIENTIFIC SUPPORT VERSION 2, JULY 2010

A guidebook for oil and chemical spill responders, describing the products and services that the NOAA Scientific Support Team can provide to Federal On-Scene Coordinators (FOSCs). (updated: November 10, 2010). For more info on this and other NOAA publications go to - <http://www.response.restoration.noaa.gov/>



In this issue of the ISCO Newsletter we are printing the second of four articles contributed by Dr Douglas Cormack.

Dr Douglas Cormack is an Honorary Member of ISCO. As the former Chief Scientist at the British Government's Marine Pollution Control Unit and head of the UK's first government agency, the Warren Spring Laboratory, Douglas is a well known and highly respected figure in the spill response community. He is the Chairman and a founder member of the International Spill Accreditation Association.

HARMONISATION OF TECHNOLOGY AND MARINE ENVIRONMENT (PART TWO)

As to knowledge-acquisition on the physicochemical fate of oil in the marine environment, on operational-release limitation, and on accidental-release response, the UK R&D programme from 1976 was unique in having a dedicated research ship and authorisation to release oil at sea and onshore for all relevant purposes. However, while the results of this programme were published in a series of progress reports and summarised in 1983 as a book² which also reported the limited extent of their national implementation, neither this physicochemical/operational knowledge nor the biological knowledge available from all incidents from the *Torrey Canyon* of 1967 to the *Deepwater Horizon* of 2010 has so far diminished the belief in species-extinction/ecological-disaster which wrongly casts oil-producers and ship-operators as enemies of the marine and general environment.

However, the UK R&D team established in October 1974, was motivated by knowledge of the commercial impacts of amenity-loss and fish-marketing interruption, rather than by belief in species-specific or ecological disasters. Indeed the team was surprised to know that belief in biological damage could override the known benefits of dispersing oil at sea to prevent its coating individual organisms; of dispersing it from shorelines to facilitate re-colonisation; and of cargo/bunker transfer in safe-havens to prevent yet more oil being released from subsequent weather-damage in exposed locations. Indeed, despite dispersants and mechanical-recovery being known to provide limited response compared to the potential magnitude of un-prevented release, beliefs antagonistic to safe-haven use prevailed until the *Sea Empress Incident* of 1996 caused the subsequent *Donaldson Enquiry* to accept the knowledge-based case for safe-havens presented in my books of 1983² and 1999³.

As to building on existing knowledge of oil components and individual chemicals, the UK R&D team selected the parameters of density, volatility, viscosity, surface tension, solubility, solidification and reactivity as being relevant to whether releases would sink, float, spread, evaporate, disperse, dissolve, or react with air and/or water. Thus, pollutants were classified for potential response as evaporating floaters, non-evaporating floaters which disperse or dissolve, or sinkers which disperse or dissolve. As to gravity-induced spreading of floaters under the influence of viscosity and surface tension, it was already known that the resulting slicks had very low thickness and inversely high areas for the evaporation, dispersion and solution which effect natural surface-clearing; that the inversely low thicknesses would ensure low concentrations of oil components per unit volume of air and water, per unit area of surface; that this would seriously reduce recovery and dispersion rates by any conceivable intervention; and that while the encounter rate of dispersant-spraying equipment could be increased by mounting it on aircraft rather than ships, ship-speed itself would need to be reduced to about 1 knot for mechanical-recovery by any conceivable means.

As to quantification, the team observed equilibrium slick-thickness to be around 0.1mm, for which the encounter rate of a 1m wide unit travelling at 1 knot would be 0.18 tonnes per hour and *pro rata*. Thus, while evaporation and/or dispersion proceeds uniformly over every square metre of the entire area, the concentration in every bottom cubic metre of atmosphere or top cubic metre of sea can be no more than 100 parts per million, and less for rates slower than instantaneous, and less again on dilution to higher and deeper levels. Thus, regardless of how much evaporation/dispersion occurs in total, concentrations in air and water will be low because the areas are inversely high. As to the effects of applied dispersant on living organisms, marine biologists knew the kerosene carrier to be more toxic than the surfactant while their combined toxicity could be measured only at concentrations higher than could arise from application-rates scaled to slick thickness and encounter-rate. Indeed, when water replaced kerosene, toxicity could only be measured by adding oil to the dispersant under test and increasing concentrations by two orders of magnitude above operational levels. Thus, toxicity-testing continued under conditions which could ban the most effective formulations while approving the least effective. To be continued next week.

1 The *Rational Trinity: Imagination, Belief and Knowledge*, D.Cormack, Bright Pen 2010 available at www.authorsonline.co.uk

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

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

GOM DISPERSANT USE – LATEST FINDINGS

John S. Brinkman writes “In spite of the “spin” the EPA/USCG/NOAA and BP continue to put on the unprecedented use of almost 2 million gallons of dispersant during the Deepwater Horizon catastrophe, 800K gallons at the wellhead, at least a part of the world is “not buying what their selling”.

Both articles support what Dr. Koops referenced during his presentation at OPRC-HNS TG11, in September 2010.

I thought you will find the attached article to be of interest? I suspect it will take several more weeks/months/years to verify these findings but I find it very hard to believe that the oil magically disappeared”.

Editor: The articles John is referring to can be accessed at –

<http://www.nature.com/news/2010/101110/full/news.2010.597.html>

http://www.upi.com/Science_News/2010/11/05/Dead-dying-coral-at-gulf-oil-spill-site/UPI-86921288986165/

TWITTERING AND ALL THAT – ANSWERS TO QUESTION

Sjon Huisman wrote “Stay away from Facebook and similar links. Keep the newsletter and web-site up to date and there is no need to go elsewhere. As I see it these other things are toys that are quite often misused”.

Mark Frances advised “I use the linked-in to keep up with the news and keep in touch with ex colleagues around the world. It gives you the opportunity to open an area for various discussions. Obviously the BP spill has sparked a lot of interest. The good thing about it is that you decide who joins your area. I share your opinion that a lot of time can be wasted on these network sites and some people want to join just to get their profile shown but not to participate. I think this could be a good idea as members could meet and discuss things with each other and not necessarily take up more of your time. Facebook, Plaxo and Twitter seem to be more family oriented. I do not find them particularly useful”.

Editor – For the present at least ISCO isn't planning to participate in any of these networking sites. The Newsletter seems to work well – but I do sometimes struggle to keep the website up-to-date. It has been suggested that a Forum be created on the website – a place where readers can directly post messages and exchange news – but this would require a “Moderator”. Does anyone want this and are there any volunteers?

ISCO NOTICES**FREE DOWNLOADS – SPILL RESPONSE GUIDANCE & OTHER USEFUL THINGS**

Apologies are due to those who have recently visited the “Useful Downloads” page of the ISCO website. “Useful Downloads” allows users to download free tools, guidance documents and software for oil and chemical spill response – but the site, with some non-responsive links and other problems, was in need of overhaul.

This work has now been done and you can have a look by clicking [HERE](#)

“Useful Downloads” is capable of further development and improvement. It would be nice to have an index of the many topics addressed with a “jump to” facility making using the site easier and faster. Any volunteers willing to help?

INTERNATIONAL DIRECTORY - SPILL RESPONSE SUPPLIES & SERVICES

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New feature - Click on the links above to find what you are looking for. Clicking on any entry will display the advertiser's website. Cost of inserting each entry is – For ISCO Corporate Members FREE – For non-members GBP 500 per annum.

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.