

ISCO & THE ISCO NEWSLETTER

The ISCO Newsletter is published weekly by the International Spill Control Organisation, a not-for-profit organisation supported by members in 45 countries. ISCO has Consultative Status at IMO, Observer Status at IOPC Funds and 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.

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ARCTIC: ADM. ZUKUNFT: “WE ARE NOT READY FOR ARCTIC OIL SPILLS”



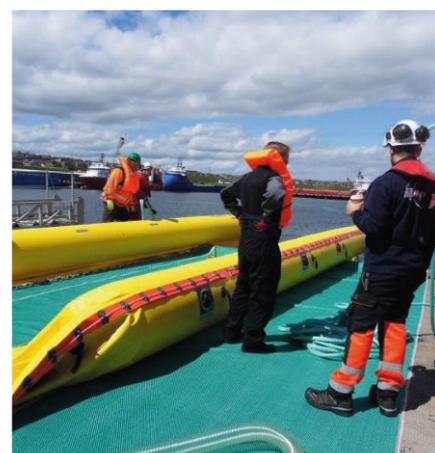
Paul F. Zukunft is a United States Coast Guard admiral and the current Commandant of the U.S. Coast Guard.

July 19 - On Monday, U.S. Coast Guard Commandant Adm. Paul Zukunft warned that environmental response organizations are not prepared to address a large oil spill in the Arctic.

He drew on his experience as the federal on-scene coordinator during the Deepwater Horizon response to predict the likely outcome of an Arctic spill.

“I can assure you that if there is an oil spill, we’re not going to recover all that oil. On the best of days, during the Deepwater Horizon cleanup, we recovered maybe 15 percent of that oil,” Adm. Zukunft said, speaking at a National Oceanographic and Atmospheric Administration symposium in Washington, D.C. “It was flat calm and we had a fleet of over 6,000 ships out there doing recovery operations, and we had the infrastructure to support all of that. Now you put that many people up in Barrow, Alaska. They better be carrying polar bear spray, because they’re going to be camped out.” *The Maritime Executive* [Read more and watch video of the proceedings of 7th Symposium on the Impacts of an Ice-Diminishing Arctic on Naval and Maritime Operations.](#)

EUROPE: TRAINING TO GET THE MOST OUT OF THE NEW EQUIPMENT ASSISTANCE SERVICE



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International news (continued)

July 6 - Twenty-two equipment operators from Baltic and North Sea EU member states participated in the first two Equipment Assistance Service (EAS) hands-on training sessions organised by EMSA on 6-8 June and 20-22 June, respectively, at the EAS stockpiles in Gdansk (Poland), and Aberdeen (UK). Before the training actually took place, registered participants had the opportunity to prepare by following the new e-learning module developed by EMSA.

During the course, the participants became familiar with the main features of the various equipment sets by taking part in the actual deployment of the equipment on water. The feedback received was very positive and EMSA will work towards implementing the recommendations received to improve the next sessions.

<http://www.emsa.europa.eu>

CARIBBEAN: OIL SPILL RESPONSE / RAC REMPEITC WORKSHOP

Commander Keith Donohue, Ms. Carla Bikker and RAC/REMPEITC-Caribe's newest member, Maartje Folbert, organized, facilitated and conducted the International Maritime Organization (IMO) Sub-Regional Workshop on the Implementation of an Incident Management System (IMS), held in Nassau, The Bahamas from 20-25 May, 2017. Sixteen senior maritime officials from Caribbean governments were sponsored by IMO and RAC/REMPEITC-Caribe to attend the workshop. The workshop improved participants' knowledge relating to oil spill preparedness, response and cooperation; using practical and theoretical exercises. It also enabled contingency planning pertaining to offshore oil pollution response for future revisions of the regional plans.



Participants of the IMO Sub-Regional Workshop on the Implementation of an Incident Management System (IMS) held in Nassau, The Bahamas, 20-25 May 2017

UNEP AMEP Quarterly Newsletter [Read more](#)

Incident reports

KENYA: CHEMICAL OIL PRODUCTS TANKER THERESA ARCTIC REFLOATED

July 14 - Chemical oil products tanker Theresa Arctic (IMO 8715508) has been refloated, just over three weeks after running aground on Bofa beach in Kilifi while loaded with 46,000mt of vegetable oil.

Mombasa port personnel refloated the ship after earlier attempts had been foiled by bad weather and inappropriate equipment.

The Kenya Ports Authority (KPA) salvage team were forced to put contingency measures in place to mitigate pollution risks as the local community's water source intake was less than 200 metres from the site.

The refloating was successfully accomplished by combined efforts of Smit International, Alpha Logistics, Cormaco and KPA salvage teams. *Insurance Marine News and World Maritime News* [Read more](#)

Incident reports (continued)

BANGLADESH: HUGE OIL SPILL FEARED IN THE KIRTANKHOLA



Photo: Locals collect the fuel oil that spilled from the oil tanker MT Fazal after it collided with another cargo vessel at Charkaua Point of the Kirtankhola River in Barisal about 8:00am yesterday. The tanker was carrying 1.32 lakh litres of diesel oil from Chittagong to the Jamuna oil depot in Barisal. Photo: Star

July 15 - Thousands of litres of diesel are believed to have spilled into the Kirtankhola river in Barisal yesterday, after an oil tanker collided with a cargo ship that was operating with a master.

The oil tanker was carrying about 13 lakh liters of diesel and petrol and a chamber full of 1.2 lakh liters of diesel cracked on impact.

Officials could not say exactly how much oil has spilled, but some media reports suggested it could [Note: Lakh – 100,000]

be some 50,000 litres or more. *The Daily Star* [Read more](#)

NIGERIA: TANK FARM EXPLOSION KILLS TEN IN CROSS RIVER

July 16 - At least 10 persons have now been confirmed killed in a blaze that gutted a tank farm at the Calabar Free Zone Enterprise at Esuk Utan Community in Cross River State with others sustaining various degrees of burns.

The fire which affected a tank farm, part of the Nigeria Ports Authority and the Esuk Utan Community, was said to have been triggered by an overflow of PMS (petrol) from a vessel to a tank farm around the area.

Speaking to Channels Television, some witnesses claimed that most of the people who got burnt were scooping the petroleum product. *Channels TV* [Read more](#)

USA: TEXAS - BASTROP COUNTY 50K GALLON OIL SPILL: FEAR OF DAMAGE SINKING DEEPER AS CLEAN UP CONTINUES

July 17 - Crews continue to clean up the site where 1,200 barrels, or 50,000 gallons, of crude oil spilled near Southwest Bastrop.

The Magellan Midstream oil company says all of the free standing crude oil has been removed, but the cleanup is just beginning.

At around 9 a.m., a contractor working on behalf of Magellan Midstream struck a valve causing a leak in the Longhorn pipeline, according to James Gabriel with the Bastrop Office of Emergency Management. The line broke and spilled 1,200 barrels, about 50,000 gallons of oil near Farm to Market Road 20 and Shiloh Road. *Spectrum News*

[Read more and watch video](#)

INDIA: 20K LITRES OIL SPILLS OVER FARMLAND AS IOCL PIPE LEAKS

July 18 - The Indian Oil Corporation Limited (IOCL)'s Barauni-Kanpur pipeline on Monday developed a leakage near Babupur village under Naubatpur block in Patna district, causing crude spillover on agriculture land.

Reports said the local administration alerted the villagers asking them to stay away, and the IOCL officials to rush for immediate maintenance. Five fire tenders along with fire officers were deployed on the spot to control the damage. An IOCL maintenance team from Barauni also reached the spot. *The Times of India* [Read more](#)

JAMAICA: MAJOR OIL SPILL IN KINGSTON HARBOUR

July 19 - The National Environment and Planning Agency (NEPA) is reporting that there is a major oil spill in the Kingston Harbour in the vicinity of Petrojam.

NEPA says preliminary information is that the spill occurred about 10 o'clock this morning.

The agency also says the oil spill has extended to the Gordon Cay area.

NEPA is advising marine interests to exercise caution when using the area.

It says a team is currently on site assessing the situation and is collaborating with first responders, including the Jamaica Defence Force Coast Guard, with clean-up activities. *The Gleaner* [Read more](#)

Incident reports (continued)

UK: FYLDE COAST OIL SPILL LATEST: TONNES OF CRUDE OIL ARE CLEARED AWAY

July 19 - Experts believe the worst of the oil spill that has hit the Fylde coast this week may be over. Hundreds of bags weighing almost six tonnes have been filled as specialists worked to clear beaches of the thick, black substance, from as far south as the mirror ball in South Shore, and as far north as Knott End and the River Wyre.

Bispham, Cleveleys, Fleetwood, and Knott End beaches were worst hit, with bathers warned not to enter the sea. The Fleetwood to Knott End ferry service has also been suspended. The oil is believed to have come from a ship that released the oil - though officials have not said whether they suspect it was deliberate or accidental - 18 miles off the north west coast last Monday. *Blackpool Gazette* [Read more](#)

ICELAND: GRAFARLÆKUR OIL POLLUTION: “A DIFFICULT AND SAD CASE”

July 20 - Oil pollution in Grafarlækur stream in Grafarvogur is a very serious event says Snorri Sigurðsson of Reykjavík's Nature and Garden Office. The office is now working alongside the Health Department, Fire Department and Veitur Utilities on resolving the issue. “This is a valuable area of nature,” Snorri says. “We have tried to use those options available to us but this is a difficult and sad case.” The origin of the pollution is unclear but Snorri says that a big spill must have happened, possibly more than once but that investigators now believe it was one big event. *Iceland Monitor* [Read more](#)

VIETNAM: STORM CAPSIZES FREIGHTER, DRIVES FOUR MORE AGROUND

July 21 - Last weekend, four ships went aground and one capsized as tropical storm Talas swept ashore at Cua Lo, Vietnam.

The small coal carrier VTB 26 was anchored off of Hon Ngu, Cua Lo on Sunday evening, loaded with 5,000 tonnes of coal. She was scheduled to enter the port, but could not berth because the port authority had a storm warning in effect and would not allow merchant ships to enter. At about 0200 hours on July 17, force of the wind and waves caused her to capsize, with 12 crew and one coal company employee on board.

Local media report that she sent a distress signal before she went over, but that it was not possible to mount a rescue mission immediately due the severe weather. Seven crewmembers were eventually rescued and two were found dead at the scene. Two more bodies were recovered over the course of the week, including one found within the wreck by salvage divers. Crewmembers Nguyen Van Chieu (an officer) and Nguyen Hai Quyet (an OS) remained missing as of Friday. Over 15 vessels are participating in an ongoing search. Vietnam's deputy prime minister, Trinh Dinh Dung, has called on the nation's maritime authorities to make all efforts to locate the missing crewmembers and to salvage the capsized vessel.

In addition to the sinking of the VTB 26, four vessels were driven onto the shore. The Thai Ha 26 grounded just 300 feet off a popular beach spot for tourists, and photos in local media show her surrounded by a containment boom and a crowd of swimmers. *The Maritime Executive* [Read more](#)

News reports from around the world (countries listed in alphabetical order)

BELIZE: OIL & HNS INCIDENTS CONFERENCE STARTING ON 25th JULY

For more details see letter from Carlos Sagrera, MSc, MISCO, under CORRESPONDENCE on Page 6.

CANADA: HUSKY OIL SPILL CLEANUP CONTINUES ON SASK. RIVER ONE YEAR AFTER PIPELINE LEAK

July 20 - Cleanup resulting from the Husky Energy oil spill is expected to continue into August, according to an official with the Saskatchewan government's Ministry of Environment. On July 20 last year, a Husky pipeline carrying blended crude oil buckled, eventually leaking 225,000 litres of the material in and around the North Saskatchewan River near Maidstone, Sask. *Global News* [Read more and watch video](#)

MALAYSIA: PORT OF TG PELEPAS FILES RM 31.9 MIL OIL SPILL DAMAGE SUIT

July 20 - Port operator Pelabuhan Tanjung Pelepas Sdn Bhd (PTP) has filed a suit seeking RM31.86mil plus interest for losses due to an oil spill at PTP's premises from tanker MV Trident Star in August last year. MMC said at about 7am on Aug 24, 2016, at about 7am, Trident Star was berthing at ATT Tanjung Bin Terminal and, in the course of loading a cargo of 2,500 metric tonnes of marine fuel oil, there was an overflow from one of its tanks onto the upper deck of the vessel which subsequently spilled into the sea. *The Star* [Read more](#)

News reports from around the world (continued)

NIGERIA: NORWAY, UNITAR URGE GOVT TO INVEST IN OIL SPILL PREVENTION

July 14 - The Norwegian government and the United Nations Institute for Training and Research (UNITAR) have called on the federal government to enhance national contingency plans and invest in relevant equipment to ensure effective oil spill prevention and protect the environment to future generations.

Speaking at a regional conference on marine safety and fisheries protection in Lagos yesterday, the Norwegian Ambassador to Nigeria, Mr. Jens-Petter Kjemprud, pointed out the past oil spills in Nigeria were preventable.

Allafrica.com [Read more](#)

NIGERIA: Ogoni CLEAN-UP: HYPREP CALLS FOR PATIENCE, UPDATES UNEP REPORT

July 20 - The Hydrocarbon Pollution Remediation Project (HYPREP) has called on the people of Ogoni land in Rivers State to be patient with the agency as it was working hard to implement the United Nations Environment Programme (UNEP) report on the clean-up of the area.

HYPREP has also said it was carrying out an update of the UNEP Report considering that it was submitted since 2011 and the state of the impacted sites could have been altered. *This Day Live* [Read more](#)

NIGERIA: EXXONMOBIL DENIES OIL SPILLS IN IBENO AS YOUTHS PROTEST, BLOCK WORKERS AT QIT

July 21 - Oil spill suspected to emanate from the facility of American oil major, the ExxonMobil has triggered another protest by youths in Ibena local government area of Akwa Ibom State.

However, to camp down the nerves of the youth, the oil giant has in a swift reaction denied the spill being from any of its facility in the area. The angry youths drawn from oil bearing communities of the State have for three days now blocked the Qua Iboe Terminal (QIT) facility of ExxonMobil at Mkpanak in Ibena Local Government Area. *This Day* [Read more](#)

SENEGAL: OIL SPILL RESPONSE WORKSHOP

July 21 - Participants from 11 countries (Benin, the Congo, Côte d'Ivoire, Democratic Republic of the Congo, Gabon, Guinea, Guinea-Bissau, Mauritania, Sao Tome and Principe, Senegal, Togo) are attending the sub-regional workshop, which will analyse national policies on dispersant use and provide training on further development and implementation of these policies.

The event is also looking at how the Net Environmental Benefit Analysis – a decision-making concept used to help ensure that the response to an incident does not result in greater harm to the environment than may have already occurred. The Dakar workshop was organized under the Global Initiative for West, Central and Southern Africa (GI WACAF) – a joint IMO-IPIECA project. *Maritime Herald* [Read more](#)

USA: ALASKA - MAD ON THE NORTH SLOPE OF ALASKA



This photo was taken on the Beaufort Sea, north of Prudhoe Bay, Alaska, during a site visit for an oil spill drill. Left to right: MST1 Jeffrey Crews, CDR James Binniker, NOAA SSC Catherine Berg, MSTCS Tiffany Wright, LT Todd Bagetis, COTP Sean McKenzie, USCG Sector Anchorage. Image credit: NOAA

July 21 – NOAA Staff from the Office of Response and Restoration attended a Mutual Aid Deployment (MAD) exercise on Alaska's North Slope oil field.

A MAD exercise is conducted annually on the North Slope with the industry host alternating from year to year. This was the first time Hilcorp Alaska hosted the MAD which included field equipment deployment, an Incident Command Center, and remote operations in Anchorage.

NOAA [Read more](#)

News reports from around the world (continued)

USA: NOAA DISBURSES \$16.7 MILLION IN OIL SPILL PENALTIES TO FUND RESEARCH

July 10 - LSU has received one of the competitive federal grants funded from penalties paid by parties responsible for the Deepwater Horizon oil spill.

A research team led by LSU Department of Oceanography & Coastal Sciences Assistant Professor Michael Polito has been awarded funding from NOAA's RESTORE Science Program to study how current coastal land loss restoration practices impact marsh food webs.

In total, 78 researchers and resource managers will be involved, with 58 of them located in the region. The awards range from \$231,671 to \$2,312,275. These projects were selected following a rigorous and highly competitive process, which included a review by a panel of outside experts. *Eurekalert.org* [Read more](#)

USA: BURIED OIL FROM DEEPWATER HORIZON DISASTER STILL HARMING WETLANDS

July 20 - Oil spilled seven years ago in the Deepwater Horizon disaster in the Gulf of Mexico might no longer be visible, but it's still taking a toll on Louisiana's fragile wetlands. A new study by Louisiana State University indicates that crude oil from the 2010 BP oil spill has become lodged in wetland soils, where it remains almost as toxic as the day it flowed into the gulf.

"We found oil four to five centimeters down in the layers of marsh, which we expected to see," said John White, associate director of LSU's Coastal Studies Institute. "What was surprising was that the oil was still causing plants to die." *The Times Picayune* [Read more](#)

USA: ALASKA - OIL SPILL RESPONSE TRAINING COMING TO UTQIAGVIK

July 21 - "Spills happen," said Lt. Cmdr. Jereme Altendorf, planning specialist with the U.S. Coast Guard Sector Anchorage. "If you're moving oil, it's not if, but when."

He and other representatives from federal agencies, the state, and other oil spill response groups will be in Utqiagvik next week for a spill response seminar. *The Arctic Sounder* [Read more](#)

People in the news

UK: KIT TENNANT - CRISIS MANAGEMENT AND OIL SPILL RESPONSE PROFESSIONAL



Chris is currently working as advisor on the transition of BP Forties Pipeline System ER procedures following the sale of Forties Pipeline System to INEOS and is based at Grangemouth in Scotland. [Thanks to Linked-in]

Correspondence

LETTER FROM CARLOS SAGRERA, MEMBER OF ISCO COUNCIL FOR PANAMA, REGARDING THIS WEEK'S CONFERENCE IN BELIZE

July 19 – "Next week I shall be in Belize (I'd seen the news of the Sarstoon oil spill at the ISCO Newsletter, a good example of the transboundary oil spills problems that we've in the region) making a presentation at the REPICA XXXIX (Ports Authorities of the Central America Countries). The organization is under the responsibility of COCATRAM (www.cocatram.org.ni). The subject of my speech is:

Management of Environmental Emergencies in Central America: A Port and Coastal Glance
Gestión de las Emergencias Ambientales en Centro América: Una Visión Costero Portuaria

And the focus is on oil spills and HNS of recent times... with the following topics: Lessons Learned Deficit – Transboundary Emergencies Management - Contingency Plan Adaptation – Increasing Leadership of the Environmental Authority – NGOs Participation and Environmental Jurisprudence in the Region – Social Media Transparency – Needs of Professional Management

Here is the link for the Conference Program" -

http://www.cocatram.org.ni/repica/program/XXXIX%20REPICA_Belize_2017.pdf

OIL SPILLS: INLAND RESPONSE GOOD PRACTICE GUIDELINES FOR INCIDENT MANAGEMENT AND EMERGENCY RESPONSE PERSONNEL

Part 5 of a new serialised article contributed by IPIECA and IOGP



Response management (continued)

Safety and health issues

The safety of response teams and the community affected is the top priority during an oil spill response. Hazards to responders include physical ones (such as slips, trips and falls) and chemical hazards (such as spilled oil). Four dominant factors that influence the degree of hazard to responders are:

- the properties and composition of the spilled oil;
- environmental circumstances at the time of an oil spill and during the response;
- the location and types of tasks (including duration); and
- measures to minimize exposures.

Evaporation can produce high levels of flammable gases, and the risk of igniting a fire is a serious consideration, particularly for spills of light crude oils and light refined products (especially gasoline). An early task during an oil spill response is often to monitor for explosive limits of volatile hydrocarbons, as crude oils and gasoline can often contain high levels of light aromatics.

Hydrogen sulphide and other sulphur compounds are not carcinogenic but they are highly acutely toxic. The human nose can detect these compounds at very low levels. Sulphur compounds cause irritation well before toxic levels are reached. However, since our ability to detect odours is quickly deadened, spilled oils with sulphur compounds should be approached carefully.

Sulphide levels in crude oils vary widely. Some crudes pose few problems, but the ones that do can present serious health issues even with concentrations at non-toxic levels, due to their highly irritating effects (e.g. headaches and nausea etc.).

Further information and details on managing safety and on how responders are protected from potential hazards is provided in the IPIECA-IOGP Good Practice Guide entitled Oil spill responder health and safety (IPIECA-IOGP, 2012).

Net environmental benefit analysis (NEBA)

Net environmental benefit analysis (NEBA) is a process used by the response community for making the best choice of response options to minimize the impacts of oil spills on people and the environment—see the IPIECA-IOGP Good Practice Guide on NEBA (IPIECA-IOGP, 2015). It involves consideration and judgment to compare the likely outcomes of using different oil spill response techniques alongside recommendations as to the preferred tactics from experienced response/ NEBA practitioners.

NEBA typically involves the steps shown in Table 2, which should be carried out prior to a spill incident as an integral part of oil spill contingency planning.



The NEBA process

Contributed article (continued)

Table 2 Typical steps involved in the NEBA process

NEBA Step	Description
Evaluate data	The first stage is to consider where the spilled oil is and to where it will drift under the influence of currents and wind—various oil spill trajectory models exist to support this. It is also useful to know how an oil will ‘weather’ as it drifts. This is part of evaluating the available data.
Predict outcomes	The second stage is to assess what is likely to be affected by the spilled oil if no response is undertaken. This may include ecological resources offshore, nearshore and on shorelines, alongside socio-economic resources. The efficiency and feasibility of the response toolkit should also be reviewed. This covers the response techniques, the practicalities of their utilization and how much oil they can recover or treat. If areas under threat include oil-sensitive coastal habitats, the role of oil spill response at sea is to either prevent or limit the spilled oil from reaching these habitats. Previous experience can help assess which oil spill response techniques are likely to be effective. Pragmatic, operational considerations should form a very important part of the NEBA process applied to all feasible response techniques.
Balance trade-offs	The advantages and disadvantages of the potential response options are considered and weighed against the ecological and socio-economic impacts of each to understand and balance the trade-offs.
Select best options	The process concludes with the adoption of response technique(s) within oil spill contingency plans that minimize potential spills’ impacts on the environment and promote the most rapid recovery and restoration of the affected area.

NEBA in practice

The simple NEBA example below raises the question of whether or not to use controlled in-situ burning (to be addressed later in this series) in an oiled wetland:

- The oil may be pooled in substantial amounts, so it would be easily ignitable. Yet, burning would create unaesthetic black smoke, and combustion would damage and/or destroy the oiled vegetation above the surface water level.
- Traditional manual/mechanical clean-up operations could destroy the same vegetation (e.g. after oiled sediment and oiled vegetation removal). Equipment operations and responders could unintentionally push or trample oil down towards root systems where the effects of the oil exposure could create long-term damage.
- What is the degree of oiling and the forecast recovery potential for the oiled wetland?
- What is the predicted oil removal efficiency of the response options?
- How unique is this habitat and what is the seasonal sensitivity of these plants?
- Both the controlled in-situ burning and mechanical recovery options (see the following section on Response techniques) need to be evaluated against each other, and also against the additional option of no clean-up with monitoring of the natural recovery of the wetland.

These NEBA considerations can be assessed beforehand and incorporated into oil spill contingency planning. This planning then facilitates effective decision making, with equipment and personnel identified, staging areas selected and priority protection needs in place. NEBA considerations are also applicable during a specific incident to guide the process of assessing the spill circumstances and response options, and estimating the potential outcomes

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To be continued next week

Publications

EUROPE: CONCAWE - PERFORMANCE OF EUROPEAN CROSS-COUNTRY OIL PIPELINES

Statistical summary of reported spillages in 2015 and since 1971. This CONCAWE Report No. 7/17 is now available for download at https://www.concawe.eu/wp-content/uploads/2017/07/Rpt_17-7.pdf

ROVS AND AUVS COLLECT SLICK THICKNESS MEASUREMENTS



Photo: An ROV, just visible under the oil slick, is fitted with ARA's acoustic technology to collect measurements of the slick.

Everywhere you look ROVs are being used in the marine environment; from ocean floor mapping, species and habitat reporting to performing site investigations and pipeline inspections. So it is no surprise to find a ROV taking acoustic measurements of an oil slick.

Looking to the future of this technology, BSEE has contracted Applied Research Associates, Inc. (ARA) to develop and test acoustic

techniques and sensors to measure the slick thickness of oil on the surface of the water and to measure the droplet size of subsurface releases of crude oil and dispersants for potential use at the wellhead.

This slick thickness measuring technology will help the industry direct cleanup operations to areas where the majority of the oil is located and determine if the oil is thick enough to sustain burning. By measuring the droplet size and gas bubble size distribution at the wellhead, responders will be able to better determine the fate and transport of oil and optimize the efficiency of a dispersant application.

The project started in September 2015 with ARA developing the acoustic technology and sensors. A team of researchers from ARA and the Virginia Institute of Marine Science conducted a feasibility test of the technology in March 2016 at Ohmsett.

A second test was conducted in June 2016 to refine the measurements of oil slicks and subsurface oil releases using a commercial ROV platform and a commercial AUV glider platform equipped with the ARA acoustic technology.

“The main goal of this work is to begin transitioning the high fidelity acoustic measurements for slick thickness and oil droplet size, to free swimming ROV and glider platforms for eventual deployment during oil spills in the open ocean,” explains Dr. Paul Panetta of ARA.

“Acoustics offer several advantages for measuring oil properties, including the ease of deployment, large number of existing marine acoustic instruments, and its ability to penetrate high concentrated plumes of oil.”

The project has now moved into the next step of incorporating the acoustic sensors on an ROV and an AUV glider platform. According to Dr. Panetta, they returned to Ohmsett in February 2017 to study the effects waves can have on measurements of the slicks in various sea states using Ohmsett's wave making capabilities.

For the first series of tests, a large volume oil slick was placed in a 15-foot by 20-foot channel. The ROV and AUV glider moved freely along the length of the channel collecting measurements of the slick.

These test runs were performed using various wavelengths and wave heights to study the sensors performance while mounted on the free swimming ROV and AUV platforms.

Throughout the final test series, a mounting stand outfitted with discharge nozzles was suspended from the Ohmsett bridge to create subsurface oil, dispersant, and methane releases to simulate a subsurface release. Prior to the release, Alaska North Slope (ANS) crude oil was premixed with COREXIT 9500 dispersant. The ROV and AUV moved freely through the water column while collecting acoustic data from the plume of oil and gas.

“Once the data has been analyzed, we will identify key advancements needed for integration of measurements of slick thickness, dispersant effectiveness, gas bubble size distribution, and oil droplet size distribution onto free swimming ROV and AUV platforms,” said Panetta.

As part of the project, the acoustic ROV will be delivered to Ohmsett and will become new tool for researchers to use during testing at the facility.

This article first published in the Ohmsett Gazette is reprinted here with the kind permission of Ohmsett. Read more at http://www.ohmsett.com/ohmsett/Ohmsett%20Gazette%20Spring_Summer%202017_Final.pdf

AN ORGANOGELEATOR-CELLULOSE COMPOSITE MATERIAL FOR PRACTICAL AND ECO-FRIENDLY MARINE OIL-SPILL RECOVERY

July 7 - Spilt crude oil has repeatedly polluted and even destroyed marine ecosystems. An effective measure would be to remove spilt oil slicks by absorption into a separable solid phase. As Indian scientists now report in the journal *Angewandte Chemie*, congelation of the oil to a rigid gel within impregnated cellulose and scooping the particles out is possible.

Marine oil spills are disasters that cannot be completely avoided as long as we drill for oil or transport it across the ocean. As oil slicks pose huge environmental and economic threats, people try to recover the floating spilt oil from the water surface before it reaches the shores or is emulsified by a turbulent sea. But this is difficult. Simply skimming or booming often fails as the oil film quickly spreads out in large areas. Kana M. Suresan and Annamalai Prathap from the Indian Institute of Science, Education and Research (IISER) Thiruvananthapuram in Kerala, India, have developed and tested an intriguingly simple strategy. Combining absorption and gelation processes, they tightly bound the oil to a porous matrix and then simply scooped the solid particles out of the water. Even full with the oil, the granules did not sink but remained at the surface.

The scientists chose cellulose as an environmentally friendly, cheap, and porous carrier matrix and impregnated it with a so-called oleogelator, which was a cheap mannitol-based organic compound. This simple impregnation step proved to be key in converting the cellulose to an effective oil-absorbing and recycling system.

The first reason for that is the gelation ability of the gelator. "Phase-selective organogelators are amphiphiles which can congeal oils selectively from a biphasic mixture of oil and water," the scientists explain. Gelation occurs because the gelator molecules get dissolved in the oily phase, and then they form a three-dimensional fiber network through hydrogen bonding. The oil becomes trapped in this fibrillar network to form a rigid gel. Thus, gelation turns the liquid oil phase into a solid one, which can be simply scooped out.

The other advantage of impregnation is that the gelator renders the cellulose matrix hydrophobic. It did not suck in water as naked cellulose does. But it "absorbed all the oil, and the rigid globules containing the congealed oil could be scooped out after two hours, leaving the clean water," the authors reported. And even recycling was possible: The scientists demonstrated that squeezing or distillation of the congealed granules can yield the spilt oil. This simple, cheap, and environmentally benign system will add interesting aspects for further field research. [Phys.org/news](https://phys.org/news)

More information: Annamalai Prathap et al. Organogelator-Cellulose Composite for Practical and Eco-Friendly Marine Oil-Spill Recovery, Angewandte Chemie International Edition (2017). DOI: 10.1002/anie.201704699

OSRL TESTS AND VALIDATES REMOTE SENSING EQUIPMENT

A recent offshore exercise, conducted by Oil Spill Response Ltd. (OSRL), was designed to understand how remote sensing technologies can help detect oil spills at sea more effectively. Utilising the latest in satellite, airborne and in-water surveillance and communications equipment, the highly successful event demonstrated the value of the state-of-the-art technology in identifying and monitoring spills and was conducted with full approval of the Marine Management Organisation (MMO) following a rigorous planning and stakeholder consultation process.

The main surveillance tools and providers involved in the exercise included:

- Radar and optical satellite imagery (MDA, Earth-I, Airbus, Telespazio)
- Infra-red and Ultraviolet sensors on the OSRL UKCS aircraft (2Excel Aviation)
- Airborne hyperspectral sensors (2Excel Aviation)
- Unmanned Aerial Vehicles (UAVs) (Sky Futures and Bristow Group)
- Autonomous Underwater Vehicles (AUVs) (Blue Ocean Monitoring and Planet Ocean)
- A surveillance kite with COFDM link (Domo Tactical Communications (DTC))
- IP Mesh Network on vessel and crew (Briggs Marine and DTC)
- SCAT (Shoreline Clean-up Assessment Technique) based surveys testing a new SCAT e-tool

The exercise was showcased through OSRL's Southampton-based Visualisation Centre, which provided a 'Common Operating Picture', integrating data from each of the technology partner's equipment as well as oil spill modelling platforms and satellite feeds.

The exercise took place on the 13th June 2017 in open sea off the southern coast of England. A minimal amount of oil was released under carefully controlled conditions and with approval from the MMO. On hand was the full complement of oil spill response equipment and personnel, including a purpose-equipped vessel, containment and recovery equipment, and UK approved dispersant. <https://www.oilspillresponse.com>

DESMI'S OIL SPILL RESPONSE TRAINING GETS ACCREDITED



July 18 - Danish oil recovery solution manufacturer DESMI has obtained Nautical Institute accreditation for its IMO Oil Pollution Preparedness and Response (OPRC) training courses. The accreditation, received in March this year, allows operators to obtain fully compliant training directly from the manufacturer.

Contrary to what many people think, large spills do not occur that often. Being able to tap into equipment knowledge and response experience gained at the 'coal face' provides a unique opportunity for training participants to learn from the experiences of others without encountering the pitfalls.

The training programme covers many different needs. In accordance with the accreditation, courses are conducted for operational staff, supervisors and senior managers, respectively.

Operational staff are instructed in understanding the weathering process of oil in the marine environment, how to select appropriate equipment, implement efficient and effective operations using different response strategies, and participate in oil spill response teams at the site.

Course participants at supervisory levels learn to safely and efficiently respond to oil spills, undertake initial risk assessments and initiate a response to a spill. The training also covers how to identify priorities for protection, determine the correct response strategy, identify the limitations of response options and equipment, and understand the needs of the media.

At the upper end of the scale, participants receive instruction on the complexities of oil spill management, learning to consider the political and media pressures, legal and financial implications, as well as issues of public and response personnel safety, and post-operational requirements. [Green4Sea](#) [Read more](#)

Desmi is a Corporate Member of ISCO

USA: ELASTIC WILL HOLD INLAND OIL SPILL RESPONSE WORKSHOP ON 2nd OCTOBER

July 20 - Elastec's 5th Inland Oil Spill Workshop will be held in Carmi, Illinois and New Harmony, Indiana the week of October 2, 2017.

This year's theme is RIVER SPILL! The purpose of the workshop is for participants to experience equipment in on-water exercises and to learn inland response tactics from experienced industry experts.

Our workshops appeal to new and seasoned oil spill responders, emergency service organizations and first responder firefighters. The price is \$950 per person. Travel, lodging and some meals are additional.

Workshop 2017 also qualifies as an 8-hour Hazwoper refresher course. Our workshops have been sold out each year. Space is limited to accommodate classroom size and safe on-water exercises. Paid registrations will be accepted on a first come-first serve basis. Because available places are limited you should [REGISTER NOW](#)

Elastec is a Corporate Member of ISCO

UK: NEW INVESTMENT INCREASES BRIGGS MARINE CONTRACTORS DIVING DIVISION CAPABILITIES

July 18 - As part of its ongoing growth plans, Briggs Marine Contractors has made a six-figure investment into its diving division's capabilities with the purchase of a dual basket diver Launch and Recovery System (LARS).

The system, which was manufactured by Submarine Manufacturing Products Ltd (SMP), comes as Briggs experiences increased demand for safe, high quality and compact diving solutions. It has been built and maintained to International Marine Contractors Association (IMCA) guidelines and has been certified by Lloyds Register.

The SMP dual basket LARS allows the safe launch and recovery of up to two working divers and one rescue diver, in depths of up to 50m. The new system was immediately employed on an offshore renewables project, with teams of divers working around the clock in depths of up to 28m to facilitate replacement of an inter array cable.

The dual basket LARS is available to the wider market for hire. For more information, please contact Briggs Marine's Diving Division on +44 (0) 1592 872 939 or divingservices@briggsmarine.co.uk

Briggs Marine is a Corporate Member of ISCO

Upcoming events summary

COUNTRY	2017	TITLE OF EVENT	LOCATION
For more information click on Title of Event			
SINGAPORE	Sept. 4-6	Salvage & Wreck Asia	Singapore
NIGERIA	Sept. 5-7	National Workshop on Liability and Compensation	Abuja (TBC)
UK	Sept. 5-8	SPE Offshore Europe	Aberdeen
UK	Sept. 6-7	8th Maritime and Salvage Response	London
FRANCE	Sept. 12-14	Cedre Mariner Project Workshop	Brest
UK	Sept. 20-21	The Emergency Services Show	Birmingham
UK	Sept. 27-28	Contamination Expo Series 2017	London
FRANCE	Sept. 28	CEDRE Information Day – “Spills in Ports”	Paris
CANADA	Oct. 3-5	40th AMOP Technical Seminar	Calgary
TUNISIA	Oct. 10-11	Oiled Shoreline Clean-up W'shop & Tier1 Exercise	Sfax City
CANADA	Oct.30-Nov.1	Arctic Shipping North America Forum	Montreal
CHINA	Nov. 1-3	Oceanology International China	Qingdao
IVORY COAST	Nov. 6-9	GI WACAF Regional Conference	Abidjan
UAE	Nov. 13-16	Abu Dhabi Int'l Petroleum Exhibition & Conference	Abu Dhabi
UK	Nov. 29-30	11th Arctic Shipping Summit	London
USA	Dec. 5-7	Clean Gulf Conference and Exhibition	Houston, TX
2018			
UAE	Feb 28 – Mar 1	Offshore Arabia Conference & Exhibition	Dubai
UK	March 13-15	2018 INTERSPILL Conference and Exhibition	London
UK	March 13-15	Oceanology International 2018	London
USA	April 4-5	Clean Waterways Conference	St. Louis, MO
UK	May 23-24	HAZMAT 2018	Stratford on Avon
USA	June 19-21	Clean Pacific Conference and Exhibition	Portland, OR
To request posting of an event of interest to the Spill Response Community please send details to the Editor			

Links for recent issues of other publications (in alphabetical order)

AMSA Aboard	News from the Australian Maritime Safety Authority	December 2016
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	June 2017
CROIERG Enews	Canberra & Regions Oil Industry Emergency Response Group	Current issue
EMSA Newsletter	News from the European Maritime Safety Agency	July 2017 issue
Environmental Technology Online	Environmental Monitoring, Testing & Analysis	July 2017 issue
IMO News Magazine	News from the International Maritime Organization	Summer 2017 issue
IMO Publishing News	New and forthcoming IMO publications	July 2017
Intertanko Weekly News	International news for the oil tanker community	July 21, 2017
JOIFF "The Catalyst"	Int'l Organisation for Industrial Hazard Management	Q3 2017 issue
Maritime Executive Magazine	Often contains articles of interest to the spill response community	May-June 2017
MOIG Newsletter	News from the Mediterranean Oil Industry Group	July 2017 issue
NOWPAP Quarterly	News from the North West Pacific Action Plan	Quarter 1, 2017 issue
Ocean Orbit	Newsletter from the International Tanker Owners Pollution Federation	May 2016
OCIMF Newsletter	News from the Oil Companies International Marine Forum	June 2017 issue
Pollution Online Newsletter	News for prevention & control professionals	July 19, 2017
Safe Seas, Clean Seas	Quarterly Newsletter from Maritime New Zealand	December 2016 issue
Sea Alarm Foundation Newsletter	Oiled wildlife Preparedness and Response news from Sea Alarm	Spring 2017 issue
Technology Innovation News Survey	News from US EPA – Contaminated Site Decontamination	May 1-31, 2017
Transport Canada Newsletter	News and articles re transport of dangerous goods in Canada	December 2016 issue
USA EPA Tech Direct	Remediation of contaminated soil and groundwater	July 1, 2017
USA EPA Tech News & Trends	Contaminated site clean-up information	Spring 2016 issue
WMU Newsletter	News from the World Maritime University	December 2016

Your editor depends on regular receipt of updated links for listed publications. If these are not received, relevant entries may be discontinued

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