



ISCO NEWSLETTER

The Newsletter of the International Spill Response Community
Issue 353, 24 September 2012

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News

IN-SITU BURNING EFFECTIVENESS IS SUBJECT OF PROPOSED ASTM OIL SPILL RESPONSE STANDARD



ASTM International [Committee F20 on Hazardous Substances and Oil Spill Response](#) has approved several standards for in-situ burning. The latest proposed standard on this subject, [ASTM WK37324](#), Guide for Evaluation of In-Situ Burning Effectiveness, is currently being developed by [Subcommittee F20.15 on In-Situ Burning](#).

In-situ burning is a controlled burning, at the spill location, of oil that has spilled from a vessel or facility. This technique was used extensively in response to the 2010 Gulf of Mexico oil spill.

"The proposed guide will help standardize the evaluation of a burn and produce results that will be consistent among different users, enhancing the accuracy and credibility of the information," says Steve Potter, senior engineer and managing director, SL Ross Environmental Research Ltd., and an F20 member.

Potter notes that the committee welcomes participation in its standards developing activities. "We have recently completed standards for in-situ burning

related to ignition devices, fire-resistant booms, burning in ice conditions and in marshes. As burning becomes more accepted as a response technique, we hope to broaden the scope of standards related to in-situ burning." *ASTM News Release* [Read more](#)

INTERNATIONAL CONFERENCE EXTENDS FUND TO TACKLE MANAGEMENT OF POTENTIALLY HAZARDOUS CHEMICALS

September 21 - The third International Conference on Chemicals Management (ICCM3), on Friday extended until 2015 a Trust Fund that has to-date provided over US\$31 million to improve the management of potentially hazardous chemicals in 105 countries, providing a welcome boost to efforts to safeguard human health and the environment.

Delegates at the conference also recognized the need to better understand and communicate the risks posed by endocrine disrupting chemicals - compounds which disrupt the systems that produce and secrete hormones in humans and wildlife - and marked them as an emerging issue in the Strategic Approach to Chemicals Management (SAICM).

As the sustainable management of chemicals becomes an issue of growing global concern, over 500 delegates and experts from 124 countries, international organizations, governments, non-governmental organizations and the chemicals industry gathered in Nairobi for the five-day meeting under the auspices of SAICM.

One of the key tools of SAICM, adopted in 2006, was the Quick Start Programme (QSP), which has been supporting initial enabling activities for the sound management of chemicals in developing countries, least developed countries, small island developing states and countries with economies in transition.

The QSP Trust Fund, which supplied most of the funding for the programme, was set to expire this year, but delegates voted to extend its life until 2015. This will allow more developing nations to submit requests for assistance in soundly managing chemicals until long-term funding is secured. *UNEP News Centre* [Read more](#)

NORWAY: PSA TO INVESTIGATE HYDROCARBON LEAK ON ULA

September 19 - A substantial escape of hydrocarbons occurred on the Ula field in the Norwegian North Sea on 12 September. The Petroleum Safety Authority Norway (PSA) has decided to investigate this incident.

No people were injured and no damage caused to the installation beyond the equipment directly involved. But the PSA considers the incident to have had a substantial potential.

The leak arose in the separator module on Ula's production platform (PP). Nobody was in the module when the incident occurred. *The Maritime Executive* [Read more](#)

BP shuts down Norwegian oil field after leak

September 18 - BP shut a Norwegian oil and gas field after a potentially dangerous leak, the company said on Tuesday, six days after the incident forced the emergency shutdown of the facility. *Reuters* [Read more](#)

NIGERIA: FRESH OIL SPILL HITS BAYELSA COMMUNITY

September 18 - A fresh crude oil spill has been reported at Obama flow station trunk line belonging to Nigerian Agip Oil Company in Nembe creek, Nembe Local Government Area of Bayelsa State.

The spill, according to the natives, has disrupted fishing activities in the creek and waterways and is spreading at high speed due to the current of the water and moving into the creeks of Igbeta-Ewoama, Iwokiri, Sabaturo and other fishing settlements and communities of Nembe Kingdom. *Vanguard Newspaper* [Read more](#)

NIGERIA: SENATE SEEKS PENALTY FOR OIL SPILL

September 20 - The Senate says a robust penalty regime for oil spill is needed to encourage environmental responsibility and care.

The resolution was taken yesterday during the second reading of a bill for an Act to amend the National Oil Spill Detection and Response (NOSDRA) Act 2006 sponsored by Senator Bu-kola Saraki (PDP, Kwara Central).

Senate President David Mark called on those charged with the implementation of the Act to be honest saying most of the environmental challenges would have been averted if they had taken their responsibilities seriously. Leading debate on the bill, Saraki said Nigeria has lost over 13 million barrels of oil to preventable spills. *allAfrica.com* [Read more](#)

USA: DEQ SPOKESMAN MISHANDLED BRAITHWAITE CHEMICAL SPILL AND SHOULD BE FIRED, ACTIVISTS SAY

September 19 - An environmental watchdog group on Wednesday called for the firing of state [Department of Environmental Quality](#) spokesman Rodney Mallett, saying Mallett repeatedly downplayed the public's risks following a chemical spill at the [Stolthaven](#) New Orleans terminal in Braithwaite. Anne Rolfes, founding director of the Louisiana Bucket Brigade, said Mallett told residents they had nothing to fear from the petroleum and chemical storage terminal when it was obvious contamination occurred after [Hurricane Isaac](#).



David Grunfeld, *The Times-Picayune* - Stolthaven chemical holding and transfer facility in Plaquemines Parish admitted to releasing chemicals during Hurricane Isaac.

"Rodney Mallett is a high-level official at DEQ with a lot of influence and power and he is repeatedly the person put out front," Rolfes said. "At some point there has to be some accountability."

The group also renewed its call for the U.S. Environmental Protection Agency to take over state regulators' implementation of environmental programs including the Clean Air Act, the Clean Water Act and emergency response. It also requested that the EPA's Office of Inspector General investigate Louisiana's

system for hazard assessment, emergency response and public relations. *The Times Picayune* [Read more](#) (See also the report in last week's Newsletter)

GERMANY: UPDATE ON CONTAINER SHIP FLAMINIA

September 19 – Voytenko Mikhail reports in the *Maritime Bulletin* - Decontamination works started on board of MSC Flaminia and will last for about 5 days, with the aim of cleaning up the superstructure, reported German Central Command for Maritime Emergencies. It is expected that the superstructure will be cleaned and safe for people by the end of this week. Germanischer Lloyd worked out the discharge plan for MSC Flaminia, envisaging both the offloading of the cargo and discharging of water collected in holds during the firefighting. The stability of the vessel during the discharge is one of the main priorities of the salvage. 4 more containers added to a list of damaged containers with hazardous substances, the total number staying now at 153.

Maritime Bulletin [Read more](#) (This link will give you access to the complete chronological history of the incident, photographs and listing of the hazardous substances in onboard containers)

MEXICO: PEMEX FACES COMPLAINT OVER OIL SPILL

September 20 - Mexico's Profepa environmental protection agency has filed a criminal complaint against state oil monopoly Petroleos Mexicanos "for the deaths of turtles and contamination of beaches and mangrove swamps" in the wake of an oil spill in the southern state of Oaxaca.

The criminal complaint lodged Wednesday with the federal Attorney General's Office "is based on the results of laboratory analysis conducted on intestine and liver samples taken from turtles found dead during inspection tours" in the region.

On Aug. 11, a loading buoy (an installation used to load crude oil on to tanker ships at sea) sank at a spot off the coast of Oaxaca facing the Salina Cruz refinery, causing crude to spill onto six beaches in that state. *Fox News* [Read more](#)

USA: JEFFERSON OIL SPILL ONE OF IOWA'S LARGEST; EPA TAKES OVER INVESTIGATION

September 20 - An oil spill in Jefferson appears to be the largest in Iowa history, and the U.S. Environmental Protection Agency has taken over the investigation, the Iowa Department of Natural Resources reported.

Crews have found oil along 10 to 15 miles of the North Raccoon River, but have not determined how much oil spilled from a 20,000-gallon above ground storage tank at Krieger's Greenhouses. The Greene County sheriff's department reported the spill on Thursday, Sept. 13.

Oil ran out of a tank valve, down a ravine, through a culvert and into the river, which provides drinking water for the Des Moines area.

News (continued)

DNR environmental specialist Alison Manz of the Atlantic field office said cleanup crews have used vacuum trucks, skimmers, booms, and absorbent pads to recover the product, which is being tested to see if it also contained pesticides or other chemicals. So far, 800 gallons of oil and 1,000 gallons of mixed oil and water have been recovered. Work continues today. *Des Moines Registrar* [Read more](#)

UK: REVISION OF NATIONAL SPILL CONTINGENCY PLAN

September 20 - The UK's National Contingency Plan for Marine Pollution from Shipping and Offshore Installations has been re-written and interested parties are currently being asked to comment.

The plan is the blueprint for how the UK would respond to offshore pollution from shipping and offshore installations. The revisions have particularly focused on the areas of command, control, communications and operations; environment, scientific and technical advisory activity; shoreline response and the Civil Contingency Act Coordination; waste Management and claims and legal aspects of national incident response.

The consultation will run for 8 weeks until 12 November 2012. The document can be found at http://www.dft.gov.uk/mca/mcga07-home/emergencyresponse/mcga-dops_cp_environmental-counter-pollution_and_response/cp-con-ncp2012.htm

All responses will be considered and it is expected that the final updated version of the National Contingency Plan will be published this winter. *Fishnewseu* [Read more](#)

ARCTIC: NEWS UPDATES

Oil spill barge gets final tests before heading to Arctic

September 16 - After months of delay, a barge-mounted oil well blowout containment system built in Bellingham is undergoing sea trials before its final deployment to a Shell Oil Co. exploration project in the Chukchi Sea, north of the Bering Straits.

The Arctic Challenger barge project employed hundreds of workers at the Port of Bellingham's shipping terminal through much of the spring and summer. Its owner and operator, Superior Energy Services of Houston, had expected it to be on the job by now, providing an emergency oil well blowout response system meant to prevent the kind of prolonged oil hemorrhage that resulted when BP's Deepwater Horizon erupted in 2010 in the Gulf of Mexico.

But getting final safety approvals from federal officials took longer than expected, Shell spokesman Curtis Smith said in an email. *Bellingham Herald* [Read more](#)

Shell hits new snag in Arctic drilling programme

September 17 - Royal Dutch Shell PLC has suffered another setback in its drilling program in the icy waters of the Chukchi Sea off Alaska, as the challenges of Arctic exploration continue to stymie global oil companies.

After a lengthy permitting process, Shell had begun drilling its first exploration well in the Chukchi, off the northwest coast of Alaska, earlier this month but had to re-evaluate after an oil-spill containment dome was damaged during testing last week. The company said Monday it will no longer plan to drill into a suspected hydrocarbon zone this fall. *The Globe and Mail* [Read more](#)

Oil-spill containment barge work in Bellingham needs permits

September 20 - The delay-plagued Shell Oil barge that would provide oil-spill containment for Arctic drilling has hit another bump: The project now needs environmental permits. The Washington Department of Ecology announced Thursday, Sept. 20, that it will require the companies retrofitting the Arctic Challenger to apply for stormwater permits. Greenberry Industrial, which is doing the fabrication, and Superior Energy Services, which has been installing the containment system on the barge, have been discharging stormwater from their projects without permits, according to Ecology. The Arctic Challenger is being worked on at the Port of Bellingham shipping terminal on Cornwall Avenue. *The Bellingham Herald* [Read more](#)

British Lawmakers Seek Arctic Drilling Moratorium

September 20 - With Royal Dutch Shell and Cairn Energy's failed attempts at finding recoverable oil and gas in the arctic this year, along with a record breaking ice melt season, lawmakers in the UK are seeking an all-out arctic drilling moratorium that would ban offshore drilling until a solid oil spill clean-up plan is put in place.

Oil and gas companies including Royal Dutch Shell Plc and Cairn Energy Plc should be prevented from drilling in the Arctic until rigorous environmental regulations are in place, a panel of U.K. lawmakers said.

Oil spill response techniques haven't been proven to work in Arctic conditions, the multiparty Environmental Audit Committee said today in an e-mailed report. It proposed a halt to drilling until stronger safeguards are in place in an effort to avoid leaks on the scale of BP Plc's Macondo disaster in the Gulf of Mexico in 2010. *gCaptain* [Read more](#) [Another related report](#)

UK: EUROPE'S DEEPEST NUCLEAR CLEAN-UP TO TAKE PLACE AT DOUNREAY IN CAITHNESS.



Dounreay nuclear power station in Caithness. Picture: Ian Rutherford

September 19 - Plans have been unveiled for Europe's deepest nuclear clean-up at the decommissioned Dounreay plant in Caithness.

Work is expected to start next year on the huge task of removing an estimated 1,500 tonnes of radioactive waste from two underground facilities at the Caithness nuclear complex – a 213ft-deep vertical shaft and a nearby vault set 30ft below the surface.

The water-filled shaft was first used to store intermediate level waste from some of Britain's earliest nuclear energy experiments in 1957. The silo – a shallow reinforced concrete bunker – was built in 1971 to store nuclear waste from the plant.

contaminated with sodium continued to be buried in the underground silo despite an explosion in 1977 caused by a cocktail of sodium, potassium and water. *The Scotsman Newspaper* [Read more](#)

A report published in 1996 revealed that waste

NORWAY HELPS VIETNAM DEVELOP OIL SPILL STRATEGIES

September 19 - An international conference was held in Hanoi on September 19 by the Vietnam Sea and Islands General Department and the Norwegian Embassy to develop strategies for managing oil spills at sea.

The event aimed to boost cooperation and share Norway's environmental management experience towards protecting the ocean environment in Vietnam while using resources in a sustainable and effective manner.

The focus of the seminar was on devising plans to respond to oil spills at sea, mapping an oil spill sensitivity system and evaluating the risks of oil spill pollution in oceanic areas within Vietnam's jurisdiction.

Norwegian ambassador to Vietnam Torstein Risa said his country will transfer advanced environmental surveying technologies and offer advanced training to help Vietnam cope with oil spills and other environmental pollution. *Voice of Vietnam* [Read more](#)

USA: GULF FISHERIES REBOUNDING FROM BP SPILL, GOVERNMENT SAYS

September 19 - Gulf of Mexico fisheries are rebounding from the [BP Plc \(BP\)](#) oil spill, landing more fish last year than in 2009, the year before the worst U.S. offshore marine disaster, the government said.

The total catch was 25 percent bigger last year than in 2009, and 55 percent more than in 2010, the [National Marine Fisheries Service](#) said today in a report. In April of that year, the Deepwater Horizon oil rig exploded, killing 11 workers and triggering a spill the government estimated at more than 4 million barrels.

"Our fisheries are on the way up," Harlon Pearce, chairman of the [Louisiana Seafood Promotion and Marketing Board](#), said in an interview. Some species are doing better than others, and the industry will "need another year or two of stabilization" before it's back completely, he said. *Bloomberg* [Read more](#)

CANADA: FEW OIL PIPELINE SPILLS DETECTED BY MUCH-TOUTED TECHNOLOGY

September 19 - For years, TransCanada, the Canadian company that wants to build the Keystone XL pipeline, has assured the project's opponents that the line will be equipped with sensors that can quickly detect oil spills.

In recent newspaper ads in Nebraska, for instance, TransCanada promised that the pipeline will be "monitored through a state-of-the-art oil control center 24 hours a day, 365 days a year. 21,000 sensors along the pipeline route relay information via satellite to the control center every five seconds."

News (continued)

Other companies make similar claims about their remote sensing technology, sometimes promising they can detect and isolate large spills within minutes.

But an InsideClimate News examination of 10 years of federal data shows that leak detection systems do not provide as much protection as the public has been led to believe.

Between 2002 and July 2012, remote sensors detected only 5 percent of the nation's pipeline spills, according to data from the [Pipeline and Hazardous Materials Safety Administration](#) (PHMSA). *Inside Climate News* [Read more](#)

CANADA: CONGRESS LOOKS TO EXTEND OIL SPILL LIABILITY TAX TO CANADIAN CRUDE



Crews clean up oil, from a ruptured pipeline, owned by Enbridge Inc, near booms and absorbent materials where Talmadge Creek meets the Kalamazoo River as in Marshall Township, Mich. Federal investigators are expected to present their findings Tuesday, July 10, 2012 on the likely cause of a pipeline rupture that spilled more than 800,000 gallons of crude oil into the river nearly two years ago. (AP Photo/Paul Sancya, File)

September 20 - Congressional Democrats want to force companies importing tar sands crude from Canada to pay into the same spill trust fund that users of conventional oil finance.

The prospect that the proposed Keystone XL pipeline would deliver a surge of imported tar sands crude from Alberta to the Gulf Coast has revived the trust fund issue.

Energy companies generally pay an 8-cent-per-barrel tax into the [oil spill liability trust fund](#), which can be used to finance clean up operations and assess natural resource damage after a spill.

The excise tax generally is imposed on crude oil received at U.S. refineries and petroleum products entering the U.S. for consumption or warehousing. But under an Internal Revenue Service decision last year, the bitumen extracted from Canada's oil sands is not treated as crude and therefore avoids the tax.

Although little noticed at the time, the decision has since turned heads because the oil industry functionally treats the bitumen extracted from tar sands as crude – whether by upgrading it to synthetic crude oil or diluting it with other hydrocarbons to flow through pipelines. *Fuel Fix* [Read more](#)

USA: ATTORNEY GENERAL TAKES ACTION OVER OIL SPILLS

September 17 - Illinois Attorney General Lisa Madigan announced actions on Friday against several oil pipeline companies for spills near Palos Park and Lockport.

One spill occurred along a section of pipeline near the Cal-Sag Channel in Palos Park.

The spill began in the early morning of Aug. 27. The Illinois Environmental Protection Agency estimated that at least 29,400 gallons of jet fuel soaked into the ground before entering a drainage ditch that flowed into the Cal-Sag Channel. The pipeline is operated by Buckeye Pipe Line Co. LP for owner West Shore Pipe Line Co.

"Even though emergency repairs were made to protect the surrounding environment, this court action will require that the pipeline's owner and operators thoroughly assess the damage and restore the area," Madigan said. "The preliminary injunction is the first step toward ensuring that the companies involved are held fully responsible for this incident."



A Cook County judge ordered research into the extent of the contamination through the preliminary injunction and required the companies to inform the Illinois EPA of the initial repairs made to the pipeline. The companies must also document the proper disposal of contaminated water and soil. *LegalNewsline.com* [Read more](#)

MALAYSIA: PIRATES CAUGHT SYPHONING AND SELLING BUNKER OIL FROM HIJACKED SHIP

September 20 - The Malaysian Maritime Enforcement Agency (MMEA) recently foiled an attempt by six pirates from syphoning off and selling bunker fuel from a hijacked vessel in local waters.

News (continued)

MMEA officials noticed uncommon ship-to-ship activity between MT Scorpio and MT Sea Jade. As a nearby MMEA patrol boat started to move towards the two vessels, six masked men were seen escaping in a wooden boat equipped with a high-powered engine, which was next to MT Scorpio. *The Maritime Executive* [Read more](#)

People in the news

MIKE FOULDS IS NOW INTERNATIONAL BUSINESS DEVELOPMENT MANAGER



Mike Foulds, formerly with Fosse Liquitrol and Ro-Clean Desmi, has recently joined Lubetech Industries as International Business Development Manager.

His new job role is to develop export sales for Lubetech into the Middle East and African markets, and also creation of a shipping department. Lubetech, based in Southampton, UK, is a supplier of oil spill response materials and equipment.

ISCO news

NEW WEB PAGES CREATED FOR ISCO'S PROFESSIONAL MEMBERSHIP INITIATIVE

Within the Membership Section of the ISCO website at <http://www.spillcontrol.org> new pages now give details about Professional Membership of ISCO and include information on the Code of Conduct, Assessment Guidelines and other matters. A downloadable Application Form is also included.

After an extended gestation period, ISCO's professional recognition is at last moving forward and more information will be published in next week's Newsletter.

The many Individuals who have already indicated their intention to apply for Professional Membership will be given priority and will hear from the ISCO Secretary during the week commencing 1st October. (This week your Secretary will be attending the IMO OPRC-HNS TG14 meeting in London). If you have not yet registered interest, it's not too late to be included in the first tranche of applications to be assessed by the Professional Standards Committee. Send an email to john.mcmurtrie@spillcontrol.org

The new web page includes an introduction "About Professional Membership". If you don't know about PM, it's recommended that you read this introduction.

Applications from USA and Canada will be assessed by a North American panel. Applications from other areas of the world will be assessed by a UK-based panel.

NEW WEB PAGE CREATED FOR THE ISCO CORRESPONDENCE GROUP ON THE INTERNATIONAL RESPONSE RESOURCE INVENTORY PROJECT

The ISCO Secretary has written to all of the twenty-two ISCO Corporate Members who have advised their interest in being part of the ISCO correspondence group. The purpose of the Correspondence Group is to assist ISCO in relaying the views of members and help define how ISCO can most effectively ensure that the private sector within the spill response community contributes ideas and recommendations in regard to this important project for streamlining the mobilisation of spill combat resources during major incidents.

The new RRI web page can be accessed within the Members' Area of the ISCO website. You will need to log in and select IMO from the menu on the left hand side of the home page, then select Work Groups and finally, RRI project.

The web page takes you through the history of the RRI concept and will be updated as the project develops.

For members who have not yet joined the Group, it's not too late. Send an email to john.mcmurtrie@spillcontrol.org

IMO OPRC-HNS TG14 AND MEPC MEETINGS IN LONDON

Members will be represented by ISCO President, David Usher, ISCO Secretary, John McMurtrie, and Honorary Member, Dr Douglas Cormack. ISCO has submitted two papers – one to TG14 and one to the MEPC.

These meetings will be reported on in the next issue of the ISCO Newsletter.

Please note that, as your Secretary will be away, he may have difficulty in responding to emails. Please therefore exercise patience. You will receive replies as soon as possible.



In this issue of the ISCO Newsletter we are printing No. 95 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](#)

CHAPTER 95: KNOWLEDGE OF SHORELINE CLEANING

In the early post-*Torrey Canyon* days, WSL designed ship-mountable dispersant spray-set and a smaller inshore boat version which could be adapted to spray beaches by replacing its twin spray booms with hand-lances. The equipment in this third form was reasonable portable and convenient to use and could deliver 7 gallons min over a swath width of 2 metres with the operators walking at a speed commensurate with the pollutant layer thickness. These early equipments were commercially supplied by Biggs Wall Ltd and were quickly followed by a variety beach spraying equipment from other commercial suppliers.

The Beach Guard supplied by the Chapman Chemical Company was towed by and used in conjunction with a dispersant filled road tanker on the esplanade, car park or other beach-adjacent hard-standing, while four operatives each with a hand-lance and 100 metres of connecting hose walked the beach at up to this distance from associated pump and supply units applying 2700 litres h⁻¹ of hydrocarbon-carried dispersant across a 2 metre swath width. Again, the Invictacat was introduced to widen the deployable range, this being an eight-wheeled, low tyre-pressure, self-propelled, rough-terrain vehicle, carrying its own dispersant supply and spraying 1620 litres h⁻¹ over a swath width of 2 metres from a boom on each side or through hand-lances so that operatives on foot could go beyond the operational limits of the vehicle itself to treat otherwise inaccessible locations. When the vehicle is unable to reduce its speed to deal successfully with higher pollutant layer thicknesses, it can switch to multiple passes at otherwise convenient speeds. Yet again, Cooper Pegler Knapsack Sprayers were used for localised treatment of pollutant in otherwise inaccessible locations including rocky outcrops and cliffs. As the name implies, this pressurised applicator and its dispersant supply are carried on the back of the operative who thus has considerable freedom of movement in locations accessible only on foot. This equipment could also apply gels and herders.

The most suitable gelling agents are the non-ionic surfactants such as the alkyl phenyl ethers and the polyethoxylated glycols. The gelling agent is thoroughly stirred into the dispersant to a volume concentration of 20% and the mixed dispersant/gelling agent is then mixed with seawater in the combined mixing and application gun in the ratio of 3:2 to produce the gel, this second mixing stage being most conveniently achieved by feeding the two components from separate pressurised backpacks to the mixing/application gun which comprises a mixing chamber with concentric inlets and control valves which permit component flow adjustment to desired gel consistency, such a mixing/application gun being easily produced from an oxyacetylene welding torch, though commercial equipment is now available.

As to Herders, otherwise known as Surface Film Chemicals (SFC), it is a considerable advantage to achieve a clean beach and to have a further chance at collection from trenches or water surfaces. Thus the pollutant freed to run down the beach to seaward on the ebb may be collected in a trench dug for this purpose or retained between the beach and a coastal boom from whence it can be mechanically recovered. Again, when the slope of the beach is insufficient for the pollutant to run downwards on the interposed surface film, it may be caused to do so by the gentle action of flowing water supplied by pumps, while instead of collection in trenches it can be deflected by a V-arrangement of boards-on-edge into a sump for collection from a much greater layer thickness than is achievable in a trench or boomed area. Such techniques could presumably be applied to mud flats, while in rocky areas, the pollutant could be expected to collect with increased layer thickness at low points such as rock pools thereby facilitating mechanical collection.

Indeed, small-scale trials conducted by WSL showed that rock, shingle and pebble beaches, and concrete surfaces, were left un-oiled when the tide fell after prior SFC treatment using a Cooper Pegler Knapsack Sprayer to lay down three 2 metre wide bands, the first at the water's edge and the second halfway between the first and the third just below the high tide mark at the rate of 135 l h⁻¹ preferably within an hour of the arrival of the oil. This application rate was designed to apply the SFC to the bands at a rate of 8 litres per 100 square metres, a rate which could also be delivered by the Beach Guard Trailer and Invictacat and to the sea contiguous to the shore by the inshore version of the WSL spray set adjusted to give an application rate of 90 litres per linear mile.

In using Shell Oil Herder or BP Oil Guard, the Companies recommended protective clothing, full eye protection and gauntlet gloves to be worn; contaminated normal clothing to be removed immediately; areas of skin contact to be washed thoroughly with soap and water; and good open air ventilation, the threshold limit in air being 50ppm. For storage they recommended sealed containers to prevent evaporation, accidental release and contamination; avoidance of heat and open flame, all application equipment to be thoroughly clean, soap or detergent residues being detrimental to performance; and sealed storage between 50 and 80°F (solidifies a 36°F) for indefinite contaminant-free life.

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.

THE OIL SPILL RESPONSE JOINT INDUSTRY PROJECT (OSR-JIP)

Note from Editor - Many members of the international spill response community are not well informed about the important work being done by members of the OSR-JIP.

In order to help correct this situation, the ISCO Newsletter is publishing background information and briefing notes on the project.

We acknowledge the kind permission of Programme Manager, Rob Cox of IPIECA to include information on the work programme being undertaken by the OSR-JIP.

This is the second part of this article and elaborates on JIPs 5-11 and 16. The concluding part (covering JIPs 12-15 and 17-19 will appear in next week's ISCO Newsletter.

JIP 5: In-Situ Burning



Rationale

Prior to the Macondo spill, In Situ Burning (ISB) was a lower profile response technique which had enjoyed limited utilisation and testing. The circumstances of the Macondo incident allowed ISB to be used extensively and it was viewed as a success by both industry and the regulators who authorized the process. However, this success raised its own issues and highlighted the immaturity of the technique and the lack of understanding of long and short-term impacts.

Final products / deliverables

Two products are planned under this JIP:

WP1: Examining existing published data from boom and igniter manufacturers, and seeking ISB operational reports to compile efficiency data.

WP2: Presenting and summarizing the composition of plumes and residues, as well as the technical and scientific approaches for conducting air monitoring during an incident and the methods for emissions calculations and data evaluation.

WP3: Producing an IPIECA-OGP Good Practice Guide (GPG) on In-Situ Burning incorporating a template for pre-approval of ISB. Communication materials will be incorporated into the ISB GPG.

JIP 6: Risk Assessment and Response Preparedness

Rationale

A considerable amount of response equipment (e.g. booms, skimmers) and consumables (e.g. dispersant) is available worldwide, and the quantity and placement of those resources has largely been allocated on the basis of the perceived risk of an oil spill from shipping (mobile risk of finite size). The advent of Macondo highlighted the converse case (fixed risk of unknown and possibly extended duration) indicating that industry needs to revise spill response plans and equipment inventories to provide a response capability for a range of scenarios up to and including the Worst Credible Case Discharge (WCCD) from a given fixed facility. There is no globally accepted process for this process in the upstream.



Final products / deliverables

We have contracted with two consultants (DNV and Peter Taylor) to develop two OGP Recommended Practices (RPs):

- An RP on upstream Environmental and Socioeconomic Risk Assessment
- An RP on the associated upstream Contingency Planning and Response Resource Planning.

These build heavily on previous work done by the industry in Norway, and on API's planning guideline. A secondary piece of work will focus on the current update to ISO 17776 on "Petroleum and natural gas industries -- Offshore production installations -- Guidelines on tools and techniques for hazard identification and risk assessment"

JIP 7: Effective Exercises



Rationale

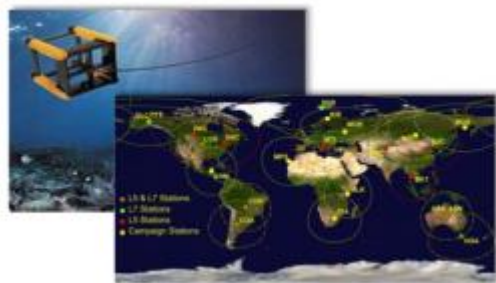
Exercising oil spill contingency plans is the primary means to test and verify their effectiveness and identify areas for improvement. An exercise programme must progressively prepare responders to perform effectively in realistic representations of all the risks that the contingency plan has been designed to meet. The GIRG process highlighted a concern and identified an opportunity to improve the effectiveness of exercises.

Final products / deliverables

WP1: Review current exercise guidance and practices, with a view to recommending mechanisms and tools for their improvement. Develop a Recommended Practice on response exercises - scope, scale and frequency.

WP2: Update JIP 12 Good Practice Guide on Exercise Planning

JIP 8, 10, 11, & 16: Surveillance, Visualization & Tracking: OGP – managed JIPs



Rationale

Knowing where the oil is, and understanding what condition it is in following a spill, is critically important. The GIRG analysis recognized the fast-paced emergence of new technologies, but also the fragmentation between groups who facilitate the technology and the responders who ultimately use it. JIP's 8, 10, 11, & 16 have a common thread running through them related to Geomatics and Metocean technology, which are themselves interdependent. Recommendations arising from the GIRG process in these areas will be addressed through seven proposed work packages.

Final products / deliverables

WP1: Review existing in water surveillance technologies for detecting and tracking oil in the water column, and identify and make recommendations on the appropriate suite of platforms and sensors that should be available in a region as part of a spill response strategy.

WP2: Produce a recommended practice for surface surveillance of oil spills, applicable globally, aligned with API. WP2 will also – possibly in collaboration with API – write a JIP 12 Good Practice Guide (GPG) on non-visual surveillance, tracking, and estimation of oil spills.

WP3: Produce a recommended practice for oil spill modelling and prediction. WP3 will also review and assess the current capability of oil spill modelling in the industry, and suggest additional research as necessary to improve the modelling of subsea plumes and surface spills using appropriate hydrodynamic and oil spill models.

WP4: Collate, review and assess the available global metocean databases that can be used to provide in-situ data to calibrate and validate numerical models (link to WP 3).

WP5: Produce a recommended practice on GIS/Mapping in support of oil spill response and on the use of GIS technology and geo-information in forming a “Common Operating Picture” for management of the response. This work is critical and may be mandated by law in the US.

WP6 and WP7 will address regulatory and standards issues identified by WP's 1 – 4 and summarize standards and regulatory issues by country.

JIP 9: Assessment of Tier 2 / Tier 3 Capability

Rationale

When the current oil spill response network was set up in the 1980's, the best practice solution was to create Tier 3 global hubs/stockpiles of equipment, funded and managed by industry, at key locations around the world. Since the 1990's, there has been a growth of commercial and national resources in various countries concurrent with an increase in both the regulatory and the public expectation of a faster response. There have also been significant changes in global oil spill potential due to the evolving upstream business and changes in the traditional tanker trading routes.



Contributed article (continued)

These factors warrant a review of the adequacy of the current response network to determine whether the present model of Tier 2 and 3 locations is still fit for purpose and whether supplemental Tier 2 or Tier 3 locations are needed to improve response capability

Final products / deliverables

A consultant will develop an assessment (i.e. White Paper) of the specific locations and magnitude of potential industry exposure and preparedness which in turn will help inform the potential location of any additional resources.

Science and technology

OIL SPILL CLEAN-UP TECHNIQUE OFFERS RECOVERY POTENTIAL

An inexpensive method of cleaning up oil spills which also recovers oil in the process could soon be developed on a commercial scale.

Researchers at the Massachusetts Institute of Technology, US, have devised a new technique for magnetically separating oil and water by mixing water-repellent ferrous nanoparticles with the oil before extraction.

While previous research has focussed on separating water and these so-called ferrofluids, these typically involve pumping a water and ferrofluid mixture through a channel. Magnets outside the channel then direct the flow of the ferrofluid either through a side channel or perforated wall.

This approach can work if the concentration of the ferrofluid is known in advance and remains constant, but in water contaminated by an oil spill the concentration can vary widely. The MIT researchers have overcome this by immersing the magnets in the stream and orientating them perpendicularly to its flow. *Edie Water* [Read more](#)

Events

SOIL & GROUNDWATER EVENTS UPDATE FROM ENVIRONMENTAL EXPERT

Upcoming events in USA, UK and France [More info](#)

GREECE: 4TH INTERNATIONAL SYMPOSIUM ON SHIP OPERATIONS, MANAGEMENT AND ECONOMICS

Athens, 8-9 November, 2012. This year's keynote speaker will be Mr. Andreas Chrysostomou of Cyprus, Chairman of IMO's Marine Environment Protection Committee (MEPC). [More info](#) [Thanks to ISCO Member of Council for Greece, Prof. Harilaos Psaraftis]

UK: PIPELINE INTEGRITY MANAGEMENT SUMMIT AND O&G 2012 CONFERENCE

London, 27-29 November, 2012. [More info](#)

Publications

US EPA: TECHNOLOGY INNOVATION NEWS SURVEY

The August 1-15, 2012 *Technology Innovation News Survey* has been posted to the CLU-IN web site. The *Survey* contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. The latest survey is available at: <http://www.clu-in.org/products/tins/>

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