



ISCO NEWSLETTER

The Newsletter of the International Spill Response Community

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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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International news

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ISCO SECRETARY MATTHEW SOMMERVILLE COMMENTS ON LAST WEEK'S MEPC MEETING

Last week the International Maritime Organisation held the 72nd meeting of its Marine Environmental Protection Committee. The agenda and the bulk of the over 180 papers submitted focused on GHG, Ballast water and the use of heavy fuel oil in the Arctic. It may therefore seem there was little of interest to ISCO or its members.

However, the week-long meeting, debate and discussions by 173 member states and associated shipping industry bodies, and similar time and effort expended in the previous week by an inter-sessional working group, is very relevant to the shipping industry's future and for those who respond to marine spills that is important for your own future.

In spite of the occasional impacts from incidents and accidents the global fleet of over 50,000 commercial ships remains the backbone of the global economy and the most fuel-efficient form of transport, contributing only an estimated 3% of global polluting emissions while transporting 90% of the goods. Transport by plane, train or truck is far less efficient, this despite being widely regulated by various national legislations. In shipping however, efficiency is not taken for granted and efforts have been in place for many years to reduce fuel consumption through better ship design, managed fuel consumption, improved engine design, new and improved fuels (ships changed from coal to oil long before it was recognised onshore as a source of air pollution).

Therefore, one might assume it would be easy for IMO, armed with knowledge and new technology, and with the support of the shipping industry to, as it has done so many times before, agree a new package of measures to be applied to all ships over a planned and phased programme.

The issues however were not technical but political and it was getting members states to agree and continue to work collectively to manage the shipping industry that was the difficulty. Had agreement not been achieved, efforts by those who, like the EU, are keen to gain more control over the marine industry could have succeeded. This would have resulted in a dilution of the responsibilities of the IMO and risk pulling environmental performance down to the same levels as the rest of the global transport industry.

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cargoes of gasoline for three to four weeks as the volumes traded in Europe hit record levels last month.

Fuel in vessels, rather than in tanks on land, is typically the most expensive way to store fuel, so notable volumes of floating storage only build when the market is oversupplied. Volumes off the coast of Europe have risen from just over 250,000 tonnes in mid-March. gCaptain/[Read more](#)

KEEPING UPDATED ON THE NAIROBI WRECK REMOVAL CONVENTION



April 11 - Hazardous ship wrecks can cause many problems. Depending on its location, a wreck may be a hazard to navigation, potentially endangering other vessels and their crews. It may also cause substantial damage to the marine and coastal environments, depending on the nature of the cargo. On top of this, there is the issue of costs involved in marking and removing hazardous wrecks.

IMO's Nairobi Wreck Removal Convention goes some way to resolving these issues. It covers the legal basis for States to remove, or have removed, shipwrecks, drifting ships, objects from ships at sea, and floating offshore installations.

International news (continued)

In the end IMO Member States reached agreements for the sector as a whole - a 40% improvement by 2030, and a 50-70% improvement by 2050. This is an ambitious target.

Importantly unlike in other agreements and industries this target applies to all shipping regardless of flag, developing or developed nations, crewing, or other artificial differentiators, this can be achieved.

For ISCO members this means that the movement away from lower grade fuel oils such as IFO 380, Heavy Fuel Oil to consumption of Marine and Bio Diesel, LNG and other fuels will continue and, while higher viscosity crude oils will be produced and transported, bunkers will change. While these changes will reduce airborne emissions, they will not necessarily reduce the impacts where oil is spilled to the water as lighter products will spread more rapidly, may create more flammable gas clouds and will be more readily taken into the water column.

On the positive side we have, like the shipping industry, a plan and the time to make the required changes to port plans, resources and training to ensure the required levels of safe, efficient and effective response in the future

EUROPE'S GROWING FLEET OF FLOATING GASOLINE

April 7 - Gasoline stored in ships off Europe's coast has ballooned to more than 400,000 tonnes, putting pressure on the continent's traders to compete for buyers once summer demand starts.

Several vessels have joined the three initially booked to store fuel off Europe's ports in mid-March, and brokers said even barges have held

International news (continued)

To help spread knowledge of the specific aspects of the Convention, IMO's Jan De Boer provided an update to the Royal Institution Of Naval Architects (RINA) on the HQS Wellington, London (9 April).

The Convention entered into force in 2015, filling a gap in the international legal framework on liability and compensation by providing the first set of uniform international rules aimed at ensuring the prompt and effective removal of wrecks located in a country's exclusive economic zone. The Convention covers shipowners' liability for costs of locating, marking and removal of hazardous wrecks; compulsory insurance to cover shipowner liability; the criteria for determining the hazard posed by wrecks, including environmental criteria. The treaty also includes an optional clause enabling States Parties to apply certain provisions to their territory, including their territorial sea. IMO / <http://www.imo.org/en>

Incident reports (in chronological order)

CANADA: 4,000-LITRE FUEL SPILL IN GRISE FIORD 'UNDER CONTROL' BUT CLEANUP NOT COMPLETE, SAYS ENERGY CORP.

April 3 - Most of the work cleaning up a diesel fuel spill in Grise Fiord, Nunavut, is finished but the final remediation work won't happen until this summer, according to an official with the Qulliq Energy Corporation.

About 4,000 litres of diesel spilled out overnight on March 15. It was from one of the day tanks used to hold the fuel for the community's power generators, explained Bruno Pereira, the president and CEO of Qulliq Energy Corporation. CBC/[Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

NAMIBIA: JAPANESE VESSEL STILL STUCK

April 4 - The vessel landed onto a rocky reef about two weeks ago, and the accident is being ascribed to possible human error. The vessel was on its way from Angolan waters to Walvis Bay when it ran aground 1,5 kilometres from the shore just south of the Ugab River mouth.

At first, only one fuel tank was said to be damaged, causing diesel to spill, but due to the active wave zone in which the vessel was stranded, the spilled diesel could be dispersed and evaporate before causing too much environmental damage.

Well-placed sources however, informed The Namibian last Thursday that the engine room also started taking water, and that of the nine fuel tanks, seven were now leaking. Namibian/[Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

USA: LOUISIANA - OIL SPILL CLOSES MISSISSIPPI RIVER NEAR NEW ORLEANS AFTER CARGO SHIP HITS PIER



Picture: Louisiana Dept. of Environmental Quality responders launch drone to monitor the spill (LDEQ)

April 12 - The U.S. Coast Guard and local agencies are responding to reports of an oil spill after a cargo ship struck a pier near mile marker 100 on the lower Mississippi River near New Orleans on Thursday.

The Coast Guard Sector New Orleans received a report at 10:30 a.m. that the Singapore-flagged ship Pac Antares had allided with a pier and was reportedly leaking diesel fuel into the river.

The spill was later estimated to be about 4,200 gallons of fuel oil. gCaptain/[Read more](#) [Thanks to Matthew Sommerville, Secretary of ISCO]

April 13 - Cleanup continues for New Orleans Bunker Spill - On Friday, the U.S. Coast Guard and partner agencies continued a cleanup effort after the freighter Pac Antares hit a pier in New Orleans, spilling an unknown quantity of HFO into the water.

The unified command for the incident has deployed 121 people, 29 boats and six skimmers to remove oil from impacted waterways and shoreline. The Maritime Executive / [Read more](#)

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

CANADA: RACHEL NOTLEY SAYS ALBERTA WILL BUY KINDER MORGAN'S PIPELINE IF IT COMES TO THAT

April 10 - Alberta Premier Rachel Notley says the province will buy the Trans Mountain oil pipeline project if that's what it takes to get it built.

"We are considering a number of financial options to ensure that the Trans Mountain expansion is built, up to and including purchasing the pipeline outright if we were to come to that," Notley said in the statement Tuesday. "But it is not the only model we're considering." [Huffington Post / Read more](#)

CANADA: PROPOSED OIL SPILL RESPONSE BASE IN NANAIMO POSTPONED



Above: A Western Canada Marine Response Corporation boat during a mock oil response drill in the Nanaimo harbour. WCMRC is planning to build an oil response base in Nanaimo, but has put those plans on hold after Kinder Morgan announced it would stop all non-essential spending on the Trans Mountain pipeline project. (Nicholas Pescod/News Bulletin)

April 12 - A proposed marine oil spill response base in Nanaimo has been put on hold indefinitely.

Western Canada Marine Response Corporation, an organization responsible for cleaning up oil spills along the province's coast, will not proceed with the construction of its planned oil response station on Port Way.

Michael Lowry, communications manager with WCMRC, said the project was put on hold as a result of Kinder Morgan's decision to suspend all non-essential spending related to the Trans Mountain pipeline.

Nanaimo News Bulletin / [Read more](#)

COTE D'IVOIRE: ISMI TO DEVELOP RESPONSE STRATEGIES TO TACKLE OIL SPILL DISASTERS ON SEA

April 13 - Côte d'Ivoire, like other countries, has taken measures to combat maritime pollution through the establishment of an Inter-Departmental Committee which deals with accidental oil spillages with technical support from the Ministry of Health, Environment and Sustainable Development through Ivorian Anti-Pollution Centre (CIAPOL) which is also responsible for maritime pollution.

News reports from around the world (continued)

Among the duties of CIAPOL is the implementation of the revised plan POLLUMAR, which is the national contingency plan to combat marine pollution by the CIPOMAR division. Aside the creation of a national contact point for oil spills, the Republic of Côte d'Ivoire, in accordance with the Yaoundé Summit Resolutions, has included in its National Strategy for State Action at Sea the creation of an interregional institute dedicated to training and capacity-building in maritime safety and security. Modern Ghana / [Read more](#)

CROATIA: EU UNION CIVIL PROTECTION MECHANISM COULD RAISE PREPAREDNESS LEVELS IN ADRIATIC COUNTRIES

April – Adriatic 2018 – About the Project: For the Adriatic countries to be able to ensure safety of their seas, it is necessary to link and coordinate performance of all national stakeholders involved, both civil protection authorities usually in charge of on-shore response, and marine pollution authorities in charge of at-sea marine pollution response. Moreover, it is also necessary to establish a number of regional and bilateral cooperation agreements, and organize exercises, workshops and joint trainings to achieve the best possible level of preparedness. Accordingly, this project envisages the organization and implementation of a joint at-sea and on-shore oil spill pollution exercise, also involving on-board firefighting operations.

In that respect, the Union Civil Protection Mechanism could provide a platform for such actions in order to raise preparedness of potentially affected Adriatic countries in the coordination of their activities to protect people and the environment. The partner countries in this project are Croatia, Slovenia and Montenegro.

Most project partners have no large-scale real-life experience in oil pollution response and are at different levels of preparedness in terms of emergency response teams and equipment. Despite the high risk of maritime accidents and the establishment of individual Intervention Plans and SOPs, a joint action/exercise has never been organized or operational procedures tested, so the introduction of novelties and improvement of bilateral protocols of cooperation in CP are aimed to be achieved by this project. Adriatic 2018 / [Read the complete article](#)

FINLAND: MOSPA CONFERENCE AND EKOMON SEMINAR

April 11 - The international conference MOSPA 2018 (Oil Spills in Arctic Areas Conference) organised by the Finnish Environment Institute SYKE was held on 7th and 8th March 2018 in Oulu, Finland. In total, some 50 conferences tackled various aspects of response in the Arctic, ranging from human rescue to the assessment of oil spill impacts in this particularly sensitive ecosystem, while addressing the issues of chemical dispersion and mechanical recovery in ice-infested waters.

Particular mention can be made of the work presented on low sulphur fuel oils which have a particularly high viscosity at low temperatures and are therefore difficult to recover at the sea surface by conventional pumping operations. Alongside the conference, around 10 specialised equipment suppliers and distributors were there to present the latest developments in response equipment for cold environments. In parallel, SYKE also organised an at-sea exercise involving several vessels including the spill response vessel Louhi, designed to respond both to oil slicks and chemical spills, thanks to its citadel function. SYKE also organised, in collaboration with Cedre, the seminar EKOMON, entirely devoted to the issue of HNS spills. As a session chair, Cedre took the chance to remind attendees of the main issues at stake in the event of a spill. Cedre Newsletter / [Read more](#)

FRANCE: SUCCESS OF THE EVENT "AMOCO CADIZ, 40 YEARS OF DEVELOPMENTS"

April 11 - The two-day event marking the 40 years of progress since the sinking of the Amoco Cadiz was greatly appreciated by those who attended. Cedre would like to thank its partners and in particular: Brest métropole, Océanopolis, the Préfecture maritime de l'Atlantique and the University of Western Brittany (watch the video of the event).

The day of discussions held on 16th March began with a speech by Patricia Charlebois, Deputy Director of the Marine Environment Division of IMO, focusing on current and future global challenges. Vincent Bouvier, Secretary-General for the Sea, then emphasised the importance for France to fit into a European and international perspective. To illustrate these keynote addresses, Christophe Rousseau, Cedre's Deputy Director, gave a detailed presentation of the MT Sanchi incident in the East China Sea.

The rest of the day was organised into a series of panel sessions on four themes: prevention, preparedness, ecological impacts and restoration. The statements and discussions between panelists were rich and of high quality. A printed publication and video are set to be released soon.

The following day, on 17th March, Cedre's partners and the general public were invited on the trail of the Amoco Cadiz. The event was attended by 307 visitors, who were given a crash course in spill response. How can we determine and predict the behaviour of a pollutant when spilt at sea? What response equipment or product should be used? How is clean-up organised if the shoreline is hit? What actions can be carried out post-spill? Cedre's staff

News reports from around the world (continued)

provided answers to these questions and many more, adapting their answers for younger visitors, and brimmed with creativity in the workshops and activities on offer. Mini-conferences were also given by Pierre-Yves Dupuy from the French Naval Hydrographic and Oceanographic Service (SHOM), Eric Thiébaud from the Station biologique de Roscoff and Christophe Rousseau from Cedre. Cedre Newsletter / [Read more](#)

INDONESIA: BORNEO OIL SPILL HURTS INDONESIA'S POOR



Photo: Balikpapan Bay oil spill catches fire (Photo: Paksi Sandang Prabowo/Greenpeace)

April 9 - "The sea pollution is so bad and we've lost our livelihood," a fisherman told the ABC. "I'm standing on the coast and the smell is so strong it's giving me a headache." WALHI says more than 70% of Balikpapan Bay has been covered in oil.

Stretching some 54,716 kilometres, Indonesia's coastline is the world's second longest, after Canada's. Coastal communities not only have to deal with sinking shorelines, salinisation of rice fields and vegetable plots, and natural disasters such as tsunamis, but also with poverty, health, food shortages, and unemployment. A large oil spill can severely compound these challenges. The Maritime Executive / [Read the complete text of this article](#)

NEW ZEALAND: WHEN SHIPS COLLIDE ON WAITEMATĀ HARBOUR: EXERCISE PAIHERE

April 15 - Maritime NZ will be leading a maritime response exercise, Exercise Paihere, on Auckland's Waitematā Harbour on April 17-19.

Exercise Coordinator, Mick Courtneil, said 120 National Response Team (NRT) members will be taking part, from Maritime NZ, councils, industry, Massey University and contracted services. "Activities during the exercise will include on-water operations using recovery vessels and equipment, simulated 'oiled shoreline' clean-up, oiled wildlife recovery and stabilisation, as well as manned and unmanned aircraft deployment for reconnaissance and intelligence gathering," Mr Courtneil said. Maritime New Zealand / [Read more](#)

NIGERIA: SHELL SAYS NIGERIA PAYMENTS AND OIL THEFT CLIMB IN 2017

April 9 - * Shell's payments to the Nigerian government grew to \$4.32 billion in 2017, up nearly 19 percent from \$3.64 billion in 2016, according to its annual sustainability report released on Monday

* The bulk of the payments, \$3.197 billion, went to state oil company NNPC for production entitlement

* Crude oil theft from pipelines of Shell's Nigerian subsidiary SPDC increased by some 50 percent, rising to roughly 9,000 barrels per day (bpd) in 2017 from 6,000 bpd in 2016, the report said

* Shell said the shutdown of the Forcados export terminal for much of 2016 "reduced opportunities for third-party interference"

* Sabotage-related oil spill incidents rose to 62, from 48 in 2016, though the volume spilled fell to 1,400 tonnes, from 3,900 tonnes in 2016

* Shell's operational spills in Nigeria rose by one to nine in 2017, but it said the volume of oil spilled fell to 100 tonnes from 300 tonnes in 2016

* The company said that theft and sabotage account for 90 percent of Nigerian oil spills.

Economic Times / [Read more](#)

NIGERIA: CURBING SABOTAGE-RELATED OIL SPILLS IN NIGERIA DELTA

April 10 - With the increasing concerns raised by Amnesty International in its reports on the devastating effects of oil spills in Niger Delta, Ejiolor Alike suggests that the oil-producing communities should support the initiatives undertaken by Shell to prevent and minimise spills caused by theft and sabotage. The issue of oil spills in the Niger Delta has been a major concern to the oil communities, operating companies, various tiers of government and international stakeholders. This Day Live / [Read more](#)

News reports from around the world (continued)

SYRIA: NEFARIOUS NEGLIGENCE: POST-CONFLICT OIL POLLUTION IN EASTERN SYRIA

April 9 – Years of bombing by the US-led Coalition and Russian Air Force, combined with fighting around and attacks on oil refineries, have resulted a severely damaged oil industry. A recent analysis of Coalition airstrikes demonstrates the magnitude of targeting oil infrastructure that caused widespread localised environmental pollution.

“The absence of expertise at several oil industry locations, combined with air strikes against oil infrastructure, resulted in the build-up of rudimentary crude oil storage in makeshift surface reservoirs since 2013.

Oil spills have occurred at several of these reservoirs and nearby pipelines, resulting in localised environmental damage due to leaks or mismanagement.

At three refineries retaken from IS, significant oil spills occurred in late 2017 and early 2018, resulting in kilometres-long oil spills that were visible on satellite imagery. The cause of these spills are unknown, but could be attributed to absence of relevant on-site expertise, safer alternatives, and an unfortunate combination with heavy rainfall causing spread of crude oil over larger areas”. BellingCat / [Read the complete article](#)

USA: LINE 5 OIL PIPELINE IN STRAITS OF MACKINAC DENTED BY SHIP

April 11 - The same "vessel activity" that appears to have damaged submerged electric cables in the Straits of Mackinac last week, causing a leak of 550 gallons of benzene-containing coolant, may have also caused three dents just discovered in the Line 5 oil and natural gas liquids pipeline, also underwater where lakes Michigan and Huron connect.

Canadian oil transport giant Enbridge, which owns and operates Line 5, informed state officials late Tuesday of the dents, characterized as "very small" and posing "no threat to the pipeline," Gov. Rick Snyder's office said in a statement Wednesday.

"The state is demanding that its own experts verify this information," the governor's office stated

Snyder added, "An anchor strike was the largest risk identified in a previous independent analysis of the Enbridge pipeline, which is apparently what happened in the Straits last week." Detroit Free Press / [Read more](#)

USA: SENATORS WANT TEMPORARY HALT OF OIL FLOW THROUGH PIPELINES

April 13 - Michigan's two senators called Friday for temporarily shutting down twin oil pipelines in a sensitive Great Lakes waterway that may have been damaged by a ship anchor strike, which also is suspected in the leak of coolant fluid from nearby electric cables.

With an underwater inspection planned for early next week, Democratic Sens. Gary Peters and Debbie Stabenow said oil should not continue flowing through Enbridge Inc.'s Line 5 in the Straits of Mackinac until it's certain the pipes are in good shape. A wintry storm bearing down on the area made the situation more perilous, Peters said.

"Upcoming blizzard conditions and high winds pose a threat to the already-damaged pipeline and —even worse — would render on-site cleanup equipment ineffective in the event of an oil spill," he said. "We simply cannot afford that kind of risk to Michigan's most precious natural resource."

Enbridge spokesman Ryan Duffy said the Canadian company was monitoring the situation and "should the weather deteriorate to a point where we are concerned about the ability for our personnel to respond to an incident, we will temporarily shut down." ABC News / [Read more](#)

Science and technology

AN OIL-EATING BACTERIUM THAT CAN HELP CLEAN UP POLLUTION AND SPILLS

April 9 - An enzyme derived from a bacterium cleans soil contaminated by petroleum-based products in a simple, effective, and environmentally-friendly manner. From pipelines to tankers, oil spills and their impact on the environment are a source of concern. These disasters occur on a regular basis, leading to messy decontamination challenges that require massive investments of time and resources. But however widespread and serious the damage may be, the solution could be microscopic -- *Alcanivorax borkumensis* -- a bacterium that feeds on hydrocarbons. Professor Satinder Kaur Brar and her team at INRS have conducted laboratory tests that show the effectiveness of enzymes produced by the bacterium in degrading petroleum products in soil and water. Their results offer hope for a simple, effective, and eco-friendly method of decontaminating water and soil at oil sites.

In recent years, researchers have sequenced the genomes of thousands of bacteria from various sources. Research associate Dr.Tarek Rouissi poured over "technical data sheets" for many bacterial strains with the aim of finding the

Science and technology

perfect candidate for a dirty job: cleaning up oil spills. He focused on the enzymes they produce and the conditions in which they evolve.

A. borkumensis, a non-pathogenic marine bacterium piqued his curiosity. The microorganism's genome contains the codes of a number of interesting enzymes and it is classified as "hydrocarbonoclastic" -- i.e., as a bacterium that uses hydrocarbons as a source of energy. *A. borkumensis* is present in all oceans and drifts with the current, multiplying rapidly in areas where the concentration of oil compounds is high, which partly explains the natural degradation observed after some spills. But its remedial potential had not been assessed.

"I had a hunch," Rouissi said, "and the characterization of the enzymes produced by the bacterium seems to have proven me right!" *A. borkumensis* boasts an impressive set of tools: during its evolution, it has accumulated a range of very specific enzymes that degrade almost everything found in oil. Among these enzymes, the bacteria's hydroxylases stand out from the ones found in other species: they are far more effective, in addition to being more versatile and resistant to chemical conditions, as tested in coordination by a Ph.D. student, Ms. Tayssir Kadri.

To test the microscopic cleaner, the research team purified a few of the enzymes and used them to treat samples of contaminated soil. "The degradation of hydrocarbons using the crude enzyme extract is really encouraging and reached over 80% for various compounds," said Brar.

The process is effective in removing benzene, toluene, and xylene, and has been tested under a number of different conditions to show that it is a powerful way to clean up polluted land and marine environments." Science Daily / [Read more](#)

3D PRINTED MICROSTRUCTURES TO CLEAN OIL SPILLS IN OCEAN

April 11 - Scientists mimicked the design of floating fern called *Salvinia molesta* with hydrophobic properties to separate oil from water in case of oil spills

Oil spills are major concern in water pollution which requires immediate attention as they can destroy aquatic environment of the ocean. Team of researchers from the University of Southern California have turned to the leaves of a floating fern called *Salvinia molesta*, which have strange eggbeater-shaped protrusions. The unusual shape of these leaves makes them super-hydrophobic, which has ability of repelling water. The study aims to develop a materials inspired from these leaves to Separate oil from water, resulting in more efficient oil spill cleanups. The study was published in the journal *Advanced Materials* on April 2, 2018.

To re-create the complex structures Chen and his team used an advanced technique called immersed surface accumulation 3D printing to develop the array of microstructures that have both super-hydrophobic and oil-absorbing properties. These forces can efficiently separate oil from water to clean up vast areas on contaminated ocean. "In our work, super-hydrophobic, micro-scale artificial hairs with eggbeater heads inspired by the *Salvinia molesta* leaf were fabricated by a new three-dimensional printing process," said Yong Chen, a USC engineer who led the research. "We are the first to build this eggbeater structure, at the same size as in nature, by using 3D-printing technology." Coherent News / [Read more](#)

OIL SPILL RESPONDERS TURN TO AUTONOMOUS SYSTEMS



April 13 - AUVs could play a growing role determining the location and extent of oil spills. Direct observation has been the preferred means of determining the location and extent of an oil spill for many years, but that is changing as unmanned units enter the market.

As in many other sectors of the marine and offshore industry, autonomous systems are set to play a growing role in oil spill response operations.

Underwater and above-water units are already being tested. Autonomous technology is advancing quickly, but there are challenges to be overcome, among them safely and accurately navigating autonomous units, communicating with them and enabling them to transmit data. Offshore Support Journal / [Read more](#)

Technical support

NEW OPERATIONAL GUIDE FROM CEDRE AND TRANSPORT CANADA ON HNS SPILLS

April 11 - Cooperation between Cedre and Transport Canada has once again fostered creativity and innovation. After jointly producing a learning guide and website on chemical pollution, the brainchild of this new collaboration is a guide of international scope for professionals and responders involved in spills of HNS (Hazardous and Noxious Substances).

This document provides decision-making support for personnel in incident command centres but also for field responders. The recommendations made in this guide are based on the expertise of Cedre, Transport Canada and numerous Canadian and French partners in terms of the method, thought process and response in the event of a spill. It can be downloaded free of charge in French. Cedre Newsletter / [Read more](#)

EMERGENCY PREPAREDNESS: TRAINING EMPLOYEES

April 4 - When it comes to emergencies, you might ask yourself, how can I possibly prepare all of my employees for all possible disasters that can arise? Training for every conceivable emergency can seem daunting. How are you supposed to know what to train and at what frequency?

Good advice on Planning, Training, Teamwork, When to Train, and Drill and Review, with an option to join an Emergency Preparedness Master Class in Irving, Texas on May 2, 2018 and in Atlanta, Georgia on May 9, 2018. Environmental Compliance News / [Read more](#)

Contributed item

BRINGING WATER PURIFICATION TECHNOLOGY TO PUERTO RICO

This just received from Marc Shaye Hon.FISCO, Member of ISCO Executive Committee



un equipo, una mission

Dear PUERTO RICO

We have returned home after three weeks with you. Drawn by the devastation from hurricane Maria, we brought a water purification technology, which produces large quantities of clean water.

The measure of our experience is not simply in our work in Quebradillas and Isabela along the Rio Guajataca or Utuado besides the Rio Grande de Arecibo (Rio Vivi). The inspiration we felt comes from those we met along the way: our hometown energy company who made the journey possible. The government officials who aided us when our Water Wagon first arrived at the port of San Juan; the volunteer who left his job as an auto worker in Michigan to help us, the clergyman who works with the needy from his church in San Juan, the officials from the municipalities who struggle to have clean water despite bureaucratic road blocks, the police chief who cried "muy bueno" when he tasted the water we produced from the brackish river water flowing near his town. And there are many more. They were our inspiration each day and have been in the days following our return home.

A slogan caught my attention on a can of your very popular Medalla beer: RESTART. To take this urging to heart, I wonder, "What will it take to succeed in this challenge" for all the people of your country and for those who want to help rebuild. When one restarts, there is a need for the right amount of energy to tip the scales as well as sufficient resources to carry on. It seems that certain resources may have been in short supply even before the titanic winds of Maria. Yet, we know the richness that is Puerto Rico from our visit to every corner of the island.

One thing, however, is abundantly clear: your strength of resolve is an inspiration. We also know that you, the 3 million who remain in Puerto Rico, hold to the conviction that you are resilient and, with your faith, have what it takes to successfully rebuild. The caring you evidence is a foundation but what is the impediment. It stares us in the face. It is every unreasonable condition, which yells, "You cannot." Tolerance for the negative is unacceptable; tolerance due to stifling requisites is unacceptable; tolerance of power for the sake of power is unacceptable, tolerance of less than what is human dignity is unacceptable.

We hope all Puerto Ricans will join in unison to create what matters toward achieving the best life has to offer. Make each day a step forward in reaching that goal.

With friendship and hope, Marc K. Shaye Of Counsel Lippitt O'Keefe Gornbein, PLLC

Training

USA: NORFOLK SOUTHERN MULTI-STATE SAFETY TRAIN TOUR UNDERWAY



Above: Norfolk Southern's safety train consists of a dedicated locomotive, two boxcars converted into classrooms, three tank cars used in transporting chemicals, and two flat cars equipped with intermodal containers and multiple tank car valve arrangements that can simulate leaks.

April 3 - The safety train kicked off today in Hattiesburg, Miss., with three days of training at Norfolk Southern's rail yard there. Additional stops on the 2018 tour include communities in Alabama, Georgia, Illinois, Indiana, Kentucky, Maryland, Missouri, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia. The complete 2018 training schedule is available at the OAR website.

At each location, NS hazardous materials specialists lead a four-hour course that combines classroom instruction and hands-on training on a locomotive and rail cars. Emergency personnel attending the training learn about railroad operations, basic safety precautions, initial-response procedures, types of rail equipment, and who to contact in an emergency. Following completion of the course, qualified emergency responders can download AskRail™, a free mobile application that provides immediate information about rail cars carrying hazardous materials should a rail incident occur.

"Our safety train is helping Norfolk Southern build and strengthen relationships with first responders across our network," said David Schoendorfer, system manager hazardous materials. "We want them to be equipped with the tools and resources they need to safely do their jobs when responding to potential rail incidents. It's all about helping our communities be prepared and safe."

The safety train consists of a dedicated locomotive, two boxcars converted into classrooms, three tank cars used in transporting all types of chemicals, and two flat cars equipped with intermodal containers and multiple tank car valve arrangements that can simulate leaks.

Each year, NS offers training to first responders in communities served by the railroad through programs such as TRANSCAER® (Transportation Community Awareness and Emergency Response), a national network that promotes the safe transportation and handling of hazardous materials. The OAR program builds on these efforts by providing additional training opportunities such as classroom seminars, web-based courses, on-line resources, table-top drills, and full-scale exercises. PR Newswire / [Read more](#)

Training (continued)

USA: ALABAMA - SCIENCE OF CHEMICAL RELEASES (SOCR) CLASS IN MOBILE

NOAA's Emergency Response Division (ERD) is currently accepting applications for a Science of Chemical Releases (SOCR) class in Mobile, AL from June 25-28, 2018. Class will begin on Monday afternoon at 1:00, June 25, 2018 and will conclude on Thursday, June 28, 2018 at 4:00PM.

The application deadline is Friday, May 4, 2018. Applicants will be notified via email regarding their participation status no later than Friday, May 11, 2018.

Please be advised that SOCR classes are not filled on a first-come, first-served basis. ERD tries to diversify the participant composition to ensure a variety of perspectives and experiences to enrich the workshop for the benefit of all participants. The class will be limited to 40 participants. Applicants can find more information regarding the SOCR class, as well as an on-line application at: <https://response.restoration.noaa.gov/training-and-education/training/workshops/science-chemical-releases-classes.html>

Some applicants may have trouble accessing the application form from their workstations. If that occurs, please consider registering from a personal device (home computer, smartphone, etc.).

Applicants may also contact the Disaster Preparedness Program training coordinator, JD Hoyle, at jamechia.hoyle@noaa.gov for more information. [Thanks to Ed Levine, Response Operations Supervisor – East]

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

AMSA Aboard	News from the Australian Maritime Safety Authority	December 2017
ATRAC Newsletter	News from the Adriatic Training and Research Centre	April 2018 issue
Newsletter from George Holliday	News and commentary on HSE issues from George Holliday	On request via email
Bow Wave	Sam Ignarski's Ezine on Marine & Transport Matters	Current issue
Cedre Newsletter	News from Cedre in Brittany, France	February 2018
CROIERG Enews	Canberra & Regions Oil Industry Emergency Response Group	October 2017
EMSA Newsletter	News from the European Maritime Safety Agency	April 2018 issue
EUROWA Newsletter	European Oiled Wildlife Response Assistance Module	October 2017
IMO News Magazine	News from the International Maritime Organization	Spring 2018 issue
IMO Publishing News	New and forthcoming IMO publications	March 2018
Intertanko Weekly News	International news for the oil tanker community	April 13, 2018
JOIFF "The Catalyst"	Int'l Organisation for Industrial Hazard Management	Q1 2018 issue
Maritime Executive Magazine	Often contains articles of interest to the spill response community	Jan-Feb, 2018
MOIG Newsletter	News from the Mediterranean Oil Industry Group	April 2018 issue
NOWPAP Quarterly	News from the North West Pacific Action Plan	Quarter 2, 2017 issue
Ocean Orbit	Newsletter from the International Tanker Owners Pollution Federation	August 2017
OCIMF Newsletter	News from the Oil Companies International Marine Forum	March 2018 issue
PEMSEA E-Updates	Healthy oceans, people and economies in the East Asian Seas	January 2018
Pollution Online Newsletter	News for pollution prevention & control professionals	April 11, 2018
Safe Seas, Clean Seas	Quarterly Newsletter from Maritime New Zealand	August 2017 issue
Salvage World	Quarterly Newsletter of the International Salvage Union	Current & past issues
Sea Alarm Foundation Newsletter	Oiled wildlife Preparedness and Response news from Sea Alarm	Spring 2018 issue
Spill Alert	Newsletter from the UK Spill Association	December 2017 issue
Technology Innovation News Survey	News from US EPA – Contaminated Site Decontamination	Feb 16-28, 2018
Transport Canada Newsletter	News and articles re transport of dangerous goods in Canada	June 2017 issue
USA EPA Tech Direct	Remediation of contaminated soil and groundwater	April 1, 2018

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

News from ISCO Corporate Members

TURKEY: MEKE MARINE WILL CONDUCT MARINE RESPONSE AT "GOLDEN HORN – ISTANBUL" OIL SPILL EXERCISE

The exercise will comprise a water deployment of marine response equipment including containment booms, skimmers, storage tankers using vessels and boats. [See ISCO Newsletter 630 for more info about this event taking place at Istanbul on 6-8 November, 2018.](#)

INDIA: ALPHA MERS TRASH COLLECTION BOOMS COLLECTED OVER 500 TONS OF TRASH

April 15 - Capt. D. C. Sekhar reports "We deployed some of our own designed and manufactured trash boom in river in India. We were pleasantly surprised to learn that this trash boom ('Floating Trash Barrier') has been responsible to stop 546 Tons of trash from entering the sea. This trash was lifted off from the river and disposed through municipal facilities. [More info about this boom deployment in the New Indian Express](#)

Upcoming events summary

COUNTRY	2018	TITLE OF EVENT	LOCATION
For more information click on Title of Event			
UAE	April 16-18	SPE Int'l Conference HSE & SR	Abu Dhabi
FINLAND	April 17-20	Arctic Shipping Forum	Helsinki
UK	April 26-27	IMO & IOPC Funds w'shop on the HNS Convention	London
UK	Apr 30-May 2	April 2018 IOPC Funds meetings	London
NEW ZEALAND	May 1-3	NZ 5th Contaminated Land Conference	Christchurch
CHINA	May 3-5	Environmental Technology Conference & Exhibition	Shanghai
EQUATORIAL GUINEA	May 7-10	National workshop on contingency planning	Malabo
USA	May 7-11	13th Int'l Effects of Oil on Wildlife Conference	Baltimore, MD
UK	May 15	IMO 70 High Level Forum	London
BELGIUM	May 16-17	European Environmental Ports Conference 2018	Antwerp
USA	May 22-24	Inland Boom Shop 2018 (Hands-on Training)	Carmi, IL
UK	May 23-24	HAZMAT 2018	Stratford on Avon
NAMIBIA	May 29 – June 1	Sub-regional w'shop shoreline response to oil spills	Namibia
TURKEY	June 6-8	Regional Workshop & Oil Spill Response Exercise	Istanbul
USA	June 11-15	NOAA Science of Oil Spills (SOS) Classes	Seattle WA
ITALY	June 20-22	INTERTANKO Annual Event 2018	Rome
USA	June 19	Pacific States/British Columbia Oil Spill Task Force Annual Meeting	Portland OR
USA	June 19-21	Clean Pacific Conference and Exhibition	Portland, OR
UK	June 21	9th Premium Conference 2018	London
USA	June 25-28	NOAA Science of Chemical Releases (SOCR) class	Mobile AL
UK	June 25-28	Int'l Harbourmasters Assoc. Congress & Exhibition	London
INDIA	July 5-6	Oil Spill India 2018 Conference & Exhibition	New Delhi
SWEDEN	August 27-30	HELCOM BALEX DELTA 2018 spill recovery ex'cise	Karlskrona Area
UK	Sept. 12-13	9th Maritime Salvage & Casualty Response	London
UK	Sept. 12-13	Flood Expo	Birmingham
UK	Sept. 12-13	Spill Response Expo	Birmingham
SINGAPORE	Sept. 25-26	Salvage & Wreck Asia	Singapore
CANADA	October 2-4	AMOP Tech. Seminar on Env. Contam'n and Response	Victoria, BC
UAE	October 2-4	EI Middle East HSE Forum	Dubai
AUSTRALIA	October 2-4	Ecoforum Conference & Exhibition	Sydney
UAE	October 9-10	RECISO EnviroSpill Conference & Exhibition	Abu Dhabi
UK	October 22-26	IMO Marine Environment Protection Committee	London
TURKEY	Nov. 6-8	Regional Workshop & Oil Spill Exercise	Istanbul
USA	Nov. 13-15	Clean Gulf Conference and Exhibition	New Orleans, LA
To request posting of an event of interest to the Spill Response Community please send details to the Editor			

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