ISCO NEWSLETTER

The Newsletter of the International Spill Response Community

Issue 319, 30 January 2012

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

FREE ADVERTISING FOR ISCO CORPORATE MEMBERS

QUICK FINDER

Click on these headings

Clicking on any entry will display the advertiser's website.

Reach your Market

Entries are **FREE** for ISCO Corporate Members. For non-members one entry is just GBP 500 per annum.

Banners should be submitted in JPG format, size approx. 490 x 120 pixels. Each entry in the directory will be hyperlinked so that one click will immediately display your own website.

A one time only charge of £20 will be made for uploading each entry or, if you haven't a ready-to-upload banner, we can create one for you for only £70. Contact Bob Gentle at - bobgentle@northeastcreative.com

HAVE THIS NEWSLETTER DELIVERED DIRECTLY TO YOUR DESK

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 is not expensive.

Application Form

News

INDUSTRY LAUNCHES ARCTIC SPILL-RESPONSE EFFORT

January 26 - Some of the world's biggest oil companies have launched a four-year, multi-million-dollar collaborative effort aimed at enhancing the industry's ability to respond to and prevent Arctic oil spills as these new frontiers open up to development.

"Prevention of oil spills is a priority for industry, as is the response to any spill that may occur," programme manager Joseph Mullin said in a statement. "Spill-response research is an aspect of the oil business for which collaboration is imperative."

Oil companies are increasingly exploring for hard-to-reach resources in Arctic regions in places such as Russia, Greenland and the US. Environmentalists fear a spill in such environmentally sensitive areas would be catastrophic and near-impossible to adequately clean up.

The programme announced on Thursday by members of the International Association of Oil & Gas Producers (OGP) will run tests and experiments and develop spill-response technology that will better prepare industry to deal with possible accidents, Mullin said.

The group of sponsors includes supermajors BP, Chevron, ConocoPhillips, Shell and ExxonMobil, as well as major producers Eni, Statoil, and Total. Each company is paying an equal share of about $2.4 million, said OGP spokesman John Campbell.

The programme, known as the Oil Spill Response Technology Joint Industry Programme (JIP), will address the unique challenges posed by punishing Arctic conditions, including prolonged periods of darkness, extreme cold, distant infrastructure, presence of sea ice offshore and a higher cost of doing business, the statement said.

Some of the research will focus on in dispersant use, in-situ burning, mechanical recovery, and remote sensing in Arctic conditions. *Upstreamonline.com*
Read more

US, RUSSIA TO CONDUCT JOINT ANTARCTICA INSPECTION

Jabuary 21 - The United States and Russia will jointly inspect foreign facilities in Antarctica to make sure environmental and other responsibilities under the 1959 Antarctica Treaty are being met, the State Department said Saturday.

A US-Russian team will travel to Antarctica January 23-28 to check foreign stations, installations and equipment, it said.

"The US-Russian team will review adherence by treaty parties to their obligations, including with respect to limiting environmental impacts, ensuring that Antarctica is used only for peaceful purposes and that parties honor the prohibition on measures of a military nature," it said. *TerraDaily* Read more

---

EMSA TO CHARTER ADDITIONAL OIL SPILL RECOVERY VESSELS

The European Maritime Safety Agency (EMSA) has launched a new call for tender to enlarge its fleet of stand-by oil spill recovery vessels. EMSA has already chartered vessels operating in the Baltic Sea, along the Atlantic Coast, in the North Sea, in the Mediterranean Sea and in the Black Sea.

The current call for tender aims to charter additional vessels to operate in the southern Atlantic, central Mediterranean Sea, Bay of Biscay and western Mediterranean Sea.

The stand-by oil spill recovery vessels will have to provide their assistance services to the requesting Member State on the basis of a pre-agreed, 4-year model contract developed by EMSA, regardless of the spill location. They will need to have sufficient on-board storage capacity for recovered oil as well as an appropriately trained crew and will be required to take part in annual spill response exercises.

EMSA intends to conclude the procurement process by the end of November 2012. [Thanks to ISCO Industry Partner, INTERTANKO, for passing on this news item] Read more

---

ITALY: COSTA CONCORDIA OIL REMOVAL UPDATE

The latest from from Smit Salvage

25 January 2012: Floating oil boom on its way to being installed around the ship

The estimated amount of bunkers in the vessel is 2200 MT of IFO (intermediate fuel oil), 185 MT of MGO (marine gas oil/diesel) and lubricants, distributed over 17 tanks.

January 28 - At a press conference held today on the island of Giglio, SMIT Salvage and its partner Fratelli Neri provided a technical briefing on the oil removal operation. A presentation and animation of the oil removal operation was provided to the press. A compilation of underwater video footage filmed by divers was also provided.

Two of the six forward fuel tanks have now been installed with a sealed flange and the remaining tanks were due to be prepared today. The six forward tanks are estimated to hold approximately two thirds of the (intermediate) fuel oil in the casualty.

Whilst the expectation was that the oil removal process would commence shortly after the press conference, operations were suspended on Saturday morning due to unfavourable weather conditions. The crane barge was disconnected from the casualty and brought into the protective port of the island Giglio. Weather permitting, we look forward to completing the preparations on the forward fuel tanks and commencing with the oil removal as soon as possible. Read more

EMSA vessel to assist with bunker oil removal from Costa Concordia

The EMSA-contracted Stand by Oil Spill Response Vessel Salina Bay arrived this weekend on site of the Costa Concordia to assist SMIT Salvage, who is in charge of the bunker removal and pollution response operations. Preparations are on-going for the removal of the bunker oil from the grounded cruise ship Costa Concordia. The Salina Bay will be -as a precautionary measure- on stand-by during this operation over the next weeks. The Salina Bay is equipped with several oil recovery systems, as booms, skimmer, sweeping arms and a dedicated radar slick detection system. In the worst case of pollution, she will offer directly response capabilities. Until now no bunker related pollution has occurred.

News (continued)

Photo: Salina Bay at Giglio

"We are actively supporting all efforts to avoid environmental damage" said Leendert Bal, EMSA's Acting Executive Director, "which is a modest contribution after a very serious and tragic accident."

The Salina Bay is an oil tanker built in 1981 and measuring 75m in length which covers the Central Mediterranean Sea. Bunkering is its main commercial activity. The tanker has a storage capacity of 2 800m³ and a heating capacity of 2 800kW. Its response equipment includes two rigid 12m sweeping arms, two booms (250mt each), one remotely controlled skimmer and a slick detection radar. Additional equipment includes: a gas detector, mini-lab and flashpoint tester. The ship was contracted to the Maltese company Tankship Management, a subsidiary of the Malta-based Virtu Holding Ltd which operates passenger transport, bunkering and ship repair. [Source: EMSA Press Release] Read more

---

NEW ZEALAND: DANGEROUS GOODS REMOVED FROM RENA

ISCO Corporate Member, Braemar Howells, continues recovered container processing

Photo: January 27: Rena*'s bow as observed from 6am overflight*

January 24 - Salvors yesterday removed four dangerous goods containers from the bow of Rena. The containers held empty tanks which formerly held hydrogen peroxide and still have residual amounts of the chemical inside. Braemar Howells has plans and procedures in place for handling the containers when they are brought ashore.

This means there are no dangerous goods containers left above deck on Rena. There are still dangerous goods containers in the holds of the wreck.

The total number of containers removed from Rena since it broke in half is now 43. Salvors also removed 18 packets of timber manually from the bow section yesterday - approximately half a container load.

Observation flights have identified no significant changes to the two sections of the wreck. The weather around the Astrolabe Reef is fine today and forecast to remain clear for the next few days.

More than 2,300 tonnes of waste has been processed by Braemar Howells - the company responsible for distressed container and cargo recovery - since the Rena grounding. Braemar has processed about 2,325 tonnes of waste.

[Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group for passing on this report from *Voxy Co NZ]* Read more
Also: Latest update from Maritime New Zealand

JAPAN REVIEWS DISASTER PLAN AMID NEW QUAKE CONCERNS

January 24 - The International Atomic Energy Agency on Monday began a mission to help identify gaps in Japan's safety-check procedure for nuclear plants, to boost reactor resilience to natural disasters, as Tokyo began drawing up emergency plans with local governments.

Underscoring the risks facing Japan, a new research institute investigation has determined there is a 70% chance of a magnitude-7 earthquake striking the Tokyo metropolitan area within the next four years, and 98% over 30 years. The March 2011 earthquake was a magnitude-9.

The latest prediction surprised residents, and grabbed headlines in the local media. The government's forecast, using a different methodology, has been that there is a 70% chance of a magnitude-7 quake hitting Tokyo over the next 30 years. *From the Wall Street Journal Asia.* Read more

---

INDIA: BHOPAL PLANT TOXIC WASTE STILL STUCK IN LIMBO

January 24 - It's been 27 years since the gas leak in Bhopal that led to thousands of people dying but 350 tonnes of toxic waste still remains at the old Union Carbide plant, with various agencies unable to find a way to dispose of it safely.

While the legacy of the gas leak continues to haunt its victims and the state and central governments, the Central Pollution Control Board (CPCB) and the Madhya Pradesh Pollution Control Board (MPPCB) have been seeking to deal with the waste in line with a 2007 order of the Jabalpur high court that called on them to destroy it. Thus far, CPCB has tried to incinerate the waste in Madhya Pradesh and Gujarat but failed. The Gujarat government had initially cleared a plan to do so at Ankleshwar but backed out after stiff local resistance. Pithampur, near Indore in Madhya Pradesh, was the next choice but also had to be ruled out for the same reason. The group of ministers on the Bhopal gas leak, headed by home minister P. Chidambaram, then decided to find an alternative site in March last year.

CPCB now wants to destroy the waste at the Mumbai Waste Management Ltd (MWML) facility at Taloja, Navi Mumbai, but the Maharashtra government is resisting the move. An earlier attempt to use the Defence Research and Development Organisation (DRDO) facility on the outskirts of Nagpur came to naught after non-governmental orgnizations (NGO) and social activists in opposing Maharashtra's second capital filed a public interest litigation (PIL) the move. The Nagpur bench of the Bombay high court restrained CPCB from disposing of the toxic waste at DRDO in December. Earlier this month, MPCB got a letter from CPCB seeking a no-objection certificate, or NOC, to transfer 10 tonnes of toxic waste for disposal to the MWML facility, according to an MPCB official. From *LiveMint.com* Read more

---

USA: OBAMA OFFICIAL DEFENDS KEYSTONE XL PERMIT DENIAL

January 25 - A top State Department official on Wednesday defended the Obama administration's rationale for denying a permit for the Keystone XL oil pipeline against attacks from Republicans who say the decision was politically motivated and will cost jobs.

Assistant Secretary of State Kerri-Ann Jones said a Feb. 21 decision deadline imposed by Congress didn't provide the department enough time to assess alternative routes avoiding the environmentally sensitive Sandhills region of Nebraska, which is home to a drinking-water aquifer.

"Without that information, we'd also not be able to look at other factors, socioeconomic factors, environmental factors, as well as foreign policy and energy security," Jones told the House Energy and Commerce and Committee's energy and power subcommittee.

President Barack Obama has said the decision was not based on the merits of the project but rather on the department's inability to meet the deadline. TransCanada Corp. has said it will reapply for a permit. *Houston Chronicle* Read more

---

USA: MORE NEWS ON "FRACKING"

Obama Pushes Natural-Gas Fracking to Create 600,000 Jobs

January 25 - President Barack Obama pushed drilling for gas in shale rock and support for cleaner energy sources to boost the economy in his final State of the Union address before facing U.S. voters in November.

Hydraulic fracturing, the process of injecting water, sand and chemicals underground to free gas trapped in rock, could create more than 600,000 jobs by the end of the decade, Obama said yesterday. The process, called fracking, is among a list of energy policies Obama said would fuel economic growth.

"We have a supply of natural gas that can last America nearly 100 years, and my administration will take every possible action to safely develop this energy," Obama said.

Obama reiterated support for conservation and cleaner sources of power and pledged more oil drilling as part of an 'all-out, all-of-the-above'' policy "that's cleaner, cheaper, and full of new jobs." He said domestic energy production is at an eight-year high and imports of foreign oil were declining, prompting criticism from Republicans. *Bloomberg Businessweek* Read more

IEA to make shale gas regulatory recommendations

January 23 - The International Energy Agency (IEA) is preparing recommendations for countries to regulate the controversial shale gas industry, to be published in its global energy report in the autumn.

"If you're going to have golden gas, you have to have golden rules," IEA Deputy Executive Director Richard Jones said at a conference in Geneva on Monday, referring to a 2011 IEA report entitled, "Are we entering a golden age of gas?"

The development of shale gas extraction is a potential game-changer in world energy markets, offering ample supplies in markets that could otherwise tighten in coming years.

But the hydraulic fracturing, or fracking, technology used to extract shale gas requires large amounts of water and chemicals, and concerns about contamination of water supplies and other potential environmental problems have led some governments to ban its use or put moratoriums in place. *Reuters* Read more

CHINA: CONOCO, CNOOC PARENT REACH $160 MILLION OIL SPILL SETTLEMENT

January 25 - ConocoPhillips and China National Offshore Oil Corp. will pay about $160 million to compensate Chinese fishermen for losses arising from oil leaks in the country's biggest pollution settlement in at least six years.

The companies reached an agreement with the agriculture ministry to pay 1 billion yuan, Conoco, the third-largest U.S. oil company, said in a statement today. That's more than four times the 234 million yuan ($37 million) 29 fishermen had sought in a lawsuit for the loss of clams and sea cucumbers resulting from spills at China's biggest offshore oilfield last year.

In a sign that China is cracking down on polluters, Premier Wen Jiabao demanded a "thorough" investigation into the leaks after China's maritime regulator ordered Conoco on Sept. 2. to shut the field. Houston-based Conoco operates and owns 49 percent of the Penglai 19-3 area in Bohai Bay, while Cnooc Ltd., the listed arm of China National, has 51 percent. *Bloomberg* Read more
[Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group, for the link to this report]

NIGERIA: LATEST NEWS REPORTS

Oil spill – What way forward?

January 29 - Energy experts from around the world recently converged in Abuja to brainstorm and find lasting ways to tackle Nigeria's oil spill challenge. JULIET ALOHAN, in this report examines the submissions of these experts and writes that the time for government to act is now.

Oil and gas experts who gathered at the Transcorp Hilton Hotel, Abuja,at the First Stakeholders' Roundtable on the Niger Delta Environmental Protection and Regeneration with the theme: "Ensuring Niger Delta Environmental Sustenance," last November, focused on finding ways to end Nigeria's oil spill and environmental degradation challenge.

The forum which was the first ever stakeholders' roundtable on the subject matter attracted experts from around the world which included Bill Richardson, former governor of the United States State of New Mexico, erstwhile US Energy Secretary, and ambassador, Howard Jeter, erstwhile US envoy to Nigeria. *Leadership Newspaper* Read Juliet Alohan's Report

Untold story of Bonga oil spill

January 22 - Residents of the riverine community of Odioma, in Brass Local Government Area of Bayelsa State are still counting their losses as the devastating effects of last December oil spillage, which wrecked overwhelming havoc on their aquatic lives and farmlands continue to raise serious concern, regarding their means of livelihood.

The growing cases of oil spill in the Niger-Delta region have become recurring phenomena. For decades, oil producing communities in the South-South have been battling with multinational oil companies and the Federal Government on the need to pre-empt and contain oil spills that had culminated in gross environmental pollution, destruction of sea lives and diminishing quality of soil texture.

Predominantly, inhabitants of Odioma and other coastal communities in Southern Ijaw and Ekeremor Local Government councils, including Bisangbene, Letugbene, Agge and Ogulagha, Odimodi, in Delta State terribly affected by the Bonga Oil Spill, from the platform of Shell Petroleum Development Company (SPDC) are fishermen. So, the spill, which occurred a day before the celebration of Christmas, was a big blow to their means of livelihood.

In all, no fewer than 64 communities both in Bayelsa and Delta States are faced with negative impacts of the spill from SPDC facilities. The latest spillage, which is adjudged to be one of the worst in 10 years, occurred four months after a major United Nations (UN) study said it may take Shell, Chevron and other oil multinationals 30 years and a whooping sum $1billion to effectively carry out a comprehensive cleaning of spills in the Niger Delta region. *Sunday Tribune* Read more

Cormack's Column

In this issue of the ISCO Newsletter we are printing No. 61 in a series of 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

KNOWLEDGE OF DISPERSANT USE (CHAPTER 61)

Further to article 60, surfactants should be developed and formulations improved for extending the effectiveness of dispersants to higher emulsion viscosities and to lower wave-induced energy requirements. As to breaking mechanically recovered emulsions, the need is less: they can always be broken by heat, though the development of wider-spectrum products could be helpful. Thus, extension of the range of amenable viscosities and of emulsion types is more important for dispersants and demulsifiers respectively than is improvement in their intrinsic efficiencies, their uniform mixing with the pollutant being dependent on the volume and nature of the surfactant-carrier for 'rain-drop' application in the former case, while in the later uniformity is achieved by static mixers independent of both the volume and nature of the carrier if any.

In the early days, the surfactant carrier in dispersant formulation was hydrocarbon-based no doubt to render the formulation more oil- than water-compatible on initial contact while permitting the surfactant to stabilise the subsequently created oil droplets against immediate re-coalesce with the oil phase and to promote their entry/retention/dilution in the water phase. Later when concentrate dispersants became available for use with on-site water as a carrier to maintain the necessary uniform distribution of droplets over the upper surface of slicks, these new formulations had to be more compatible with water than with oil on initial contact. Later still when applied without the water-carrier as in aircraft spraying, the necessary uniformity of droplet distribution on slick surfaces had to be secured through attention to nozzle design and the relationship between droplet size and surface contact spot size (article 51). However, the HLB (article 29) most suited to dilution with water may not be optimal for the dispersion of oil and water-in-oil emulsions while a hydrocarbon carrier might be expected to reduce the viscosity of both and thus extend dispersant applicability to higher viscosity pollutants.

Again, formulators could reconsider the breaking of recovered emulsions in terms of continuous-phase inversion. Thus, we know that the presence of a demulsifier can decrease the fractional water content, ϕ_w of an emulsion (article 23) without actually breaking it, which in turn increases the fractional oil content, ϕ_o and reduces the viscosity eventually to the point of continuous phase separation as marked by an associated step-change in specific conductivity from which point the continuous oil phase might be inverted to the dispersed phase within the continuous water phase, though the usual outcome is the two phases of emulsion breakage. Indeed, solar energy can thus reduce the fractional water content of emulsified slicks, to an oil phase which can both disperse into the sea as oil droplets or reform the emulsion by re-uptake of water droplets.

Thus, we see the interactive nature of dispersant/demulsifier formulation, the search being for surfactants which will replace the natural water-droplet/oil emulsifiers with the demulsifiers/dispersants which will stabilise the oil-droplet/water interface, *i.e.* to replace the asphalteness, wax crystals and oxidised derivatives of other oil components which stabilise the former with new surfactants which will stabilise the latter more effectively than those currently available. A second objective would be to ensure that stabilisation by bi-wetted interfacial solids, is replaced by surfactants wetted either by oil or water but not by both. In the meantime, those who advocate the application of demulsifiers to floating slicks would presumably use dispersants until emulsification defeated them, whereupon they would use demulsifiers until they could revert to dispersants and so on, though such would require the monitoring of water-content/viscosity values not so far undertaken to monitor dispersant spraying itself.

As to further work on the mechanism of dispersion and the formulation of dispersants, it is recommended that the investigative equipment described in article 60 could be used to produce subsurface concentrations of oil/emulsion for measurement at specific time intervals after dispersant application to the emulsion carpet. Thus, for example a fluorimeter transept 450 metre behind the oil and dispersant spray jets mounted on a ship proceeding at a speed or moored in a tidal stream of 0.5m/s will provide data 15 minutes after dispersant treatment and *pro rata*, while a similar approach would provide data on untreated natural dispersion at the same time intervals. However, droplet size measurements would also be needed to distinguish between droplets large enough to be migrating upwards to re-coalescence and those small enough to remain dispersed for both differing oils and their water-in-oil emulsions both treated and untreated. Of course, such efforts towards knowledge-based progress depend on environmentalists and their regulatory fellow-travellers accepting formulation-components which their beliefs currently oppose.

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.

OIL SPILL REMOTE SENSING: CHAPTER 3

Continuing a short series of articles on Oil Spill Remote Sensing contributed by Dr Merv Fingas of Spill Science, Edmonton, Alberta, Canada T6W 1J6 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.

This is the third of a series of articles which will go into the remote sensing of oil spills. This series will cover oil spill remote sensing step by step and will present the latest in knowledge on the topic.

Atmospheric properties

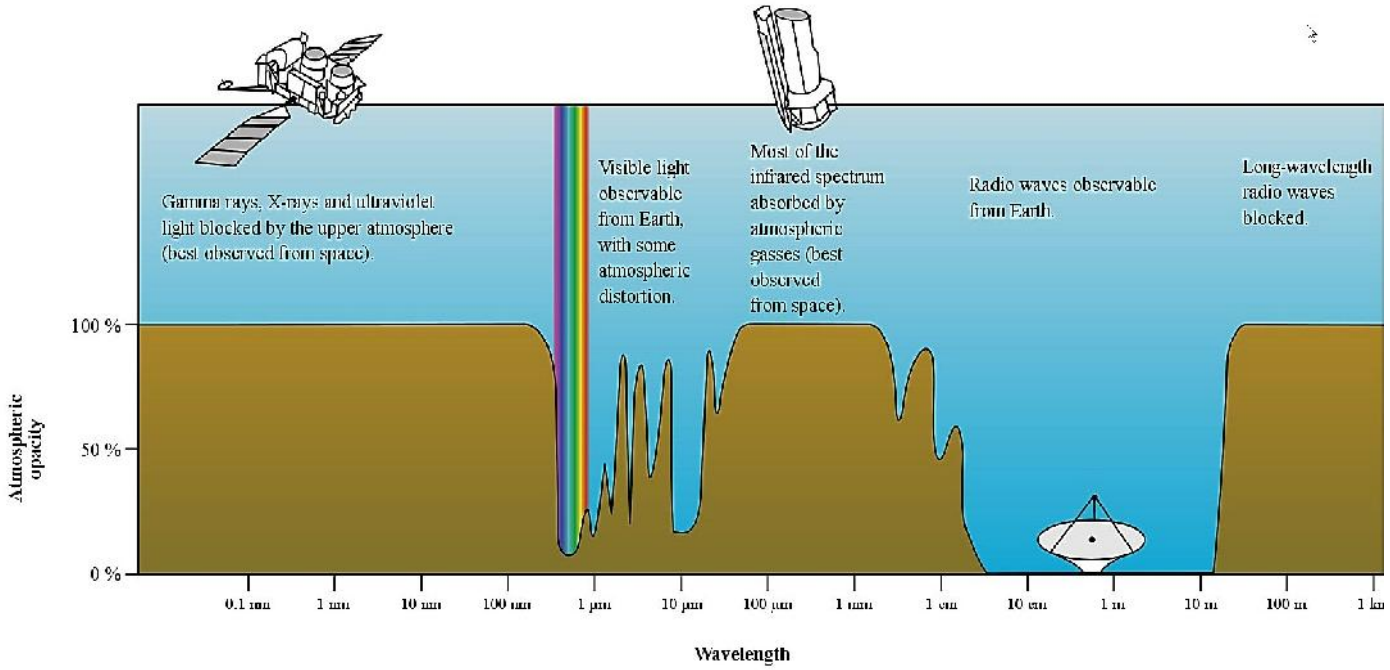

Figure 1

The atmosphere has certain transmission/adsorption windows that affect the way that one can carry out remote sensing. Figure 1 shows the atmospheric attenuation at different electromagnetic wavelengths. This figure shows that the commonly-used wavelengths in the visible, long-wave infrared and radar bands are relatively free of atmospheric adsorption. One must consider rain, fog and snow which limit operations in both the visible and the infrared regions. This leaves radar as the only all weather and day and night sensor. Radar, as will be described in further issues, has many limitations in that it does not actually detect oil but only detects the dampening of sea capillary waves at a certain range of wind speeds.

Oil interaction with light and electronic waves

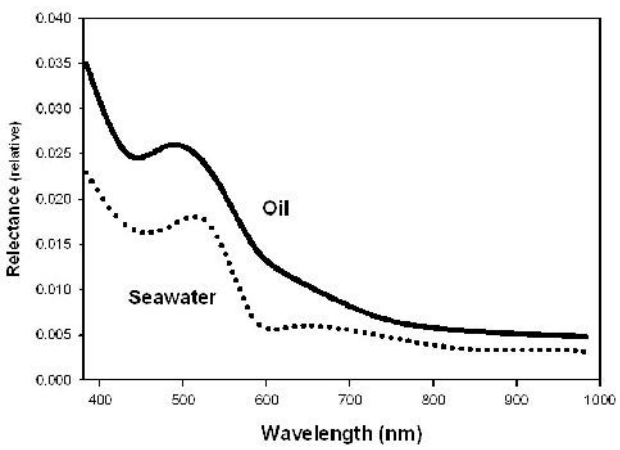

Figure 2

Oil interacts with light and electromagnetic waves in certain specific ways, this can yield detectability of oil. Several researchers have measured oil optical properties.[4] Weathering of oil increases the light absorption of the oil along with an increase in light scattering. An emulsion also absorbs more light and attenuates the light in the water column. Some researchers studied the UV and visible absorption of oils for analytical purposes, noting that crude oils were opaque and thus had to be diluted. The implication for remote sensing is that UV and visible signatures of oil are insufficient for characterization. The light reflectance of crude oils floating on water does not contain spectral information.[5]

The reflectance of oil is greater than seawater and increases with decreasing wavelength i.e. is greater in the blue-green region. Figure 2 shows typical reflectance curves between oil and water.

Special series (continued)

Several researchers have tried to use this reflectance difference to discriminate oils, however the best application is to use it as an indicator of oil on the surface.[6]

In summary, there are few very distinct characteristics that oil exhibits in the visible, IR or shorter wavelengths. Oil remote sensing depends on secondary effects for oil detection and mapping.

References:

4 Otremba, Z., and J. Piskozub, Modelling of the Optical Contrast of an Oil Film on a Sea Surface, *Opt. Express*, 411, 2001

5 Otremba, Z., and J. Piskozub, The Modification of Light Flux Leaving a Wind-roughened, Oil covered Sea Surface: Example of Computations for Shallow Seas, *Ocean. Studies*, 117, 2000

6 Wettle, M., P.J. Daniel, G.A. Logan and M. Thankappan, Assessing the Effect of Hydrocarbon Type and Thickness on a Remote Sensing Signal: A Sensitivity Study Based on the Optical Properties of Two Different Oil Types and the HYMAP and Quickbird Sensors, *Rem. Sens. Environ.*, 2000, 2010

Correspondence

??? Keystone Pipeline – What do you think ?

Sir,

Further to the ongoing controversy concerning the construction of the XL pipeline, connecting Canada and the USA. I am providing a pro/con document for your review. This was sourced from an article by Sarah O. Ladislaw mentioned in last week's ISCO Newsletter and published by the Center for Strategic and International Studies at http://csis.org/publication/latest-keystone-xl-pipeline-saga

I understand that the ISCO seeks impartiality on issues which may divide our community but would nevertheless be very interested to know the views of our members and other readers regarding the environmental impact and response concerns that this proposed project represents.

Marc K. Shaye, Esq.
Franklin, Michigan, USA

	Anti-Pipeline	Pro-Pipeline
Environmental Impact	Oil sands produce higher greenhouse gas emissions than conventional oil and therefore contribute to global warming and the associated environmental and public health impacts.	Oil sands production is not that much more greenhouse gas intensive than conventional oil on a lifecycle emissions basis, and Canada has put in place measures to reduce emissions intensity over time.
	Oil sands production has negative local land, water, wildlife, and air pollution impacts that are not adequately addressed in Canada.	Alberta has in place regulations to improve the entire range of environmental impacts of oil sands production.
	The pipeline will have adverse environmental impacts in ecologically sensitive areas, and the current plans to do not take adequate steps to address these concerns (some opposition members are flatly opposed to the pipeline regardless of safety measures).	The proposed pipeline has met or exceeded all environmental and permitting conditions to deem it safe and has appropriate measures in place to deal with incidents or accidents should they occur.
	The process of refining additional crude oil will have negative environmental and social justice impacts on areas of the country where this oil will be refined.	Refining additional volumes of crude oil or a different kind of crude oil will not change the environmental impact of regional refining activities, as local air pollution guidelines set standards for acceptable levels of air quality.

Energy Security	Increasing crude oil imports will only prolong our dependence on a fuel that is ultimately insecure due to limited global supply and oil price volatility due to the nature of the global market.	Canada is one of the most secure sources of oil supply in the world and has long been a secure source of supply for the United States.
	The oil imported by this pipeline will not be used in the United States but instead shipped to other countries through access to Gulf of Mexico trade ports. The U.S. market does not need this crude oil anyway.	The pipeline will allow more crude oil to travel to the United States and allow greater market efficiency within U.S. oil markets; some oil- sands-derived products will be exported to more appropriate markets, but other product will remain in the United States. Any additional oil in the global market helps to enhance oil security by increasing supply.
Economic Benefit	The pipeline is bad for the economy because it will increase oil prices in certain parts of the country (the Midwest) and distract investment away from clean energy technologies that will be the source of future economic growth and competition.	The pipeline and associated upgrading and marketing will have significant positive impacts on local economies, and the additional oil supplies will provide downward price pressure on global oil prices, which will have a positive economic effect.
	The pipeline will not create very many jobs and those jobs will not be high quality, high paying, or permanent.	The pipeline will create tens if not hundreds of thousands of quality jobs in a value-added economic activity.
Foreign Policy	Oil is bought and sold in a global market so buying oil from Canada does nothing to help alleviate dependence on other parts of the world. Canada does not need to ship this oil through the United States but can export it from its own shores.	Canada is a secure and stable oil supplier, trading partner, and ally of the United States. Dependence on oil from Canada is better than dependence on oil from other regions of the world. If the United States does not take advantage of this opportunity, it will be a bad trading partner and Canada will export its crude from its own coast.

Comment from your editor:

ISCO will only take up a position on a matter of this kind if it has a clear mandate from its membership to do so. However, ISCO does take up positions and works to defend and promote the interests of its members wherever there is a need. Here are recent examples –

At our AGM in Portland it was decided to support the efforts being made by Jonathan Waldron to strengthen spill responder immunity. The Oil Pollution Act of 1990 provides limited Contractor immunity but the Deepwater Horizon spill resulted in multiple lawsuits attempting to break this immunity. The resultant threat is that responders may be reluctant to respond as readily in future events. The impact of multiple lawsuits can be crippling to businesses and an initiative is underway to strengthen the immunity for responders.

Currently, ISCO is also working within the IMO to help our community. For our responder members we are making a case for a change that will make it easier to discharge settled out-water during oil containment-recovery operations at sea. The essence of our argument is that during oil recovery operations it is better to discharge settled-out water (even if oil content exceeds the currently permitted 15 ppm limit) than to cease recovery operations on account of available tank capacity being topped-up.

In the same forum ISCO is pressing for changes that will make it easier for response organisations, equipment manufacturers and research establishments to secure permission to carry out work with oil in the marine environment for R&D on developing and testing new technologies for spill response.

To answer the point raised by Marc Shaye, the ISCO Newsletter is carrying out a reader poll on the Keystone Pipeline issue. Having read the pro/con document you are invited to decide whether you are in favour or against the construction of the Keystone Pipeline. To register your opinion just click on **VOTE**

Publications

US EPA: TECHNOLOGY INNOVATION NEWS SURVEY

The December 1-15, 2011 *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 http://www.clu-in.org/products/tins/

USA: NOAA – UPDATED GUIDE TO RESPONDER TOOLS

Here is a quick guide to many of the most commonly used tools and resources the Office of Response and Restoration offers for emergency responders and planners.

Oil Spill Response/Planning Tools

GNOME, NOAA's oil spill trajectory model.

ADIOS, NOAA's oil weathering model.

TAP, NOAA's contingency planning tool.

Environmental Sensitivity Index (ESI) maps and data, concise summaries of coastal resources that may be at risk in a spill incident.

Spill Tools, a set of three programs: the Mechanical Equipment Calculator, the In Situ Burn Calculator, and the Dispersant Mission Planner

Incident Command System (ICS) forms, available in two formats: database and PDF.

NUCOS, a simple desktop unit converter that includes units unique to oil spill response.

Job Aids, field guides to assist with various response tasks.

Publications, a comprehensive list of our spill response reports, guides, and publications.

FOSC Guide, describes the products and services that NOAA can provide to FOSCs (Federal On-Scene Coordinators).

Gulf of Mexico ERMA, a resource used in the response and NRDA process for the Deepwater Horizon/BP oil spill.

Training, workshops and self-study options for spill response professionals.

Chemical Spill Response/Planning Tools

CAMEO software suite programs:

CAMEO*fm*, an application to access and manage chemical property and emergency response information.

ALOHA, a modeling program that estimates hazards after a chemical release.

MARPLOT, CAMEO's mapping program.

CAMEO Chemicals, a database of hazardous chemical datasheets you can use to get response recommendations and predict hazards. Available in online and downloadable versions.

Chemical Reactivity Worksheet (CRW), a program that predicts the reactivity of substances or mixtures of substances.

Tier2 Submit, a program that helps chemical facilities meet their Tier II reporting requirements under Sections 311 and 312 of EPCRA.

RMP*Comp, a program that helps chemical facilities that fall under the RMP rule complete their required offsite consequence analysis.

Training, training resources for CAMEO.