

# ISCO NEWSLETTER

The Newsletter of the International Spill Response Community Issue 402, 16 September 2013

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## International news

#### SAFEMED III: EURO-MED COOPERATION PICKS UP PACE

The SAFEMED III project designed to boost maritime safety and ship pollution prevention in non-EU Mediterranean countries met on 11 September at EMSA's premises to identity the expectations of beneficiary countries over the project's three-year running period. Regional and country-tailored assistance will be provided to Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria and Tunisia. Already for the latter part of 2013, six technical events are to be held: implementation of MARPOL Annexes I, II, III, V (16-18 Sept); workshop addressing ISPS code and institutional capacity (1-2 Oct); seminar on "Enforcement of prohibition of ship source pollution" (29-30 Oct); information day on CleanSeaNet (19 Nov); Maritime Labour Convention 2006 seminar (25-26 Nov), training on Flag State implementation (10- 13 Dec). EMSA was recently given the task of implementing SAFEMED III by the European Commission. *EMSA Newsletter* Read more

## **ZERO LARGE SPILLS FOR OIL TANKER INDUSTRY IN 2012**

September 15 - Updated figures for 2012 show that the tanker industry suffered zero large oil spills - defined as above 700 tonnes - for the first year since systematic records began in 1970. With just seven "medium-sized" spills, defined as seven to 700 tonnes, the International Tanker Owners Pollution Federation (ITOPF) concludes that the industry put around 1,000 tonnes of oil in the world's seas last year - the lowest figure on record.

The vast majority of spills are under seven tonnes but inconsistent reporting around the globe means they are not included.

This record of continuing improvement comes against a background of a steady increase in tonne-miles performed by the fleet since the mid-1980's.

Seatrade Global Read more

#### **Incident reports**

# **AUSTRALIA: EXXON CONFIRMS OIL SPILL IN BASS STRAIT**

September 9 - Federal agencies are investigating an oil spill in Bass Strait after they were alerted to problems at one of the offshore platforms owned by Exxon Mobil and BHP Billiton.

# Incident reports (continued)

Exxon, which operates the rigs, said the "Cobia" platform had been shut down recently after an oily sheen was observed on the surface of the ocean about 70 kilometres off the eastern Victorian coast.

The shutdown remained in place last night as both Exxon and the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) investigated the leak.

Exxon was confident the spill was not large, saying an aerial survey on Monday had suggested the sheen had dissipated, and estimating that only 750 litres had leaked. For comparison, the 2009 Montara oil spill in the Timor Sea was estimated to have leaked about 318,000 litres every day for about 10 weeks. The Sydney Morning Herald Read more [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

## ARCTIC REGION: TANKER DAMAGED BY ICE IN NORTHERN SEA ROUTE, REMAINS STUCK



arrival of another ice-strengthened tanker to come discharge her cargo.

Tanker Nordvik, pictured here, is only rated to operate in the lightest of ice conditions.

September 10 - A tanker fully laden with diesel fuel has found out first hand that the Northern Sea Route is no place for taking chances.

According to reports, the 6,403 dwt tanker Nordvik sustained damage and was taking on water following a September 4th run-in with an ice floe on the Arctic Northern Sea Route. So far there have been no reports of an oil spill or injuries, but it would seem that the tanker remains stuck in the floe and is awaiting the

A report by the Northern Sea Route Administration says that the Nordvik was sailing from Ob Bay to Khatanga with 4,944 tons of diesel fuel when it ran into ice in the Matisen Strait.

[UPDATE: Conflicting reports exist over whether or not the tanker remains stuck in the ice floe] gCaptain Read more Another report in The Alaska Dispatch of September 13 [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

## USA: MOLASSES SPILL COULD CAUSE SUBSTANTIAL DAMAGE TO MARINE LIFE

September 9 - State officials are rushing to head off an environmental and health disaster in Honolulu Harbor, where nearly a quarter million gallons of molasses from a ruptured pipeline have caused a massive marine die-off.

On Wednesday, colorful surgeonfish, pufferfish and eels were swaying limp or lifeless in the currents.

How much damage the molasses spill has caused was still being assessed. But health officials estimate that it's killing thousands of fish and damaging coral reefs.

State officials also warn there could be even more problems if they don't quickly remove as many fish as possible from the contaminated waters. They worry that the dead fish could lure sharks into the harbor and Keehi Lagoon, where the plume of molasses has spread. Honolulu Civil Beat Read more Report and video in LA Times of September 11

### September 13 - EPA sending experts to Hawaii to help respond to molasses spill

The U.S. Environmental Protection Agency is sending two spill experts to Hawaii to help clean up some 1,400 tons of molasses that spilled into Honolulu Harbor this week. *Journal Sentinel* Read more

# September 14 - From marine life to tourism, Honolulu molasses spill's effects spread

Diver Roger White took his camera below the water's surface to record the results of what 233,000 gallons of molasses has done to the sea life in Honolulu Harbor.

"They're all dead and they're all just laying across the bottom - hundreds and hundreds, thousands." Dave Bader, a marine biologist at Southern California's Aquarium of the Pacific, said "clearly it looks as if they're suffering. They're suffocating." Bader said that as the molasses breaks down, it robs the fish of oxygen. And it's likely eating away at the coral reefs. CBS Evening News Read more and watch video [Thanks to ADR Training UK]

# Incident reports (continued)

# CANADA: CONCERN GROWING OVER SEPT-ÎLES OIL SPILL

September 9 - An oil spill that happened more than a week ago in Sept-Îles might be far more serious than first reported.

Quebec Environment Minister Yves-François Blanchet visited the area Sunday while cleanup crews tried to contain a large slick before tides and winds take the oil out into the Gulf of St. Lawrence.

The focus is on how much of the spilled oil has been retained and how much has escaped the retention basin or avoided containment altogether. Initial reports from the Environment Department put the amount of oil escaped at about 1,000 litres. By Sunday, that estimate had climbed to 5,000 litres.

More than 20 boats are involved in oil containment and recovery operations in the bay, while about seven kilometres of floating dikes have been deployed. About 150 people are working on the containment project. *Montreal Gazette* Read more [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

# USA: OIL SPILL OFF STATEN ISLAND FOULS BAYONNE SHORE

September 14 - A barge-cleaning company spilled thousands of gallons of oil Friday night off the borough's shore and the oil was fouling the Newark Bay shore of Bayonne, according to the Hudson Regional Health Commission.

A report on nj.com said currents had carried the spill, which occurred when equipment malfunctioned as Clean Water of New York was making a transfer between a barge and a shoreside tank.

As much as 6,000 gallons of slop oil, Nos. 4 and 6 oil and waste oil went into the water, according to the report. Staten Island Advance Read more

## Other news

# USA: JUDGE EXPANDS INDEPENDENT REVIEW INVOLVING BP CLAIMS, THREATENS TO DISQUALIFY LAWYERS



Former FBI Director Louis Freeh, acting as special master to investigation allegations of wrongdoing in the BP oil spill claims program, has had his duties expanded by U.S. District Judge Carl Barbier. (Alex Brandon, The Associated Press archive)

September 9 - The federal judge overseeing a multi-billion-dollar BP claims settlement program has ordered former senior claims program attorneys and law firms they were connected with to explain why one law firm's \$7.9 million claim shouldn't be disallowed.

U.S. District Judge Carl Barbier also wants to know why the attorneys and associated law firms shouldn't be disqualified from representing claimants and collecting fees from those claimants.

The order, issued Friday, followed Barbier's receipt of a report from former FBI Director Louis Freeh that said former senior claims office attorney Lionel Sutton expedited a claim on behalf of attorneys Glen Lerner and John Andry for their law firm. Sutton's wife, Christine Reitano, who also was a lawyer for the claims program, also is targeted by the order. The Times Picayune Read more

## NIGERIA: SHELL CLOSE TO DEAL OVER 'RUINOUS' OIL SPILL IN NIGER DELTA

September 8 - For five years a London law firm and Anglo-Dutch oil giant have argued over reparations for one of the world's worst spills in Africa's oil heartland. But now, as fishing villages on the banks of the Niger Delta continue to count the cost of the leaks, compensation claims are finally due to be settled.

Royal Dutch Shell will tomorrow seek to reach an "acceptable agreement" with inhabitants of the cluster of Nigerian fishing villages over claims their livelihoods were ruined by the spills in 2008. *The Independent* Read more [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

#### September 13 - Niger delta oil spill victims reject 'derisory' Shell compensation offer

Niger delta communities devastated by giant oil spills from rusting Shell pipelines have unanimously rejected a compensation offer from the company, calling it an insult, and cruel and derisory. The Guardian Read more

#### CANADA: THE PIPELINE SAGA CONTINUES ...

# Pipeline Safety Chief Says His Regulatory Process Is 'Kind of Dying'



Picture: Jeffrey Wiese (center), PHMSA's associate administrator for pipeline safety, testifies at a hearing on pipeline safety. Credit: Rep. Gus Bilirakis

September 11 - Jeffrey Wiese, the nation's top oil and gas pipeline safety official, recently strode to a dais beneath crystal chandeliers at a New Orleans hotel to let his audience in on an open secret: the regulatory process he oversees is "kind of dying."

Wiese told several hundred oil and gas pipeline compliance officers that his agency, the Pipeline and Hazardous Materials Administration (PHMSA), has "very few tools to work with" in enforcing safety rules even after Congress in 2011 allowed it to impose higher fines on companies that cause major accidents.

"Do I think I can hurt a major international corporation with a \$2 million civil penalty? No," he said. *Inside Climate News* Read more

## Harper offers Obama emissions deal to win Keystone

September 6 - Canadian Prime Minister Stephen Harper, trying to win U.S. backing for the Keystone XL pipeline, has sent a letter to President Barack Obama proposing joint action to reduce greenhouse gas emissions in the oil and gas sector, CBC News said on Friday.

The White House has not responded to the letter, which was sent in late August, CBC said, although Harper met Obama briefly during the just-ended G20 Summit in St. Petersburg, Russia.

Obama has the final say over whether to let the pipeline cross from Canada into the United States and has said he would only approve it if it "does not significantly exacerbate the problem of carbon pollution". Reuters Read more

## Harper cabinet readies major B.C. pipelines push

Photo: PM Harper's pipeline push

September 14 - A parade of cabinet ministers and senior bureaucrats will head to British Columbia starting next week as part of a major push to mollify opponents of building oil pipelines to the West Coast, CBC News has learned.

Prime Minister Stephen Harper is signalling he intends to make progress on proposals to connect Alberta's oilsands with ports in British Columbia and the lucrative Asian markets beyond.

The new initiative is in large part a response to a report from the prime minister's special pipelines representative in British Columbia. Douglas Eyford told Harper last month that negotiations with First Nations — especially on Enbridge's proposed Northern Gateway — are a mess.

Eyford's report to the prime minister, and his final report in November, will not be made public.



But sources tell CBC News Eyford urged the federal government take the lead role in dealing with Indian bands on both the Gateway project and the proposed expansion of Kinder Morgan's Trans-Mountain pipeline.

First Nations leaders in B.C. confirm they are to meet on Sept. 23 in Vancouver with a delegation of deputy ministers from Aboriginal Affairs, Natural Resources, Environment and other departments with direct oversight of the proposed projects.

Grand Chief Stewart Phillip, of the Union of British Columbia Indian Chiefs, said the request to meet came out of the blue on Thursday, with no agenda — and no indication of what Ottawa is prepared to offer. CBC News Read more [Thanks to Gerald Graham of World Ocean Consulting]

#### **ARCTIC REGION: LATEST NEWS REPORTS**

#### Contracting issues delay cleanup work at reserve

September 10 - Contracting issues have delayed the start of planned cleanup work around abandoned well sites in the Alaska Arctic, a spokeswoman for the U.S. Bureau of Land Management said Tuesday.

In May, BLM-Alaska released a draft plan identifying 50 abandoned wells in the National Petroleum Reserve-Alaska that it believes require cleanup by the agency. The plan prioritized the remediation of the first 16 of those sites in the reserve. One of those sites — Iko Bay Test Well No. 1, described as lying near a well-traveled winter road, with a building well known for providing shelter to travelers in poor weather — has a gas leak that the agency said could pose a threat to public health and safety.

The plan called for surface work at several sites southeast of Barrow to begin as early as this year, with cleanup of drums submerged in oil seeps and other debris. San Francisco Chronicle Read more

# As Arctic Melts, a Race to Test Oil Spill Clean-up Technology





The U.S. Coast Guard Cutter Healy, seen here near Barrow, Alaska, is one of two working icebreaker vessels in the U.S. fleet that could be deployed in an Arctic emergency. Photograph courtesy Prentice Danner, U.S. Coast Guard

The U.S. Coast Guard Cutter Healy—one of two working icebreakers in the nation's fleet—concluded a sobering mission Tuesday in the ice-strewn waters north of Barrow, Alaska. The crew's task was to practice deploying equipment they hoped they would never use: new, high-tech gear for responding to a massive oil spill in the Arctic Ocean. (See related quiz: "What You Don't Know About Energy and the Changing Arctic.")

Some of the new technology, which included military-style drone aircraft and an unmanned underwater vehicle dubbed the Jaguar by its developers at Woods Hole Oceanographic Institution, was designed to hunt and track oil trapped in or under ice. Other devices, such as oil skimmers and ROVs (remotely operated vehicles), were more robust Arctic versions of tools that took center stage during the 2010 Deepwater Horizon disaster in the Gulf of Mexico, the largest maritime oil spill in U.S. history.

The infamous BP blowout has cast a long shadow over the industry, leaving many wondering if the Coast Guard (USCG) and the oil industry really are ready to deal with a big spill in the Arctic, where the weather is far worse and any help is much farther away. (See related coverage: "The Arctic: The Science of Change.") Add to the mix one more complication: The Arctic Ocean annually freezes into a jumbled, floating mass of ice larger than Canada and Alaska combined

Picture on left: Deckhands aboard the Healy prepare to lower an unmanned underwater vehicle, operated by the Woods Hole Oceanographic Institute, into the Beaufort Sea during a simulated spilled oil response and recovery exercise. Photograph courtesy Grant DeVuyst, U.S. Coast Guard.

National Geographic Read the complete article [Thanks to Dan Sheehan, Member of the ISCO Executive Committee]

#### Shell responds to \$1.1 million Arctic pollution deal

September 6 - Shell's troubled quest for Arctic oil in 2012 — now capped with a \$1.1 million fine for environmental violations — will make the company better prepared to return to the region, a spokesman said Friday.

"For 2012 operations offshore Alaska, Shell accepted stringent emission limits that were based on assumptions and modeling," said company spokesman Curtis Smith. "Following a season of operations, we now better understand how emissions control equipment actually functions in Arctic conditions." Fuel Fix Read more

# USA: USCG PROPOSES SAFETY & ENVIRONMENTAL MANAGEMENT SYSTEM FOR VESSELS ENGAGED IN OCS ACTIVITIES

September 10 - The U.S. Coast Guard announced Tuesday the publication of an advance notice of proposed rulemaking to publicize regulations requiring vessels engaged in outer continental shelf activities to develop, implement and maintain a vessel-specific safety and environmental management system.

The safety and environmental management system incorporates the management program and principles of American Petroleum Institute's Recommended Practice for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities, Third Edition, May 2004 (API RP 75).

The Coast Guard intends for these systems to be developed and implemented by the vessel's owner or operator and be compatible with a designated lease operator's SEMS required under Bureau of Safety and Environmental Enforcement regulations.

The published ANPRM and related materials may be reviewed online at <a href="http://www.regulations.gov">http://www.regulations.gov</a>, docket number: USCG-2012-0779. The Maritime Executive Read more

# USA: INDUSTRY AND GOVERNMENT COLLABORATE ON MAJOR LONG ISLAND SOUND MARINE INDUSTRY CASUALTY SIMULATION

September 11 - On September 17, McAllister Towing and Reinauer Transportation will be partnering with the U.S. Coast Guard Sector Long Island Sound and Sector New York in a major simulated marine accident and pollution incident on the waters of Long Island Sound. Responders will be faced with a simulated grounding and subsequent oil spill impacting the waters and shoreline of Connecticut and New York.

The exercise is part of the National Preparedness for Response Exercise Program (PREP), a voluntary program bringing together industry and government to meet the exercise and preparedness requirements of the Oil Pollution Act of 1990, legislation enacted following the Exxon Valdez. It is the first to test newly enacted vessel salvage regulations, passed by Congress to further strengthen marine response efforts. These exercises physically bring together public and private response professionals. They test the enormous management, logistics, and public response demands associated with major accidents and the actual public and environmental protection response plans which have been developed.

McAllister Towing is sponsoring the exercise and other participants include Reinauer Transportation; National Ocean and Atmospheric Administration (NOAA); the U.S. Environmental Protection Agency; U.S. Fish and Wildlife, Fire Island National Seashore; New York Office of Emergency Management; New York Department of Environmental Conservation; New Jersey Department of Environmental Protection; Connecticut Department of Energy and Environmental Protection; Fire Department of New York, Marine Response Alliance, OPA 90 Salvage and Marine Fire Fighting provider; National Response Corporation; Gallagher Marine Services Spill Management Team; The Bridgeport & Port Jefferson Steamboat Company; Steamship Mutual; and Freehill, Hogan, & Mahar. Cadets from the U.S. Coast Guard Academy and SUNY Maritime College will also participate. The Maritime Executive Read more

#### JAPAN: TWO NEW REPORTS ON FUKISHIMA

#### Ex-US Regulator: "Fukushima Cleanup Complicated"

September 13 - A former U.S. nuclear regulator says cleaning up Japan's wrecked Fukushima plant is a bigger challenge than the work he led at Three Mile Island and that ongoing radioactive water leaks are a minor part of that task.

Lake Barrett was appointed this month by plant operator Tokyo Electric Power Co. as an outside adviser for the decades-long decommissioning process. He led the Three Mile Island accident cleanup for nearly a decade as part of the Nuclear Regulatory Commission.

He said that the meltdowns in three of the reactors, massive radiation leaks and the volume of contaminated water at the Fukushima Dai-ichi plant, on Japan's northeast coast, make it a more complicated clean-up.

"In comparison to Three Mile Island, Fukushima is much more challenging, much more complex a job," Barrett told a Tokyo news conference.

Compared to the magnitude of that task, the leakage problem is a "very low health impact and not a concern," he told The Associated Press in an exclusive interview later Friday. The attention on the contaminated water leaks is "out of proportion," and is hurting the overall cleanup process by slowing things down, he said.

ABC News

Read more

#### Fukushima Plant Operator Names U.S. Adviser to Aid Clean-up

September 10 - Tokyo Electric Power Co, the beleaguered operator of the crippled Fukushima nuclear plant, said it appointed a former U.S. nuclear regulatory official as an adviser - a sign that it is prepared to reach out for foreign expertise in the face of

criticism over its handling of the March 2011 disaster.

Tokyo Electric (Tepco) said in a statement that Lake Barrett, an independent energy consultant and former head of the U.S. Department of Energy's Office of Civilian Nuclear Waste Management, will advise it on steps to decommission the plant and contain contaminated water at the site.

Barrett, who was also a director for the Nuclear Regulatory Commission at the Three Mile Island plant, the site in Pennsylvania that suffered a partial nuclear meltdown in 1979, will join Tepco's clean-up effort this week. Scientific American Read more

# USA: NOAA LAUNCHES WEBSITE HOLDING MILLIONS OF CHEMICAL ANALYSES FROM DEEPWATER HORIZON OIL SPILL

September 12 - NOAA announced the release yesterday of a comprehensive, quality-controlled dataset that gives ready access to millions of chemical analyses and other data on the massive <u>Deepwater Horizon Oil Spill</u>. The dataset, collected to support oil removal activities and assess the presence of dispersants, wraps up a three year process that began with the gathering of water samples and measurements by ships in the Gulf of Mexico during and after the oil release in 2010.

NOAA was one of the principal agencies responding to the Macondo well explosion in the Gulf of Mexico, and is the official ocean data archivist for the federal government. While earlier versions of the data were made available during and shortly after the response, it took three years for NOAA employees and contractors to painstakingly catalog each piece of data into this final form.

This Deepwater Horizon Oil Spill dataset, including more than two million chemical analyses of sediment, tissue, water, and oil, as well as toxicity testing results and related documentation, is available to the public online at: <a href="http://www.nodc.noaa.gov/deepwaterhorizon/specialcollections.html">http://www.nodc.noaa.gov/deepwaterhorizon/specialcollections.html</a>.

A companion dataset, including ocean temperature and salinity data, currents, preliminary chemical results and other properties collected and made available during the response can be found at: <a href="http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html">http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html</a>. <a href="http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html">http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html</a>. <a href="http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html">http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html</a>. <a href="http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html">http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html</a>. <a href="http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html">http://www.nodc.noaa.gov/deepwaterhorizon/insitu.html</a>.

# USA: SAFETY DATA SHEETS OFTEN FAIL WORKERS WHO HANDLE NANOMATERIALS, UNION OFFICIAL SAYS

September 10 - Due in part to "woefully incomplete" safety data sheets, workers often do not have sufficient information about potential exposure to substances containing nanomaterials, a union official said at a government-sponsored nanotechnology conference Sept. 10.

Some companies do not list nanomaterials, fail to provide all cautionary information or only include occupational exposure limits for a substance in its standard--rather than nano-sized--form, said Darius Sivin, a health and safety specialist at the United Automobile Workers.

Sivin cited an analysis conducted by safety consultants at the Lippy Group LLP of 49 safety data sheets for nanomaterial-containing products. One-third did not list the nanomaterials, 52 percent did not have cautionary language and 62 percent used exposure limits for the substance in its standard size, Sivin said. "Even where we theoretically have the right to know, we don't necessarily have the right information," Sivin said. "Bloomberg Read more"

#### **BALTIC SEA THREATENED BY WARTIME CHEMICAL WEAPONS**

September 15 - The Baltic Sea faces contamination by thousands of tons of corroding chemical weapons dumped on the ocean bed after the Second World War.

Research carried out by marine scientists has found that thousands of shells, many containing mustard gas, have now started to leak and pollute the surrounding seabed.

Historians estimate that in 1947 Britain and the Soviet Union dumped up to 65,000 tons of German chemical weapons and chemical weapons agents into the Baltic under an international agreement.

There have long been fears that the metal cases of the shells, missiles and drums containing the highly-toxic chemicals would corrode, and now scientists studying the Gotland Deep, the area of the Baltic where many of the munitions were dumped, have said those fears appear to have been realised.

"Our research has shown that in the Gotland Deep there are about 8,000 shells and missiles that could pollute the environment," said Dr Jacek Beldowski, for the Polish Institute of Oceanography. *The Scotsman* Read more

#### INDIA: 'STATE ILL-EQUIPPED TO DEAL WITH OIL SPILLS'

September 13 - Among the major hazards the state could face, and one that it is not even prepared for, are oil spills, said Muralee Thummarukudy, Chief of Disaster Risk Reduction at United Nations Environment Programme (UNEP) here on Thursday.

He was delivering the keynote address at the national workshop 'Towards a Safer State: Lessons from Uttarakhand' at the Institute of Land and Disaster Management here. "Kerala is prone to multiple major hazards - earthquakes, floods, landslides, industrial accidents - to name a few," he said, who has been involved in post-disaster response in many major natural calamities including the 2004 Indian ocean tsunami, cyclone Nargis in Myanmar and the earthquake in Haiti.

"One major issue is that of oil spills and that is not even on the radar in Kerala," he said. Oil tankers, he said, pass close to the Kochi coast almost everyday. "If a major oil spill was to happen, it could affect the entire coast of Kerala, from Kasaragod to Thiruvananthapuram," Thummarukudy said. "And nobody would be prepared to deal with it because very few people would have been aware of such a risk."

Lessons from the 2010 oil spill off the Mumbai coast, he said, had taught that there was nobody to take responsibility if the spilled oil reached the shores. The New Indian Express Read more

#### **AUSTRALIA: OILED WILDLIFE RESPONSE CAPABILITY**

AMOSC will become the co-ordinator for OWR for AMOSC members with several key milestones being undertaken in the next few weeks. Firstly the NZ built DwyerTech container designed for the stabilisation and treatment of injured wildlife which was built and procured for Vermilion Oil&Gas Australia Ltd, will be transferred to AMOSC by Vermilion.

Vermilion recognised at an early stage that industry needed to start a capacity building program for OWR and has proceeded to get equipment and personnel together for theirs and industry's wider needs. Secondly AMOSC will utilise existing relationships and create formal agreements with key OWR providers for training and response needs of Australia. Thirdly Apache Energy Ltd is building regional WA OWR plans with the assistance of Massey university and the intention is for these plans also to be held for AMOSC Members operating in WA.

The plans will hold details around food sourcing for the injured animals, water for cleaning and suitable OWR sites in the WA areas.

AMOSC will work with several OWR providers to build the WA capacity for industry – this will be a medium term focus for medium term outcomes to be met.





Above: the NZ built DwyerTech container AMOSC Read more

## Cormack's Column



In this issue of the ISCO Newsletter we are printing No. 144 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 144: IMPLEMENTATION OF KNOWLEDGE-ONLY PLANNING

Having sought to encourage coastal states singly or collectively to adopt our new knowledge-only approach to incident response by summarising its benefits to customers and ultimate payees in article 143, this article outlines what could be done in respect of the training and accreditation of contractors pending such adoption.

Thus, training for competence accreditation would confer on release response contractors the ability to select the physicochemical properties relevant to any particular incident involving oils or HNS and to substitute specific values for them to predict whether they will float or sink, evaporate, dissolve or disperse; to predict the rates and extents of these processes; to predict the quantities likely to strand in the time taken to reach shorelines under known conditions of wind and tide; to select the most effective response techniques and equipment from those available for dispersant application and mechanical collection from water surfaces and from identified shoreline types; to predict the quantities thus to be dispersed and/or collected; to predict the time and cost requirements involved in returning stranded substances to inshore waters and hence to the sea for resumption of the solution or dispersion which reduced the amount finally stranded and which would have reduced it to zero had time, wind, tide and distance from source permitted; to predict the time and cost requirements involved in collecting stranded substances with or without co-collection of beach material; to predict the time and cost requirements involved in separating emulsion from free water in breaking emulsions and in separating oil from demulsified water and in decanting such waters *in situ* or after transportation to some location approved for such processing such as an oil refinery willing to take it; to predict whether or not such oil can be recycled to actual use; and to predict the relative costs of biodegradation by return to seawater or by transportation to an approved land farming location at an oil refinery willing and able to take it.

Again, training for competence accreditation would confer on release response contractors the ability to report on all of the above for the customer in a format designed to facilitate knowledge maintenance and accrual by the coastal state as customer, thus permitting ever greater mutual understanding and constructive interaction between customer and contractor and ever greater ability of the customer to change contractors on the basis of knowledge-only. Yet again such knowledge-only reporting by the contractor and evaluation of his predictions by direct observation would clearly be of great value to the ultimate payee while central collection of all such reports by the ultimate payee would progressively increase his ability to adjudicate on all compensation claims based on contractor reports submitted by the coastal state customer to the ultimate payee. Indeed, whether or not the ultimate payee was to have the primary or secondary relationship with the response contractor could become a matter for future consideration. Either way, this new knowledge-only approach would obviate the debate of opinion/ counter-opinion which currently employs large teams of opposing lawyers

However, pending adoption of the new knowledge-only approach to release response, we see that the proposed training for contractor competence accreditation is equally applicable whether or not the customer wants to maintain his belief in imminent species-extinction/ecological-disaster. Clearly in such a case the contractor will continue to comply with the consequences of such beliefs, these being to expect no access to save havens, prohibitions on dispersant-use and on returning stranded substances to inshore and sea water, and insistence on collection and downstream processing despite prohibitions on water decanting and the absence of outlets for thus recycled oil, at least until the ultimate payee objects.

However, for those still believing that response at sea can be matched even to the largest releases, it may be recalled that the 1976 Ekofisk slick after the well was capped, had an area so much larger than individual response units, that had it been scaled down to A4 page size, the response units within it would have been invisible and even if visible their limiting ship borne encounter rates would have been as imperceptible as a wristwatch hour-hand rate; and that while the natural evaporation of the volatile 25% of the real slick was complete in 5 hours,, and while natural dispersion reduced the non-volatile emulsion by about 99%% in 72 hours, many oils are a good deal more persistent than is Ekofisk crude; that consequently the new knowledge-only approach emphasises the need for coastal states to implement knowledge-only policies for safe haven access and for prevention and capping of oil well releases while recognising that the amounts which naturally evaporate, dissolve or disperse whether of oils or HNS can neither be recovered nor cause species-extinction/ecological-disaster; and that the only real objective of response is to limit releases to within realistic encounter rate capacities and to enable interrupted commercial activities to be resumed as quickly and cost-effectively as possible

- 1 The Rational Trinity: Imagination, Belief and Knowledge, D.Cormack, Bright Pen 2010 available at <a href="www.authorsonline.co.uk">www.authorsonline.co.uk</a>
- 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.

# Science and technology

## BACTERIA SUPPLEMENTED THEIR DIET TO CLEAN UP AFTER DEEP WATER HORIZON OIL SPILL

September 9 - Bacteria living in the Gulf of Mexico beaches were able to 'eat up' the contamination from the Deep Water Horizon oil spill by supplementing their diet with nitrogen. Professor Joel Kostka will tell geochemists gathered in Florence for the conference that detailed genetic analysis showed some of the bacteria thrived on a diet of oil because they were able to fix nitrogen from the air.

The research -- the first to use next generation sequencing technologies to dig into the detail of how the native beach microbes are metabolising the oil over time -- could open the door to much more sophisticated clean up techniques.

"Oil is a natural product, made of decayed plants and animals, and so is similar to the normal food sources for these bacteria." explains Professor Kostka, a microbiologist from Georgia Institute of Technology in Atlanta.

"But because oil is low in nutrients such as nitrogen, this can limit how fast the bacteria grow and how quickly they are able to break down the oil. Our analysis showed that some bacteria are able to solve this problem themselves -- by getting their own nitrogen from the air."

Professor Kostka worked with Professor Markus Huettel, a biogeochemist from Florida State University, to take more than 500 samples over two years from Pensacola beach in the Gulf of Mexico, starting when the Deep Water Horizon oil slick first came ashore in June 2010. By analysing every gene of every bacteria in the sample, they were able to see which bacteria were present and how they responded as the conditions on the beach changed.

The researchers looked at the prevalence of genes which encode for different types of activity -- such as nitrogen fixing or phosphorus uptake -- to identify exactly how the bacteria were degrading the oil.

"By understanding how the oil is degraded by microbes, which microbes do the work, and the impact of the surrounding environmental conditions, we can develop ways to intervene to support the natural clean-up process," says Professor Kostka. *Terra Daily* Read the complete text of this article

# STUDENT, 19, CLAIMS HIS INVENTION COULD CLEAN UP PLASTIC FROM THE SEAS IN JUST FIVE YEARS

- Device could remove 20 billion tonnes of plastic from the world's oceans
- Boyan Slat came up with the idea of a series of floating booms and processing platforms designed to 'suck' in floating plastic rubbish
- The young engineering student's 'ocean cleanup' concept is designed to be self sufficient and harness energy from the sun and waves
- His invention could even make money by selling the plastic collected from the oceans, which kills millions of animals every year

September 9 - A Dutch teenager has invented a device that he claims could clean up some 20 billion tonnes of plastic waste from the world's oceans. Boyan Slat, 19, came up with the idea of a series of floating booms and processing platforms designed to collect floating plastic rubbish.

The 'ocean cleanup' concept is designed to capture the floating plastic but allow life like fish and plankton to pass through unharmed, while saving the waste materials to be recycled.



He proposes fixing sea water processors to the sea bed, which are also attached to the floating platform so that the water can move through them and generate energy.

His concept also includes using floating booms instead of nets to cover vast areas of water effectively, while no mesh and a very low speed, means there will be 'virtually no by-catch' and unfortunate animals getting tangled in nets that are meant to help conserve their habitat.

He has now set up The Ocean Cleanup Foundation to raise funds to develop his innovation. *Mail Online* Read the complete article, and watch the video

## **Publications**

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

ASME EED EHS Newsletter **Bow Wave** Cedre Newsletter The Essential Hazmat News **USA EPA Tech Direct** USA EPA Tech News & Trends Technology Innovation News Survey

Intertanko Weekly News CROIERG Enews

Soil & Groundwater Product Alert Soil & Groundwater Ezine Soil & Groundwater Newsletter Soil & Groundwater Events **IMO Publshing News IMO News Magazine** Pollution Online Newsletter EMSA Newsletter

JOIFF "The Catalyst" Int'l Environmental Technology **Environmental Technology Online** 

**HELCOM Newsletter** 

News and commentary on HSE issues from George Holliday Sam Ignarski's Ezine on Marine & Transport Matters

News from Cedre in Brittany, France

Alliance of Hazardous Materials Professionals Remediation of contaminated soil and groundwater

Contaminated site clean-up information From US EPA - Contaminated site decontamination

International news for the oil tanker community

Canberra & Regions Oil Industry Emergency Response Group

From Environmental Expert Articles, papers and reports From Environmental Expert

Upcoming events compiled by Environmental Expert

New and forthcoming IMO publications

News from the International Maritime Organization News for prevention & control professionals News from the European Maritime Safety Agency Int'l Organisation for Industrial Hazard Management

Environmental Monitoring, Testing and Analysis Environmental Monitoring, Testing & Analysis Baltic Marine Environment Protection Commission

Most recent issue Current issue July-August 2013 August 19 issue September 1 issue May 2013 issue July 1-31 issue No. 37 2013

September 2013 issue August 26 issue September 2013 issue August 29 issue August 2013 issue July 2013 No 2, 2013 September 11 issue

September 2013 issue July 2013 issue April 2013 issue September 2013 issue May 2013 issue

# ENERGY INSTITUTE: PRINCIPLES OF THE ASSESSMENT AND CONTROL OF ON-SITE ACUTE HEALTH RISKS FROM ACCIDENTAL HYDROCARBON RELEASES: GUIDANCE FOR OIL & GAS **FACILITIES, OFFSHORE INSTALLATIONS AND REFINERIES**

This document provides guidance on controlling and mitigating on-site acute health risks arising from accidental hydrocarbon releases, such as large unplanned leaks and plant failure. For consistency with other safety related guidance, this document sets, as far as possible, the necessary controls and actions for health protection in the context of hydrocarbon flammability. It defines the assessment, controls, monitoring and emergency response action that this implies for the control of a major hazard incident.

In principle the guidance can be applied to any situation with a potential for an accidental release of significant quantities of volatile hydrocarbons. This includes: offshore exploration and production; petroleum refining; bulk storage operations, and large blending and mixing operations. El Publications Online More info

## **Events**

# IOPC FUNDS: REGIONAL WORKSHOP ON THE COMPENSATION REGIME ORGANISED BY REMPEITC-CARIB, BARBADOS, 24/09/2013

Regional workshop on the international liability and compensation regime organised by the REMPEITC-Carib in Barbados, 24-27 September 2013. The IOPC Funds has been invited to run this workshop in cooperation with ITOPF for the benefit of the English-More info on this and other upcoming IOPC Funds events speaking Caribbean States. IOPC Funds Events

## Training

## USA: UPCOMING CLASSES AT TEXAS A & M ENGINEERING EXTENSION SERVICE (TEEX)

Download the list of upcoming classes

## Safety briefing

#### GENERATION OF FLAMMABLE MISTS FROM HIGH FLASHPOINT FLUIDS: LITERATURE REVIEW

Hazardous Area Classification (HAC) for explosive gas atmospheres is well established, with guidance published in various standards and industry codes of practice. However, the same situation is not currently the case for high flashpoint liquid releases that could give rise to an explosive mist atmosphere. There is a pressing need for clear guidance on mist hazards to allow operators to determine the extent of areas where flammable mists may be present and to select appropriate equipment for use in those areas.

This report provides a survey of the recent literature on flammable mists and pulls together information that will be useful in developing a HAC methodology for explosive mist atmospheres. It focuses on the three fundamental issues: mist flammability, mist generation and mitigation measures.

# Safety briefing (continued)

The first of these is discussed with reference to five measurable parameters: the Lower Explosive Limit (LEL), Minimum Ignition Energy (MIE), Maximum Experimental Safe Gap (MESG), Minimum Igniting Current (MIC), and Minimum Hot Surface Ignition Temperature (MHSIT). Measurements of these quantities in mists are analysed and models for their prediction are discussed.

The second issue of mist generation is examined under four categories: mists produced by pressurised sprays, condensation aerosols, agitation/splashing/sloshing and air stripping. Of these, the primary focus is on spray releases and condensation aerosols, which are considered to be the most likely sources of mists.

Measurements undertaken in sprays are described and models are discussed. Mitigation measures are surveyed briefly, which include mist detection, use of fire-resistant fluids or anti-misting additives, inerting and control of static charge.

Finally, tentative proposals are suggested for developing area classification guidance based on the prediction of the flammable mist cloud size.

http://www.hse.gov.uk/research/rrhtm/rr980.htm?eban=govdel-fire-and-explosion&cr=29-Aug-2013 [Thanks to ADR Training UK]

## **Products and Services**

# ENPAC SPILL CONTAINMENT PRODUCTS FEATURE ENHANCED RESISTANCE TO DANGEROUS WORKPLACE CHEMICALS

ENPAC spill containment products available from Enware Australia offer enhanced chemical resistance to help remove a wide range of dangerous chemical risks from the workplace and enhance worker safety.

Products include SpillPal drum containment units; Stinger Yellow Jacket – Chemical; Stinger Snap-Up Berm – Hydrocarbon for large-scale immediate spill response; Stinger Snap-Foam Berm – Hydrocarbon for drive-in-drive out applications; and Stinger SpillPal instant containment berm with removable foam sidewalls. More info

## Company news

# AQUA-GUARD COMPLETES 10 DAYS OF OCEAN DEMONSTRATIONS OF ITS LARGEST URO 600 OFFSHORE OIL SKIMMING SYSTEM.

Over a 10-day period this August, Aqua-Guard Spill Response Inc. held at sea demonstrations of its state-of-the-art URO 600 offshore oil skimming system. Aqua-Guard invited customers and industry associated personnel to view, learn and operate the system to understand and appreciate all of the features and ease of operation.

The URO 600 (equipped with patented RBS TRITON™ technology) is the largest of its kind available on the market with an oil recovery capacity of over 600 m3/h.

More info at: http://aquaguard.com/news/aqua-guard-completes-10-days-of-ocean-demonstrations-of-its-largest-offshor

The ISCO Newsletter is published weekly by the International Spill Control Organisation, a not-for-profit organisation supported by members in 45 countries. ISCO is dedicated to raising worldwide preparedness and co-operation in response to oil and chemical spills, promoting technical development and professional competency, and to providing a focus for making the knowledge and experience of spill control professionals available to IMO, UNEP, EC and other organisations. ISCO is managed by an elected executive committee members of which are **Mr David Usher** (President, USA), **Mr John McMurtrie** (Secretary, UK), **Mr Marc Shaye** (USA), **Mr Dan Sheehan** (USA), **M. Jean Claude Sainlos** (France), **Mr Kerem Kemerli** (Turkey), **Mr Paul Pisani** (Malta), **Mr Simon Rickaby** (UK), **Mr Li Guobin** (China), and **Captain Bill Boyle** (UK). The Executive Committee is assisted by the non-executive ISCO Council composed of the following national representatives – **Mr John Wardrop** (Australia), **Mr Namig Gandilov** (Azerbaijan), **Mr Darko Domovic** (Croatia), **Eng. Ashraf Sabet** (Egypt), **Mr Torbjorn Hedrenius** (Estonia), **Mr Pauli Einarsson** (Faroe Islands), **Prof. Harilaous Psaraftis** (Greece), **Captain D. C. Sekhar** (India), **Mr Dan Arbel** (Israel), **Mr Sanjay Gandhi** (Kenya), **Mr Joe Braun** (Luxembourg), **Chief Kola Agboke** (Nigeria), **Mr Jan Allers** (Norway), **Capt. Chris Richards** (Singapore), **Mr Anton Moldan** (South Africa), **Dr Ali Saeed Al Ameri** (UAE), **Mr Kevin Miller** (UK), and **Dr Manik Sardessai** (USA). More info on Executive Committee and Council Members can be found on the ISCO website at www.spillcontrol.org

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