ISCO NEWSLETTER

The Newsletter of the International Spill Response Community

Issue 385, 20 May 2013

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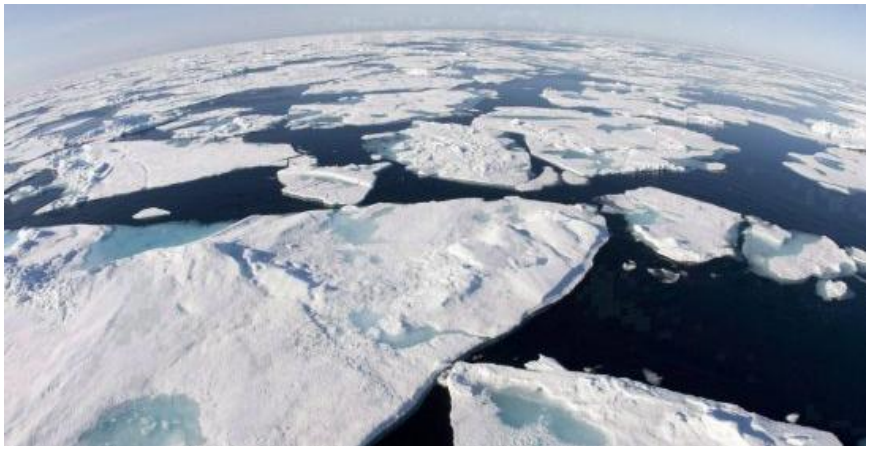
International news

CANADA TAKES HELM OF ARCTIC COUNCIL



Above: Ice floes float in Baffin Bay above the Arctic Circle as seen from the Canadian Coast Guard icebreaker Louis S. St-Laurent on July 10, 2008. Canada's 162,000-kilometre Arctic coastline is the world's longest in the Far North. Canada becomes chair of the eight-nation Arctic Council on May 15. Jonathan Hayward / the Canadian press file photo

May 13 - The vast gap between Ottawa's Arctic ambitions and reality moves to the international stage this week as Canada takes the helm at a top regional forum.

Canada becomes chair of the eight-nation Arctic Council on Wednesday (15 May) beginning a two-year term when rapid warming is exposing the Far North to increasing threats, including more shipping, oil drilling and other hazards.

Inuit and southern experts hope the spotlight will move Prime Minister Stephen Harper to match talk of responsible development and stricter security with more leadership in Canada's Arctic.

Experts at Toronto's Munk-Gordon Arctic Security Program are pressing Ottawa to significantly improve Canada's Arctic marine and aviation infrastructure, which is dismal compared with its neighbours'. *The Star* Read more

CHINA GAINS OBSERVER STATUS ON THE ARCTIC COUNCIL

As lucrative oil reserves, rare mineral deposits and shipping lanes emerge amid the rapidly disappearing Arctic ice sheet, the eyes of many nations are turning north. This week, the eight member states of the Arctic Council decided at their meeting in Kiruna, Sweden, to admit six non-Arctic nations as observers, most notably China. ***New Scientist*** *examines the implications*

May 17 - It marks the eighth time that the Arctic Council – an intergovernmental organisation made up of Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the US – has met. The Council brokers international agreements on the Arctic, affecting protected areas, climate change research and shipping routes, among others.

This week's meeting saw the adoption of a legally binding agreement to alert other members to oil spills and share responsibility for the clean-up. Greenpeace and other environmental groups that want to see drilling in Arctic banned are unimpressed, saying it doesn't go far enough to protect the Arctic.

Others say the Council does play a useful role in protecting the region's environment. Despite its limited legal clout, says Michael Byers of the University of British Columbia in Canada, the Council forces nations that are historic rivals – like the US and Russia – to work together. "The environment is driving a lot of cooperation. Everything that happens is connected to climate change," he says. "The Arctic nations all get that."

Of the seven countries that applied for observer status this year, six – China, Japan, South Korea, India, Singapore and Italy – were admitted. The European Union's application as a single bloc was denied, although it is temporarily allowed to participate in meetings. The Canadian government is believed to have blocked its application, worrying that the EU's ban on seal products would hinder native Inuit hunting traditions. *New Scientist* Read more

ARCTIC MINISTERS SIGN NEW AGREEMENT TO TACKLE OIL SPILLS

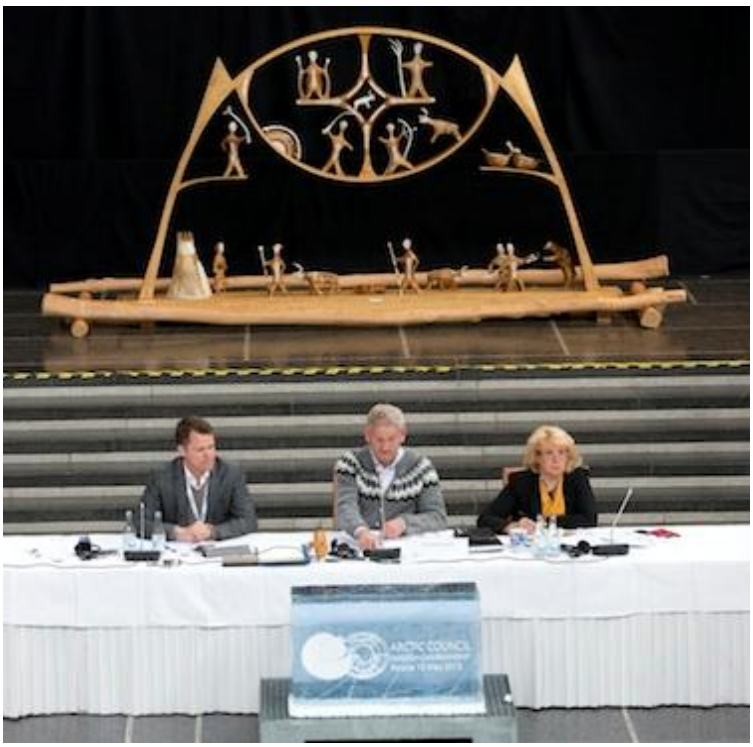


Photo: At the May 15 Arctic Council ministerial in Kiruna, Sweden, presided over by Sweden's foreign minister, Carl Bildt, centre, at the Kiruna town hall, ministers signed Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic. BY MARTINA HUBER/ REGERINGSKANSLIET)

May 17 - The member nations of Arctic Council signed their second internationally binding agreement May 15 in Kiruna, Sweden: an agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic.

"A potential oil spill could have a serious impact on the livelihoods of northerners," Canada's Arctic Council minister Leona Aglukkaq said at the meeting. "By acting together, here at the Council, we are enhancing our collective ability to respond."

A guide to tackling potential oil spills in Arctic waters, signed by all eight Arctic ministers at the ministerial, the new agreement requires its signatories to work together to clean up an oil spill, should there ever be one anywhere north of the 66th parallel.

"The prospect of a potential oil spill event in the Arctic is very much on peoples' minds," David Balton, an ocean and fisheries expert with the United States Department of State and co-chair of the task force that produced the new agreement, said in a presentation after the May 15 ministerial meeting in Kiruna. *Nunatsiaq News* Read more

INTERAGENCY AGREEMENT TO ENHANCE SITUATIONAL AWARENESS AT EUROPE'S MARITIME BORDER

EMSA's integrated maritime services will be used by Frontex to reinforce control at the Schengen external border. A three-year service level agreement was signed between the two agencies on 3 May 2013.

May 17 - Frontex assists Member States in cooperation at the operational level at all types of borders (sea, land and air). Managing one external border requires coordination of activities between national and European agencies. "The agreement signed with EMSA is an excellent example of how EU agencies can serve the Member States. The service provided by EMSA to Frontex will

help in developing effective situational awareness in the maritime domain, both for the agency and the Member States" said Frontex Executive Director Ilkka Laitinen.

Upon signing the agreement, Markku Mylly, EMSA's Executive Director stated, "We are delighted to be part of this venture. It is gratifying to see our maritime service capabilities being used to support Frontex and the Member States. We look forward to fulfilling the new role entrusted to us, and to working with Frontex in the years to come."

Realising that EMSA's expertise can be used to improve maritime awareness, Frontex has requested operational support for the detection of various illegal activities at sea. Under the new agreement, EMSA will develop tailored monitoring services, information products, and tools. Data from EMSA's Integrated Maritime Data Envi ronment (IMDatE), including ship position reports and satellite images, will be provided to Frontex to enable them to construct a more comprehensive overview of activities at Europe's maritime borders. This will build on previous pilot project services developed by EMSA for Frontex, and on integrated services which EMSA already offers to Member States and other EU bodies.

EMSA's services will be provided to Frontex in the framework of joint operations at sea, and of EUROSUR, the European Border Surveillance System. By strengthening information exchange and cooperation between Member States' authorities, EUROSUR aims to reduce the number of irregular migrants entering the EU undetected, prevent cross-border crime, as well as to assist search and rescue activities at the external maritime borders of the Union. Information provided to the Member States by Frontex based on the EMSA services will be used for various purposes, such as: 1. Surveillance of targeted ports and coasts; 2. Tracking of suspect vessels over high seas; 3. Monitoring sea areas for environmental purposes.

In addition to maritime data, EMSA's support will also consist of a 24/7 helpdesk service, via the Maritime Support Services operations centre, and training to analyse the data delivered. By combining skills, experience and resources, EMSA and Frontex can build on synergies to improve the quality of services developed. Cooperation also brings cost savings by avoiding duplication of effort and overlapping infrastructures, and in terms of economies of scale. The signing of the service level agreement brings existing cooperation between EMSA and Frontex to a new level, for the benefit of Member States.

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INTERACTIVE PARTICULARLY SENSITIVE SEA AREA DISPLAY LAUNCHED AT IMO HQ AND ONLINE

Photo: IMO Secretary-General Koji Sekimizu opens interactive PSSA display

May 17 - A new interactive display on Particularly Sensitive Sea Areas (PSSA) has been launched at IMO Headquarters and online at pssa.imo.org/.

A PSSA is an area that needs special protection through action by IMO because of its significance for recognized ecological or socio-economic or scientific reasons and which may be vulnerable to damage by international maritime activities. To date, IMO has designated 14 PSSAs.

The new display and website include videos, pictures, maps, and graphic displays, telling the unique story of each of the 14 PSSAs, together with a special insight on IMO's work on this topic, past, present and future.

The display and website have been funded with the support of generous contributions from Australia, Finland, Germany, the Netherlands, the Republic of Korea and Sweden.

Speaking at the launch on Thursday (16 May), IMO Secretary-General Koji Sekimizu said the new display would serve as a continual reminder and a celebration of the substantial contribution that has been made to environmental protection through IMO's PSSA scheme.

"It is my great hope that this ground-breaking display that we are going to formally inaugurate this evening will serve as a continual reminder and a celebration of the substantial contribution that has been made to environmental protection through IMO's PSSA scheme", Mr Sekimizu said. "But, more than that, I hope that it will galvanise further efforts to identify, and protect, more of these special areas throughout the world."

The PSSAs designated by IMO to date are:

- The Great Barrier Reef, Australia (designated a PSSA in 1990)
- The Sabana-Camagüey Archipelago in Cuba (1997)
- Malpelo Island, Colombia (2002)
- The sea around the Florida Keys, United States (2002)
- The Wadden Sea, Denmark, Germany, Netherlands (2002)

International news (continued)

- Paracas National Reserve, Peru (2003)
- Western European Waters (2004)
- Extension of the existing Great Barrier Reef PSSA to include the Torres Strait (proposed by Australia and Papua New Guinea) (2005)
- Canary Islands, Spain (2005)
- The Galapagos Archipelago, Ecuador (2005)
- The Baltic Sea area, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden (2005)
- The Papahānaumokuākea Marine National Monument, United States (2007)
- The Strait of Bonifacio, France and Italy (2011)
- The Saba Bank, in the North-eastern Caribbean area of the Kingdom of the Netherlands (2012)

Photos can be found here. Watch PSSA video here *www.imo.org* Read more

MARPOL ANNEX V 2012 AMENDMENTS: STRICTER CONTROLS ON BULK CARGO WASH WATER DISCHARGE AT SEA

May 16 - The discharge of non-recoverable cargo or cleaning agents contained in hold wash water is defined as “garbage” within Annex V (entered into force 31st December 1988) of the International Convention for the Prevention of Pollution from Ships (MARPOL). Any discharge of “garbage” at sea is regulated through this Convention, with discharge being more heavily restricted in six defined special areas (the Mediterranean, the “Gulfs” area, the Wider Caribbean, including the Gulf of Mexico, the Baltic Sea, the North Sea and the Antarctic). Each of these special areas has a need for more stringent controls brought about by greater sensitivity to pollution. Two further areas (the Black Sea and the Red Sea) have been proposed but are not yet in force.

The 2012 amendment to MARPOL Annex V requires that as of the 1st January 2013 all shippers of bulk cargoes provisionally classify their cargoes as harmful to the marine environment (HME) or not. The classification of a cargo as HME is primarily influenced by the toxicity of the cargo itself to marine life. No cargo classified as HME may be discharged at sea, and should therefore be disposed of at a suitable Reception Facility (RF).

ITOPF has prepared a document which sets out the shippers’ responsibilities regarding notification, the general methodology of cargo classification as HME, and some common questions regarding the process of cargo eco-toxicity testing. Read more

Incident reports

USA: DIESEL FUEL CLEANUP CONTINUES IN ANCLOTE RIVER; NO CAUSE YET FOR BOAT FIRE

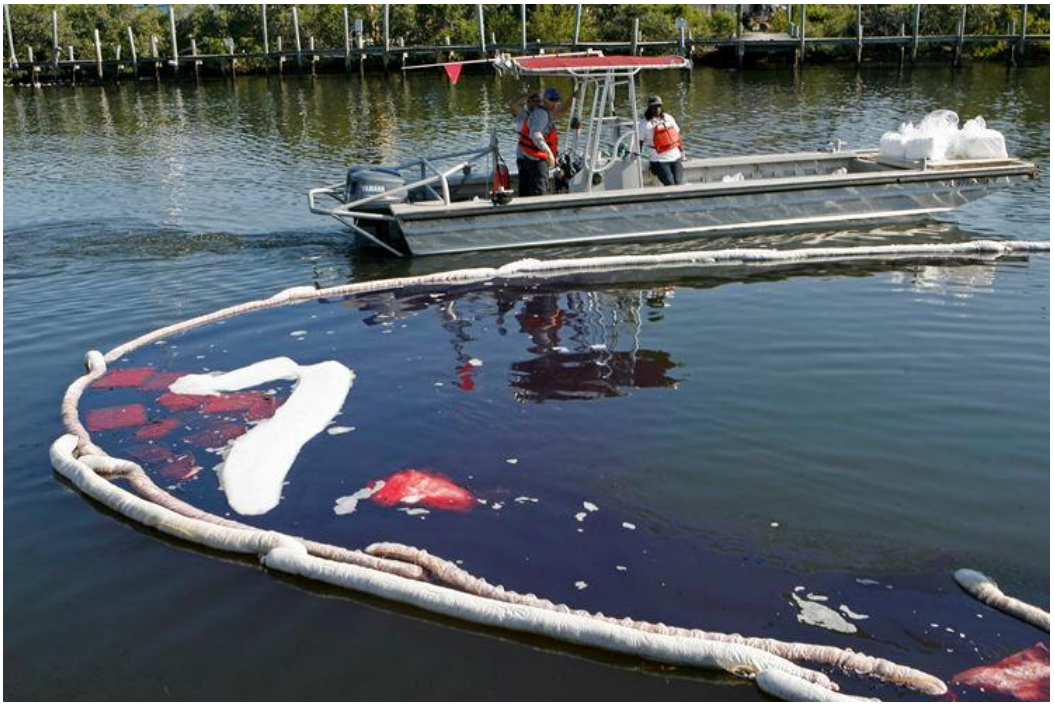

Photo: Coast Guard crews, shown here Wednesday, continued to work Thursday to clean up the diesel fuel spilled in the Anclote River after a shrimp boat caught fire Tuesday night.

May 16 - Cleanup of the diesel fuel spill on the Anclote River continued throughout Thursday as the U.S. Coast Guard and other agencies rolled drum skimmers over the water to collect more than 4,500 gallons of diesel-contaminated water.

A large boat fire Tuesday caused fuel to gush into the river at the city’s historic Sponge Docks.

No effects on wildlife had been reported by Thursday afternoon, according to a news release from the Coast Guard. About 500 feet of floating boom had been placed around the gutted boat, the Skye Marie, to prevent the spread of pollution, the release states. *Tampa Bay Times* Read more

Other news

USA: INFRARED GEAR, OIL COLLECTION SYSTEM PROVIDE NEW TOOLS FOR SPILL RESPONSE BOATS

In the picture: Benson, Cognevich, Midship Marine owner Randy Hinojosa, Paskewich and Palmisano.

April 29 - Clean Gulf Associates, a New Orleans-based organization formed in 1972, is a nonprofit cooperative of 125 oil and gas companies operating in the Gulf of Mexico.

Clean Gulf recently took delivery of *Breton Island*, the third in a series of 95-foot oil spill response vessels. They form the first fleet of all-aluminum OSRVs with overnight accommodations in the country. *Breton Island*, *H.I. Rich*, and *Galveston Island* are prepositioned in Venice, La., Leeville, La., and Galveston, Texas, respectively.

The U.S. Coast Guard-certified OSRVs are equipped with an Aptomar-Rutter integrated oil spill detection and communications system.

"It is a military spec infrared camera that is liquid cooled, giving it a high degree of sensitivity," said Jack Clouse, project manager with CGA Services. The camera can differentiate oil from water by detecting the temperature differences between the two substances. In operation, the X-band radar first detects the oil, then the operator switches over to the infrared camera to stay on the thickest concentration of oil. *Professional Mariner* Read more [Thanks to Rupert Pearn, Aptomar]

NEW ZEALAND: OIL SPILL PLAN: INPUT SOUGHT

May 13 - Public feedback on regional plans for dealing with a major oil spill is being sought during a series of community meetings this month.

Regional On-Scene Commander Gregory Meikle says the focus of the meetings on May 14, 21 and 22 is to gauge public opinion on the proposed changes to the Tier Two Oil Spill Plan.

The objectives of the Tier Two Oil Spill Plan are to prevent pollution from a marine oil spill and contain and clean up oil spills in a manner that causes minimum damage to the marine environment and does not pose unreasonable danger to human life.

It details a response for up to 15 tonnes of heavy fuel oil and also provides Maritime New Zealand with specific regional information to assist with large scale spills such as the Rena. *Sun Live* Read more

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UK: SHIPPING CHEMICAL 'UNSAFE FOR BIRDS'

May 13 - Wildlife charities are calling for tighter regulations to protect seabirds from a group of chemicals that caused hundreds of seabirds to be washed up off the south coast of England.

The number of seabirds affected by the recent spill of polyisobutene (PIB) has now reached 4,000, said the RSPB.

The sticky chemical is used as a lubricant in ships' engines. It is also moved in large quantities, as it is used to make chewing gum, adhesive tape and sealants.

The organisations are appealing to the International Maritime Organization (IMO) to "reclassify" the chemical.

The RSPB said in a statement: "The risk of PIB is seriously underestimated. "We are urging the government to call on the IMO to urgently review [its] hazard classification and implement regulations and a systematic monitoring programme that prevent any further tragic and wholly avoidable incidents like the one just witnessed." Polyisobutene, more commonly known in the chemical industry as polyisobutylene or PIB, was first developed during the 1930s as a synthetic alternative to natural rubber. It is a polymer very similar in its molecular structure to polyethylene and polypropylene - the materials used for carrier bags. *BBC News* Read more

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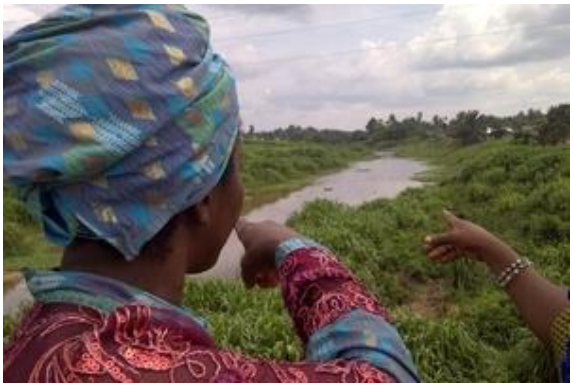
FRANCE: ECOLOGICAL DAMAGES: INTRODUCTION INTO THE FRENCH CIVIL CODE NOW LAUNCHED

May 13 - Thirteen years on from the *Erika* oil spill and the introduction of the notion of ecological damages, accepted by France's Supreme Court on 25th September 2012, French Justice Minister Mrs Taubira created a working group on 24th April in order to prepare its introduction into the French Civil Code.

This group should submit its report by mid-September 2013. The initial bill submitted in May 2012 was amended and voted in on 17th April 2013 by the Senate law commission. We note that the scope of ecological damages has been extended beyond the recognition of an offence and that priority is given to the repair of damages in kind or through the payment of damages when this is not possible. *Cedre Newsletter* Read more

NIGERIA: CONFLICTS OF INTEREST AND EXCLUSION IN NIGER DELTA OIL SPILL INVESTIGATION AND CLEAN-UP



Picture: Women take a prominent role in the Delta's economic activities, but they are excluded from the process to assess and compensate for oil spills. © Amnesty International

Excerpts from an article by Audrey Gaughran, Amnesty International's Director of Global Thematic Issues, Madhu Malhotra, Director of Amnesty International's Gender, Sexuality and Identity Programme, and Oluwatosin Popoola, Amnesty International's researcher on Nigeria.

May 13 - We have just come back from the Niger Delta, where we talked to scores of women and men from communities impacted by oil spills.

In our conversations, the women in particular shared their anger, anxiety, fear, pain and hopes with us. For many of them, being excluded from the process in the aftermath of oil spills compounded the damage they suffered from the events themselves.

After oil spills in the Niger Delta a lot hinges on a form called a JIV, a Joint Investigation Visit.

When we asked women in communities affected by oil spills how they have been involved in various processes including the JIV, almost invariably their response was: "What is that?" Some had heard of the JIV, but even those who knew a bit more about it only did so through secondary sources in the community, rather than being directly involved themselves.

In many of Niger Delta communities we visited in Rivers and Bayelsa states women take a prominent role in economic activities, particularly farming. But even though it is the land they worked that is so often destroyed by oil, they are almost always excluded from the JIV process. The oil companies deal with village elites and chiefs, who are almost invariably male. Compensation is usually paid to leaders and landowners – again, almost always men. *LiveWire* Read more

USA: PIPELINES SPILL THREE TIMES AS MUCH OIL AS TRAINS, IEA SAYS

May 14 - Pipelines in North America spilled three times as much crude oil as trains for comparative distances over an eight-year period, the International Energy Agency said today in a study it based on U.S. Department of Transportation data. The Paris-based energy adviser also said that the risk of a train spill was six times greater than a pipeline incident over the period between 2004 and 2012.

"Increasing volumes of crude oil transported by rail raise questions of safety," the IEA said in its medium-term oil market report. "Our analysis reveals that compared to pipelines, rail incident rates are higher while the opposite holds for spill rates."

The calculation included an estimate that the average load of crude carried by train travels 1,000 miles, which the organization said is conservative, since most Bakken crude is shipped 1,700 miles from North Dakota to St. James, Louisiana. The analysis of the eight-year period didn't include a spill of 715 barrels of crude from a derailment in Minnesota in 2013 that was more than double the amount spilled by trains in the previous four years, according to the report. *Bloomberg* Read more

USA AND CANADA: PORT CRAFTS RESPONSE IN CASE OF OIL SPILL

May 14 - When Tesoro Corporation and Savage Companies recently said they'd launch a crude oil operation at the Port of Vancouver, the announcement raised the possibility of new jobs and private capital investment.

It also raised the prospect of environmental damage, including the potential for oil spills in the Columbia River.

On Tuesday, the port sought to address how such emergencies would be handled, convening a workshop to listen to experts spell out their plans and inviting the public to comment, too.

"I like to call it a MASH unit for wildlife," Liz Wainwright, executive director of the Maritime Fire and Safety Association, said of certain emergency-response equipment, including a fully stocked wildlife care trailer. "It can be mobilized very quickly."

The workshop, which featured a presentation by Wainwright and others, occurred during the regular public hearing of the port's three elected commissioners. It came weeks after the announcement in April by Tesoro and Savage that they've formed a joint venture to build and operate facilities to store, load and unload crude oil at the port. *The Columbian* Read more

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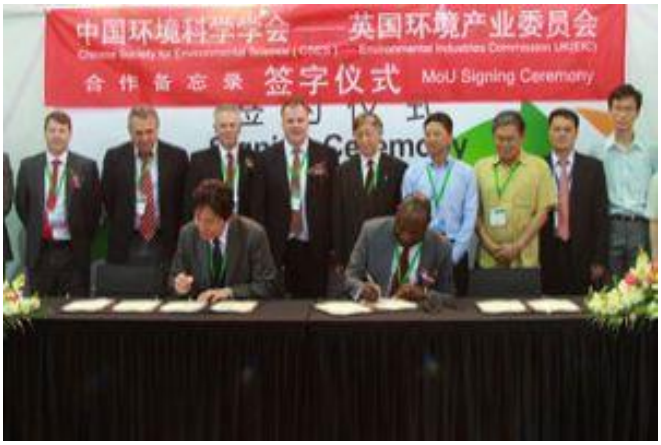
UK ENVIRONMENTAL TRADE ASSOCIATION SIGNS DEAL TO ACCESS CHINESE MARKET



Picture: EIC's Dr Nelson Ogunshakin (front right) and CSES' Ren Guan-Ping signing the MoU

May 14 - The UK's Environmental Industries Commission (EIC) has today signed a Memorandum of Understanding (MoU) with the Chinese Society of Environmental Sciences (CSES), aiming to ease UK environmental firms' access to Chinese markets.

The agreement enables EIC member companies to seek accreditation with the CSES, providing a platform from which to offer their products and services into the Chinese market.

Commenting on the agreement, EIC's chairman, Dr Nelson Ogunshakin said: "Today marks a new opportunity for EIC in creating tangible export prospects for its members to take advantage of the growing market in China. *Edie Energy* Read more

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AUSTRALIA: BP TO APPLY GULF OF MEXICO OIL SPILL LESSONS TO GREAT AUSTRALIAN BIGHT

May 15 - British energy giant BP has kicked off the environmental approvals process for its planned $600 million oil exploration program in the Great Australian Bight.

In the process, the company has acknowledged that drilling in what is viewed as Australia's last frontier for giant oilfields will be viewed by some in the context of its 2010 Gulf of Mexico oil spill disaster. *The Australian* Read more [Registration required]

CANADA: CAN BIG OIL HANDLE THE ARCTIC?

May 13 - With the public increasingly worried about oil spills, some aboriginal groups calling for an Arctic drilling moratorium, and the oil industry as keen as ever to tap Northern deposits, oil spill response preparedness was a big topic of discussion at the Arctic Council meeting in Sweden this week.

As Canada, which has large untapped deposits under the Beaufort Sea, assumed its chairmanship on Wednesday, the group of the eight nations that surround the North Pole signed a pact on oil spill prevention in Kiruna, Sweden's most northern city.

Coinciding with the meeting, the London-based International Association of Oil & Gas Producers (OGP), whose member companies produce more than half of the world's oil, was eager to talk about industry efforts to improve handling of oil spills in Arctic environments, which it says have advanced significantly in recent years. *Financial Post* Read more

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UK & USA: BP: FICTITIOUS SPILL CLAIMS PUTTING US AT RISK

May 17 - Oil giant BP has warned that millions of dollars of "fictitious" compensation claims for the 2010 Gulf of Mexico oil spill are putting the company at risk.

The group has sought an injunction to stop payouts to companies which it argues are claiming fraudulent or inflated losses from its $8.2bn compensation pot. Reports said an appeal document recently filed by BP in the US courts argues that businesses from the Gulf coast have been handed millions of dollars for "non-existent, artificially calculated losses". *Irish Examiner* Read more

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Other news (continued)

USA: OBAMA ADMINISTRATION UNVEILS FRACKING RULES

May 16 - The Interior Department unveiled a revised proposal Thursday to regulate the oil-and-gas development process known as fracking when it occurs on federal and Indian lands.

It's Interior's second swing at the delayed rules after the department in January pulled back a proposal from mid-2012.

"The new proposal maintains important safety standards, improves integration with existing state and tribal standards, and increases flexibility for oil and gas developers," the department said in a statement Thursday.

The plan drew immediate criticism from industry officials who say the rules are not needed, and from green groups who say Interior has made troubling concessions to oil and gas companies. *The Hill* Read more

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USA: FRACKING CAN BE DONE SAFELY, BUT WILL IT BE?

May 17 - Fracking for natural gas doesn't have to be an environmental disaster, says a new report - Out of sight (and smell), natural gas slowly bubbled up into Norma Fiorentino's private water well near the town of Dimock in northeastern Pennsylvania—in the heart of the new fracking boom in the U.S. Then, on New Year's Day 2009, when a mechanical pump flicked on and provided the spark, Fiorentino's backyard exploded. She and many others blame the blast on fracking—the colloquial name for the natural gas drilling process that combines horizontal drilling and the fracturing of shale deep underground with high-pressure water to create a path for gas to flow back up the well.

The fracking revolution has freed up previously inaccessible natural gas in shale formations like the Marcellus, which underlies states from New York down to West Virginia and has been heavily tapped in Pennsylvania. On May 16 the U.S. Department of Interior released its new guidelines for such fracking on public lands. And a new review article funded by the National Science Foundation and published in Science on May 16 examines what fracking may be doing to the water supply. "This is an industry that's in its infancy, so we don't really know a lot of things," explains environmental engineer Radisav Vidic of the University of Pittsburgh, who led this review. "Is it or isn't it bad for the environment? Is New York State right to ban fracking, and is Pennsylvania stupid for [allowing it]?"

According to the review, the answer is no. "There is no irrefutable impact of this industry on surface or groundwater quality in Pennsylvania," Vidic says. *Scientific American* Read more

People in the news

NORWAY: NEW MANAGING DIRECTOR OF NOFO

As of August, Leif Joar Kvamme will take over as Managing Director of the Norwegian Clean Seas Association for Operating Companies (NOFO).

Kvamme is currently the Director of QHSE in North Atlantic Drilling, which is a Seadrill company. He also has long and varied experience as a former Director of the Joint Rescue Coordination Centre South Norway and Director of the Civil Emergency Planning Department and a member of the County Governor of Rogaland's management team. *NOFO* Read more

ISCO News

KNOWLEDGE-BASED RESPONSE PLANNING FOR MARINE INCIDENTS: DOCUMENT OPRC-HNS/TG 15/INF.

Dr Douglas Cormack, Hon.FISCO, comments on the ISCO paper presented at the recent IMO TG15 meeting.

Readers will recall that ISCO was authorised by MEPC 59 to report its progress towards knowledge-only response planning to the OPRC-HNS/TG. The reasons for having done so over TG 10-15 were that the knowledge-base itself was being serialised in the ISCO Newsletter; that this timescale would provide member states with multiple opportunities to update the knowledge-base and for NGOs to disown beliefs already refuted by it or to reality-evaluate remaining beliefs to positive/negative knowledge; and that such voluntary response would obviate the need otherwise to invite them formally to do so before finalising the knowledge-only plans.

However, there having been no voluntary response, ISCO issued its invitation on 15 November 2012, having notified MEPC 64 of its intention so to do, and reported to TG 15 a nil response as of 6 May 2013. However, with the knowledge-base remaining open to correction until completion of its serialisation later this year, the knowledge-only contingency and incident-specific plans for all aspects of marine incident response will then be produced as a single document.

Thereafter, arrangements will be made for this document to be available to IMO member states, NGOs, response contractors, and

indeed to the public as an open publication. Thus, it will provide individual member states, not only with incident response plans, but also with amplification of the model training courses of IMO and with cost-effective relationships with response contractors. Thus, while ISCO is not seeking IMO endorsement of its incident response plans: it is confident that knowledge can speak for itself to member states and will eventually be universally preferred to reality-refuted belief.

As to document TG 15/INF.2, the following summary was presented to the TG.

This document sets itself in the context of its forerunners to TG 10 -14 (paragraphs 1 & 2); resolves the confusion by which belief is mistaken for knowledge by differentiating the one from the other as defined therein (3 - 8); identifies the knowledge of fate, effects and cost-effective response acquired by observations at real incidents and/or by experimentation with deliberate releases to sea and shorelines (9-12); identifies species-extinction/ecological-disaster as belief, given its absence thus far; identifies anthropogenic global warming as belief which ignores known carbon-dioxide cycles; suggests hypotheses which believers have yet to reality-evaluate in respect of the impact of organism-coating and of the significance of the carbon dioxide cycles (13 & 14); recognises the known slick thickness and concentration-toxicity relationships by which biodegradation is unimpeded, extinction/disaster is absent and dispersant-use is without toxic effects in increasing biodegradation rates and in reducing the need for post-recovery processing; and recognises the slick-thickness limitation on the encounter rates of response techniques which necessitate cargo/bunker transfer to limit release volumes (15-19).

The document then notes the cost-effectiveness of knowledge-based response, the cost-ineffectiveness of thwarting it with belief-based prohibitions, and the benefits of their repeal in respect of the use of save havens, dispersants, and *in situ* decanting of processed water (20-24). It again invites believers to reality-evaluate the above beliefs in the knowledge that unimpeded biodegradation of all organic compounds to carbon dioxide fully accounts for the absence of species-extinction/ecological-disaster, that photosynthesis-biodegradation continuously recycles the global biomass through the atmosphere as carbon dioxide; that formation-decomposition of carbonate rock does likewise; and that significant temperature change is thus unlikely to arise from combustion of part of a 'fossilisation' but for which all of its carbon dioxide equivalent would already be recycling through the atmosphere (25-28).

Thus, on the above knowledge, the new ISCO contingency plan will emphasise the need to limit releases to those of initial impact by bringing casualties into safe havens for cargo/bunker transfer; identify the nature and volume of containment units; classify the contents as gases, liquids or solids, as sinkers or floaters, and as spreaders, evaporators, dissolvers or dispersers; identify the physicochemical properties known to control the rates and extents of these processes, the amounts left to strand and the relative effectiveness of dispersants and mechanical recovery at sea, in inshore waters, and onshore. Thus, this contingency plan becomes an action/inaction plan for any specific incident simply by substituting incident-specific values for the physicochemical properties relevant to the specific incident (29-33). Indeed, this approach can be applied to past incidents to compare what was done with what could and ought to have been done, assuming of course that knowledge is to be preferred to belief.

MORE PHOTOS, GRAPHICS AND VIDEO MATERIAL NEEDED FOR DEVELOPMENT OF REVISED IMO MODEL TRAINING COURSES

Members are asked to assist – Patricia Charlebois writes – "Further to the discussion at TG 15, reference had been made to specific photo and video requirements to support the development of the OPRC model courses. In this regard, please find the list identifying the requirement. Any assistance that you can provide the Secretariat in this regard would be highly appreciated. Thanks to those who have already shared photos and videos with us". Here is a list of items needed to fill gaps -

Graphics
- Weathering process (SINTEF and ITOPF have nice ones)
- Output from spill trajectory model
- AIS tracks
- Sensitivity map
- IPIECAS GI Areas
- UNEP areas

Photos:
- Sensitive resources (beach, hotel, etc.)
- Tanker
- Platform
- Light oil on beach
- Heavy oil on beach
- Oiled park or boardwalk (any municipal structure)
- Oiled beach in front of hotel
- Water intake
- Oil in Port or marina
- Oil near home
- Oiled archeological site
- Oiled sea mammals
- Oiled birds
- Oiled mangroves
- Oiled marsh
- Oiled mudflat
- Fish market
- Oil slick near many sensitive resources (city, beach, port, etc.)
- Shoreline protection
- Boom failure
- Salvage operations
- Cargo transfer operations
- At sea recovery operation
- Aerial application of dispersants
- Vessel application of dispersants
- In situ burning
- Photo of shoreline clean-up (mechanical, manual, etc..)
- Incident command center
- Beach inspection or survey (SCAT)
- Water sampling
- Fishery bans
- Public health warning notices
- Equipment cleaning station
- Oiled small craft
- Oiled property
- Oiled fishing gear
- Oiled fish farm
- Environmental damage to marsh

Videos
- Case histories

If you can help, please send items to Patricia Charlebois, Senior Technical Officer, Marine Environment Division, International Maritime Organization (IMO), 4 Albert Embankment, London SE1 7SR or email pcharlebois@imo.org

Cormack's Column

In this issue of the ISCO Newsletter we are printing No. 127 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 127: KNOWLEDGE AND COUNTER-BELIEF

We know from articles 70-91 that the WSL *Springsweep* mechanical recovery system can encounter/ recover ~ 3 tonnes of oil per hour at a layer thickness of 0.1mm while proceeding at 1 knot, and thus ~ 12 tonnes per hour of 80% water-content emulsion at a layer thickness of 0.4mm; that it would recover 9 tonnes per hour of the officially reported 60% water-content emulsion at the *Sea Empress Incident*; and that in windrows perhaps 25 tonnes of this emulsion per hour which at the reported water-content would equate to ~8 tonnes of oil per hour. Thus, we see that the six seagoing recovery ships present at this incident, 2 French, 2 ND and 2 UK, might have been expected to recover 480 tonnes of oil per 10 hour day, 3,360 tonnes per 7-day week or 7,720 tonnes in the two weeks prior to terminal-entry of the casualty. However, as officially reported, 1,275 tonnes of oil were recovered by two inshore skimmers operated within the Haven by the harbour authority while the six seagoing ships discharged only 725 tonnes, though after the first ten days other inshore recovery vessels operating external to the Haven contributed to this 725 tonnes by transference to the ships offshore. Thus the waterborne recovery was only 2,000 tonnes of oil.

However, had ~10,000 tonnes (7,720 + 2,000) of oil been recovered, it would have equated to ~30,000 tonnes of emulsion at 60% water-content. In addition, substantial quantities of free water are always co-collected depending on the differing design principles of recovery systems. Again, we know that recovered emulsions must be broken to separate oil and water phases by passage through online demulsifying static mixers before entering onboard storage tanks or by installed heat exchangers after tank entry (articles 16-30); that the volume of aqueous phase thus produced can be up to four times that of the oil phase; that this water together with the co-collected free water must be decanted from beneath the accumulating oil phase within the tank as from an API oil-water separator (articles 16-30 and 125) in order to conserve storage space which otherwise would contain more water than oil; that such decanted water would only contain significant oil concentration as droplets were the oil-water interface allowed to reach the tank extraction point (article 125); and that this tendency can be reduced by ballasting the tank at the outset. However, counter-belief now prohibits all such water discharge unless permitted by discretionary dispensation without which pollutant recovery is prohibited from an already polluted area for being <100% effective, though the oil-content of the discharge can now be monitored online and recycled or stopped by automatic valve and power control where previously installed. Thus, we see that the quantities potentially recoverable at the *Sea Empress Incident* would have overwhelmed the needless prohibition on decanting . . . or the prohibition would have terminated recovery.

As to shorelines, it was officially reported for the *Sea Empress Incident*, that from 3,000-5,000 tonnes of oil, equivalent to 10,000-15000 tonnes of emulsion at 60% water-content, were stranded on some 200km of shoreline; that recovery operations thereon involved directing some 900 men to complete the task by Easter; that it was only judged complete after the second Easter had passed; and that the already difficult enough physicochemical tasks of separating pollutant from beach material (articles 92-102), emulsion breaking, and oil-water separation (articles 16-30) were now compounded by all manner of regulations based on environmentalist belief since the *Eleni V* had released its heavy fuel oil in the vicinity of Lowestoft in 1978, among which is the now standing prohibition on discharging co-collected and previously emulsified water direct to the shore or contiguous seawater (previous paragraph) .

As to the processing of recovered materials, we know that some 20,000 tonnes of liquid wastes from the waterborne and shoreline operations were transported to the Texaco refinery in Milford Haven though the rates of arrival must have exceeded those of routine refinery waste generation. However, emulsified and free water were reported to have been removed to the extent of 13,000 tonnes at 15ppm oil content. Of the 10,800 tonnes of polluted beach material, 7,300 went for bioremediation at the Texaco land-farming site while some 3,500 tonnes were land-filled, and some 120 tonnes of polluted sand were cold-mixed to produce a 50/20 HRA type road surface material. However, temporary storage at Pembroke Dock and Pendine Sands attracted Environmental Agency attention as being non-compliant with its latest regulations and it became clear that even these comparatively small quantities presented major processing problems, refineries being able to deal with routine wastes but not so readily with the unexpected and unscheduled.

Thus, knowing that some 24,000 tonnes of oil had evaporated naturally and that some 39,000 tonnes had dispersed naturally from the 15th to 22nd February; we are entitled to ask why dispersant which had contemporaneously dispersed some 5,000-6,000 tonnes of oil was not permitted to disperse another 3,000-5,000 tonnes either before or after it stranded, given the difficulties of shoreline mechanical recovery and downstream processing (articles 47-61 and 92-102) which took over a year, compounded as they were by the belief-based regulations of self-appointed environment-protectors.

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.

IN SITU BURNING: CHAPTER 19

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

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

Summary of the Serial

This is the 19th of a series of articles on in-situ burning of oil spills. This series will cover in-situ burning step-by-step and will present the latest in knowledge on the topic.

19. Marshes I

Several marsh burns have been conducted around the world, including well-documented burns in Louisiana and Texas. These burns were largely successful and provided important information on protecting the marsh plants and the best time of year to burn. The roots of marsh plants, which also house the propagation portion of the plants, are sensitive to heat. If burning is conducted at a dry time of year, such as in late summer, these roots could be killed.

Flooding is a useful technique for flushing oil out of a marsh while protecting the roots of marsh plants. This can sometimes be accomplished by putting a berm across the drainage ditches or by pumping water into the high areas of the marsh. Care must be taken to use flood water of similar salinity to that normally in the marsh and to restore the natural drainage in the marsh after the flood. Often marshes cannot be flooded, however, and thus burning could be conducted when the marsh is wet such as in spring. If a marsh cannot be burned within about one month of oiling, there is usually no benefit to burning because the oil will already have penetrated and damaged plant life.

When burning in marshes, care must be taken to prevent damage to shrubs and trees that grow in the back and higher areas of the marsh. A fire-break must be available to prevent the fire from spreading outside the marsh and to ensure that wind will not drive the fire into nearby forested areas.

Figure 20 (below) shows a marsh burn.

Figure 20 A salt marsh burn in Louisiana. The high water level and topography keeps the fire contained to the oiled area.

Special feature – In situ burning

Several cases of burning in marshes are given below:

Copano Bay [45]

On January 7, 1992, an underground pipeline ruptured by Chiltipin Creek near Copano Bay, Texas, spilling 460 m^3 of South Texas light crude oil into a salt marsh. Vacuum trucks, skimmer, pumps and sorbents were brought to the scene but proved to be only marginally effective. After considering various options, a decision was made to burn the oil. The oil was ignited four days after it spilled, and burned for 20 hours in various areas. The area was surveyed, and pockets of remaining oil were ignited later. At the time of the burn the marsh was covered with water from recent heavy rainfall, providing protection to plant roots and rhyzomes. A study to monitor marsh plant recovery over a period of five years suggested that plant diversity in the impacted area was reduced, but that total plant biomass was similar to the control area after two growth seasons.

Rockefeller Refuge [46-49]

On March 13, 1995, approximately 6 m^3 of condensate oil spilled from a pipeline in the Rockefeller Refuge, Louisiana, affecting 20 ha of brackish marsh. Mechanical cleanup equipment was brought on scene, but was both ineffective at collecting the oil and damaging to the marsh. In-situ burning of marshes is commonly used in that area to reduce organic debris, reduce unwanted fires, and enhance marsh growth. At the time of the spill the water layer over the marsh soil was 5 to 10 cm thick. In-situ burning of the oiled marsh was approved and conducted four days after the burn, removing the oil from 8 ha. of the impacted marsh. Studies conducted three years later concluded that the areas impacted and burned recovered better than the areas impacted but not burned. Three years after the burn, the burned areas attained the same plant density as the reference area.

Ruffy Brook [49,50]

On July 22, 2000 a transfer pipeline near Ruffy Brook, Minnesota, failed and released over 8 m^3 of medium Bow River crude oil into a marsh fed by Ruffy Brook. The spill affected approximately 3 acres of fresh water marsh, that was covered by water up to 30 to 100 cm above the marsh soil surface. Mechanical recovery was deemed difficult to deploy and potentially damaging to the marsh, so in-situ burning was conducted the same day of the spill. The burn lasted for three hours, and remaining pockets of oil were ignited over a period of three days. No secondary burning occurred during this operation. It is estimated that 80% of the oil was consumed during the burn. A significant amount of burn residue (in some places 1 cm thick) was left after the fire went out. The residue was picked up by hand three days later. There is no evidence that any residue sank. The marsh was visited a year later, and found to have recovered well, with the exception of willows, a fire sensitive species. The quick response prevented spreading of the oil and thereby minimizing damage to the marsh.

Bayou Tank Battery [51]

On August 17, 2002, a spill occurred at a tank battery in the Sabine National Wildlife Refuge in Southwestern Louisiana. The spill of 24 to 50 m^3 crude oil ran into the adjacent marsh. Salt water spilled together with the oil, spread the oil over about 1.5 Ha of dense marsh. A burn was started on the first day. A survey indicated that most of the oil had been successfully removed from the marsh. The removal of the residue, however, proved to be difficult and took several days to accomplish using sorbents and nets. Soil samples were taken in unaffected and burn areas to assess them for metal content. Analysis of the soil samples for cadmium, chromium, copper, lead, manganese, nickel, vanadium and zinc showed that the metal contents were relatively the same in the area under the burn and nearby. This indicated that burning, at least in this particular case, did not increase the soil metal content for those metals noted. The burn did show, however, that removal of residue is difficult and requires significant time.

Diesel Spill in Wetlands and Salt Flats, Northern Utah, [52]

On 21 January 2000, a release of an estimated 16 m^3 of diesel occurred from a product transportation pipeline north of Great Salt Lake in Utah. Because of weather (freeze/thaw periods and wind), the product spread over 15 Ha of salt flat and wetlands during the next few days. Initial oil containment efforts were successful in reducing the risk of oil impacts in a nearby national migratory bird refuge. However, the risk remained to migratory waterfowl that were expected to arrive at the impacted wetland within approximately 6 weeks. As a result, in situ burning was proposed to remove the free-phase diesel and destroy the oiled vegetation. Upon approval of a site remediation plan and fire management plan, a Heli-Torch was used on 10 March, 2000 to initiate a burn of the most-highly impacted 5 Ha. The following month (late-April), 1.3 Ha of remaining lightly oiled vegetation were burned using drip torches and propane wands for ignition. It was estimated that 75-80% of the spilled diesel was burned in these operations. Because burning of the oil and impacted vegetation would not remove Diesel that had penetrated into the soils, bioremediation techniques were subsequently implemented to further reduce hydrocarbon levels in the soil and attain the regulatory cleanup target of 20 mg/kg total polycyclic aromatic hydrocarbons.

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To be continued

LAST WEEK IN OPATIJA CROATIA HOSTED ADRIASPILLCON 2013

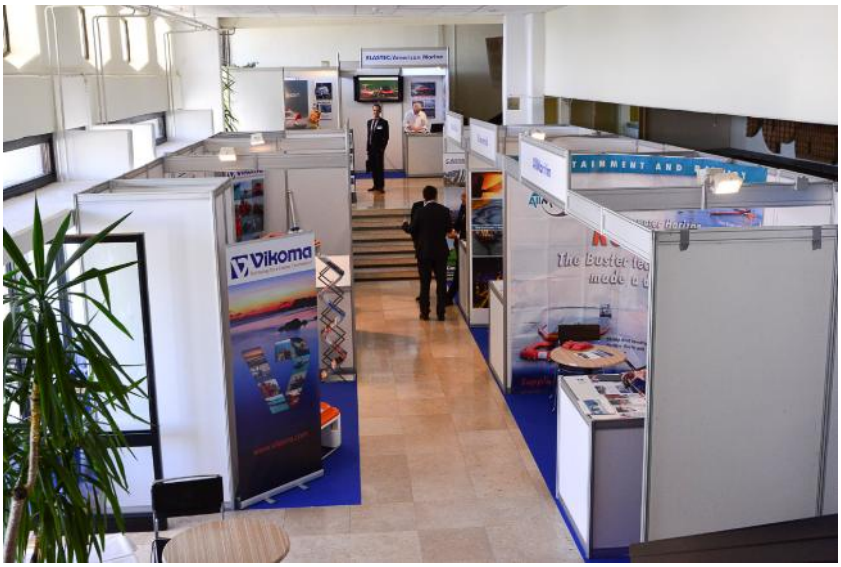
Darko Domovic, ISCO's Member of Council for Croatia reports on the Adriatic Oil Spill Conference

The Second Adriatic Conference on spill prevention, preparedness and response **ADRIASPILLCON 2013** was held between 14 and 16 May 2013 in Opatija, Croatia. In the opening session last Tuesday the participants were welcomed by the representatives of the organizers - OSEC, the host town, the Faculty of Maritime Studies - University of Rijeka and REMPEC, while the Conference was officially opened by the representative of the Croatian Ministry of Maritime Affairs, Transport and Infrastructure, under whose patronage ADRIASPILLCON 2013 was organized.

Some 135 participants from all Adriatic coastal States (Albania, Bosnia and Herzegovina, Croatia, Italy, Montenegro and Slovenia), as well as their counterparts from various European countries, Canada and the USA, attended the Conference. The speakers included representatives of government agencies from the Adriatic countries, international organizations active in the field of preparedness and response, academic institutions and producers of spill response related products.

The Conference was accompanied by a specialized Exhibition in which some of the leading manufacturers of spill response equipment and products and providers of spill response services presented their recent developments and activities. These included several ISCO Industry partners and Corporate members who also contributed to the ADRIASPILLCON 2013 as speakers.

Pictures (Above right): A section of the international audience. (Above left) Mr G. Gonzalez of REMPEC addresses the conference. (Below): Part of the exhibition area



The Conference was divided into three sessions dedicated to national and regional arrangements for spill preparedness and response in the Adriatic region, to dealing with incidents involving hazardous and noxious substances other than oil, and to various aspects of oil spill response respectively. During the first session the participants were familiarized with the recent developments in national preparedness and response systems, including in particular new Albanian, Italian and Montenegrin national contingency plans, and were informed of a couple of relevant regional projects aiming at further increasing the regional response capacities. The session dedicated to HNS spills was included in the Conference for the first time and served to increase the awareness of the participants of the problems related to dealing with spills of hazardous materials, which were so far usually neglected in comparison to oil spill related issues. Finally, in the last session speakers from several regional and European organizations presented a series of interesting, recently developed new tools and services, as well as a number of new developments in spill response technology.

Participants hailing from relevant government agencies, international organizations, oil industry, spill response organizations, scientific and research institutions, maritime sector, ports and NGOs took an active part in discussions that followed presentations, but also encouraged OSEC to organize another ADRIASPILLCON in three years time. Although it would be too early to anticipate what may happen by 2016, it was indicative that the representatives of several Adriatic countries expressed their interest in hosting the next edition of the Conference.

Based on reactions of participants, speakers and exhibitors, it appears that ADRIASPILLCON succeeded in becoming a prime regional forum for discussing accidental marine pollution related topics in the Adriatic region, and that Adriatic coastal States, as well as international organizations and other interested parties, strongly support the idea of establishing ADRIASPILLCON as a regular regional event.

Publications

FOR YOUR INTEREST – LINKS FOR RECENT ISSUES OF PERIODICALS

ASME EED EHS Newsletter	News and commentary on HSE issues from George Holliday	Most recent issue
Bow Wave	Sam Ignarski's Ezine on Marine & Transport Matters	Current issue
Cedre Newsletter	News from Cedre in Brittany, France	April 2013 issue
The Essential Hazmat News	Alliance of Hazardous Materials Professionals	March 13 issue
USA EPA Tech Direct	Remediation of contaminated soil and groundwater	May 1 issue
Intertanko Weekly News	International news for the oil tanker community	No 20, 2013
CROIERG Enews	Canberra & Regions Oil Industry Emergency Response Group	May 2013 issue
Soil & Groundwater Product Alert	From Environmental Expert	May 13 issue
Soil & Groundwater Ezine	Articles, papers and reports	May 2013 issue
Soil & Groundwater Newsletter	From Environmental Expert	May 16 issue
Soil & Groundwater Events	Upcoming events compiled by Environmental Expert	April 2013 issue
Technology Innovation News Survey	From US EPA - Contaminated site decontamination	March 1-31 issue
IMO Publshing News	New and forthcoming IMO publications	April 2013 issue
Pollution Online Newsletter	News for prevention & control professionals	May 8 issue
EMSA Newsletter	News from the European Maritime Safety Agency	May 2013 issue
JOIFF "The Catalyst"	Int'l Organisation for Industrial Hazard Management	April 2013 issue
Int'l Environmental Technology	Environmental Monitoring, Testing and Analysis	April 2013 issue
HELCOM Newsletter	Baltic Marine Environment Protection Commission	May 2013 issue

HOT OFF THE PRESS – NEW CEDRE CHEMICAL RESPONSE GUIDE

In the collection of *Cedre* chemical response guides, the French language guide on Acrylic Acid

Events

NORWAY AND NEWFOUNDLAND SPILL TECHNOLOGY SEMINAR

The Oil Spill Response Technology Seminar, to be held from 27 to 28 May 2013 in St John's, Canada, aims to bring together industry experts to address how the oil industry can best react to an oil spill event in our oceans. Conference subjects are Challenges in Oil Spill Response, Environmental Monitoring Systems, Mechanical Recovery Options, Dispersants and In Situ Burning. Specialists from Norway and Newfoundland bundle their experiences. *Atlas4Jobs* Read more

UK: 7TH ANNUAL ENVIRONMENTAL & CLEAN TECHNOLOGY CONFERENCE

Thursday 6 June in Edinburgh - The programme for the conference is now available to view on our website at: http://www.setn.org.uk/wordpress/programme/

The conference is free to attend and/or exhibit and exhibitor places are filling up fast. Exhibiting at sector-targeted conferences is worthwhile but can be expensive so don't miss this opportunity to exhibit with SETN picking up the tab! If you haven't secured your stand yet, register now before all spaces go: http://www.setn.org.uk/wordpress/registration/

Company news

NEW ADDRESS FOR INTERNATIONAL SALVAGE UNION

From 03 June 2013 our new contact details will be: International Salvage Union, Holland House, 1-4 Bury Street, London EC3A 5AW Tel: +44 20 7220 6597

INDIA: ISCO MEMBER, VIRAJ CSE WINS MAJOR CONTRACT

VirajCSE has signed a Five Year Contract beginning 2013 with Ambuja Cement Limited, (India's largest Cement Manufacturing Company) for their Tier-1 OSR support, including equipment & manpower at their Ulwe Port, Navi Mumbai.

UK: ATLANTIC OFFSHORE RESCUE COMMISSIONS UK'S MOST POWERFUL EMERGENCY RESPONSE AND RESCUE VESSEL

Aberdeen-based standby vessel operator Atlantic Offshore Rescue has commissioned what will be the UK's most powerful emergency response and rescue vessel (ERRV). The Ocean Troll. – *Atlas4Jobs* Read more