

ISCO & THE ISCO NEWSLETTER

The International Spill Control Organization, a not-for profit organization 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 Intergovernmental, Governmental, NGO's and interested groups and individuals

ISCO holds consultative status at the International Maritime Organisation and observer Status at the International Oil Pollution Compensation Funds

ISCO EXECUTIVE COMMITTEE

Members of the Executive Committee who act as the INTERIM EXECUTIVE (Acting in lieu of President, and as Members of SECRETARIAT (Core Management Team)

- Mr John McMurtrie, VP and Editor (UK)
- Ms Mary Ann Dalgleish, VP M'ship (USA)
- Mr John Wordrop (Australia)

Other Members of Executive Committee who also act as members of the SECRETARIAT

- Captain Bill Boyle (UK)
- Mr Marc Shaye (USA)
- Mr Michael Watson (UK)

Other Members of the EXECUTIVE COMMITTEE

- Mr Kerem Kemerli (Turkiye)
- Mr Dan Sheehan (USA)
- Mr Matthew Sommerville (UK)
- Mr Neil Marson (UK)
- Ms Helena Rowland (USA)
- Dr Larissa Montas (USA)
- Capt. D C Sekhar (India)
- Dr Mervyn Fingas (Canada)
- Ms Jane Delgado (USA)
- Mr Carlos Sagrera (Panama)
- Mr Ed Levine (USA)
- Mr Rupert Bravery (UK)

COUNCIL (NATIONAL REPRESENTATIVES)

- Mr John Wardrop (Australia)
- Mr Elkhan Mamedov (Azerbaijan)
- Dr Merv Fingas (Canada)
- Captain D. C. Sekhar (India)
- Major Ben Benny (Israel)
- Mr Sanjay Gandhi (Kenya)
- Mr Dennis van der Veen (Netherlands)
- Mr Carlos Sagrera (Panama)
- Mrs Fatima B. Shaik (South Africa)
- Dr Ali Saeed Al Ameri (UAE)
- Dr Timothy Gunter (USA)
- Mr Flavio P. de Andrade (Brazil)
- Mr Kerem Kemerli (Turkiye)

HEADLINE INTERNATIONAL NEWS

PLEASE CLICK ON THE BANNERS BELOW FOR MORE INFORMATION



ALTERNATIVE MARINE FUELS AND THEIR IMPLICATIONS FOR SPILL RESPONSE

Innovation is playing its part with a selection of new fuels coming to market to reduce emissions; methanol, ammonia, green hydrogen, and electricity are seen as clean fuels with perhaps LNG, HVO, and blue hydrogen as transition fuels.

Whatever the shipping industry settles on as the primary fuel for propulsion, this is a clear time of change in marine fuels

This month an upcoming webinar from the UK & Ireland Spill Association looks at the implication of these fuels for operators and for spill response.

The focus of this webinar includes the implication of these fuels for operators and for spill responders. To guide us through this, there will be two respected industry professionals:

Marcus Russell is the Global Engagement Manager at Oil Spill Response. From a marine engineering background in the British merchant navy, Marcus joined Oil Spill Response Limited in 1999. Since then, he has worked predominantly in the Operations department gaining first-hand response experience in major incidents including the Erika, Prestige, Deepwater Horizon, and most recently Xpress Pearl.

Oliver Timofei is one of the founders of BlueTack, a marine salvage company focused on Incident Management & Pollution Remediation with 17 years of experience in the industry. Oliver worked for Wijsmuller Salvage, Svitzer Salvage and Ardent in different roles globally e.g. Regional Commercial Manager Australasia, VP Emergency Management and was responsible for all Preparedness & Salvage services conducted. Oliver's last position was CEO.

This webinar will take place on Wednesday 24th May at 1500 BST. For more information and how to register for this free event, visit Upcoming Events at –

<https://spillcontrol.org/upcoming-events/>



ISCO AMBASSADORS

(Members with special responsibilities in specified geographical areas)

Carlos Sagrera	Latin America (Spanish speaking)
Matthew Sommerville	UK London
John Noble	UK London & South'ton
Wu Yue	China

MEMBERSHIP OF ISCO

[Benefits of Membership](#)

Online Membership Application Form

YOU ARE INVITED TO JOIN THE ISCO DISCUSSION GROUP ON LINKED-IN



Click on the link below –

<https://www.linkedin.com/groups/4016064/> ISCO'S

FACEBOOK GROUP



Click on the link

<https://www.facebook.com/groups/388528312842431>

WHATSAPP GROUP FOR STUDENTS, TRAINEES & APPRENTICES

Here is the link for joining this group –

<https://chat.whatsapp.com/KMxdW7IEal79namyNlbVqg>

ADVANCE YOUR CAREER BY GAINING PROFESSIONAL RECOGNITION Professional recognition is a visible mark of quality, competence and commitment, and can give you a significant advantage in today's competitive environment. All who have the relevant qualifications and the required level of experience can apply for Professional Membership of ISCO. The organization offers independent validation and integrity. Each grade of membership reflects an individual's professional training, experience and qualifications. You can apply for MEMBERSHIP (MISCO) or FELLOWSHIP (FISCO) [About Professional Membership](#) [Professional Membership Application Form](#)

INTERNATIONAL & REGIONAL NEWS

VALUES OF UN CHARTER UNDER THREAT LIKE NEVER BEFORE, WARNS GUTERRES

May 9 - The values of human dignity and freedom, enshrined in the UN's founding Charter in 1945, have never been so under threat, warned the Secretary-General on Tuesday, delivering a wide-ranging speech in Spain after receiving the Carlos V European Award.

In response to the assault on the principles behind the United Nations, António Guterres said that the international community needed to raise the alarm, and "reaffirm those values." UN org. / [Read more](#)

MEPSEAS SOUTH-EAST ASIAN MARINE PROTECTION PROJECT CONCLUDES

May 9 - The successful five year project to ratify and implement key marine protection treaties draws to close. The project to protect the marine environment in South-East Asia from the negative effects of ships was marked at a high-level meeting in Viet Nam. MEPSEAS / [Source document](#)

EYEESEA TEAMS UP WITH MAPBOX TO FURTHER OCEAN POLLUTION MAPPING EFFORTS

May 9 - Eyesea, a global nonprofit organization dedicated to mapping and reducing global ocean pollution and maritime hazards, announced today that it has partnered with Mapbox, a leading provider of location data and mapping technology, to power the Eyesea pollution tracking application.

Eyesea's mission is to use technology to make ocean impact and coastal pollution visible, and to ultimately eradicate it. The organization uses a mobile app to allow seafarers and volunteers to collect data and photos of ocean debris, which are then processed and analyzed by artificial intelligence algorithms to identify the type and location of pollution.

This data is used by Eyesea's partners to plan and execute clean-up efforts. The Maritime Executive / [Read more](#)

EU PERSISTS WITH DARK FLEET SANCTIONS DESPITE ENFORCEMENT DIFFICULTIES

May 10 - The European Commission is pushing ahead with plans to ban ships that have engaged in "deceptive" practices to circumvent sanctions despite growing concerns within some governments and industry that any proposed mechanism will be "very difficult" to enforce.

As Lloyd's List first reported last month, the commission has been exploring proposals to target ships repeatedly turning off Automatic Identification System signals and engaging in ship-to-ship transfers as part of a programme of sanctions skirting.

While the plans are still only in draft form, the fact that they have survived an initial round of internal discussion within the commission suggests that the proposals have gained traction. Lloyds List / [Read more](#)

ISCO NEWS

ISCO VOLUNTEERS & OTHER MEMBERS INFORMATION EXCHANGE ZOOM MEETING ON THURSDAY 18th MAY

After missing out on our usual April meeting we will be resuming our regular monthly meeting.

Mary Ann Dalglish writes "Please join ISCO on ZOOM on March 18th at 3pm edt (Detroit, MI)

Please bring your topics for discussion, ways to improve ISCO and any other topics you wish to discuss. Looking forward to seeing you at the meeting.

The link for joining the meeting is <https://us02web.zoom.us/j/82797853822>

Mary Ann Dalglish
Membership VP

Marine Pollution Control Worldwide Problem Solvers Since 1968

PLAN

Tactical Response Planning

PROTECT

Monitoring and
Plan Improvement

PREPARE

Training, Drills and Exercises

RESPOND

On Land and Sea

Marine Pollution Control
+1 (313) 849-2333 - 24/hour
www.MarinePollutionControl.com



MPC IS OSRO #003

ISCO-OceanPact Brazil International Seminar

Maritime Pollution and 21st Century Oil Spills

**Lessons Learned for Brazil &
Latin America Preparedness,
Response and Crisis
Management**

Case Studies



Rio de Janeiro
27 October 2023

Click on the above advertisements for more information

CANADA: AS ALBERTA'S OILSANDS CONTINUE LEAKING TOXIC WASTEWATER, AQUATIC WILDLIFE FACE NEW RISKS

May 7 - Three months ago, [5.3 million litres of industrial wastewater was reported to have overflowed from an Imperial Oil storage pond](#) into a muskeg and forested area. This industrial wastewater could have filled more than two Olympic-sized swimming pools, and is now one of the largest known spills of its kind in Alberta's history.

Then came news of [a separate incident](#) where an unknown amount of industrial wastewater has been leaking from an Imperial Oil tailings pond for the last 12 months. The leakage flows underground and then resurfaces to contaminate surface waters outside the Kearl Oil Sands Processing Plant and Mine.

These waters flow into the Athabasca River, which is part of an important waterway that supports communities in Alberta and the Northwest Territories. In addition to its significance to the Indigenous communities here, this waterway also provides crucial habitats for endangered wildlife species. The Conversation / [Read more](#)

CANADA: PLAN FOR THE BAN: NEW CONSULTATION LAUNCHED FOR PLASTICS LABELLING FRAMEWORK AND FEDERAL PLASTICS REGISTRY

May 9 - In our last "Plan for the Ban" bulletin, we discussed the federal government's consultation regarding proposed labelling rules to enhance the accuracy of recyclability and compostability information on plastic packaging and the establishment of a federal plastics registry requiring plastic producers to report annually on their plastic contribution to the Canadian economy.

The federal government has now published a summary of the feedback received during this consultation period as well as two additional consultation papers: one on the regulatory framework for plastic labelling regulations and the other on technical reporting requirements for the federal plastics registry. Stakeholders have until May 18, 2023 to review and provide feedback on both consultation papers. Mondaq / [Read more](#)

FRANCE: CEDRE DUTY TEAM ACTIVITY REPORT FOR APRIL 2023

- Call from the [Syndicat mixte Dunes sauvages de Gâvres](#) in Quiberon after old oil patches were uncovered. Cedre's laboratory confirmed that this was fuel oil from the *Erika*. Cedre carried out surveys and provided advice on site, then took part in a meeting to organise the management of this residual pollution;
- Request for advice from the Maine-et-Loire fire and rescue service ([SDIS 49](#)) following a spill of mineral oil into the Mayenne river;
- Meeting at the [Maritime Prefecture for the Channel and North Sea](#) following the sinking of the fishing vessel *Morjolène* in Seine Bay;
- Meeting at [MRCC Jobourg](#) following the sinking of the fishing vessel *Calista* off Barfleur;
- Request for advice from [MRCC Fort-de-France](#) and [AEM Antilles](#) following observations of pollution of an unknown nature;
- Support for [Tanger Med Port](#) during an exercise involving pine oil;
- Discussions with [MRCC Corsica](#), [Corsen](#), [Jobourg](#), [La Garde](#) and [Réunion](#) following [CleanSeaNet](#) detections or aerial observations: discussions on the nature of the spill, drift slick forecast requests;
- Dispatch of an analysis report to the [Philippine Coast Guard \(PCG\)](#) following the identification of samples of the pollution caused by the sinking of the *Princess Empress*.

OTHER NEWS - In April, Cedre attended various meetings and events abroad, in particular in London, at the headquarters of the International Maritime Organization, in Singapore for the International Chemical and Oil Pollution Conference and Exhibition 2023 (ICOPCE) and in Switzerland to meet with AXA XL underwriters. Numerous discussions were also held to make headway on Cedre's projects such as IRA-MAR and in relation to the national monitoring networks for which sampling, training and meetings are coordinated by Cedre. Finally, training sessions continue to provide theory and practical knowledge to our clients and partners, which this month included Perenco and the Finistère fire and rescue service (SDIS 29) [Read more in the CEDRE Newsletter](#)

JAPAN CALLS FOR ACTION ON DETERIORATING YEMENI OIL TANKER

May 9 - Kenji Yamada, Japan's State Minister for Foreign Affairs, has reaffirmed his country's commitment to addressing the urgent issue of the deteriorating FSO Safer supertanker off the coast of Yemen.

During the Pledging Conference, he stressed the importance of collaboration with the international community to mitigate the risk of a potential environmental disaster. Yamada also highlighted Japan's humanitarian assistance to Yemen and announced an additional \$24 million in aid for 2023. BOL News / [Read more](#)

NIGERIA: SUPREME COURT DISMISSES CLAIM THAT OIL SPILL IS CONTINUING CAUSE OF ACTION

May 10 - The Supreme Court has rejected a claim that the tort of private nuisance over an oil spill refreshes each day. It was ruling in a claim for compensation for the 2011 spill at the Bonga oil field, some 120km off the coast of Nigeria.

NEWS REPORTS FROM AROUND THE WORLD (CONTINUED)

The leak, which occurred overnight, was stopped after about six hours. At least 40,000 barrels of crude oil leaked into the ocean. According to the 20-page judgment in Jalla and another v Shell International Trading and Shipping Co Ltd and another the oil reached the Nigerian Atlantic shoreline within weeks of the spill. Law Society Gazette / [Read more](#)

NIGERIA: FEC APPROVES ADDITIONAL N129BN FOR OGONI CLEAN-UP

May 10 - The Federal Economic Council on Wednesday, in Abuja, approved the sum of N129.8bn for various projects in the Ministry of Niger Delta Affairs, particularly the mandate of the United Nations Environment Programme on Ogoni Clean-up. Punch / [Read more](#)

UK: MARITIME & COASTGUARD AGENCY COUNTER POLLUTION TRAINING COURSES

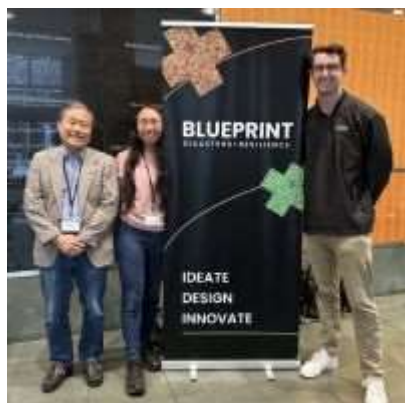
May 10 - Information on training courses from the Counter Pollution and Salvage team including who should attend, course content and objectives, and how to apply. Gov.UK / [Read more](#)

USA: LATEST NEWS REPORTS FROM NOAA OR&R

May 8 – Please click on the links below to download and read the latest news from NOAA OR&R

Celebrating Our Restoration Successes – 20 Years after the Buzzards Bay Oil Spill

Twenty years ago, disaster struck along the picturesque coastline of Buzzards Bay, Rhode Island, where the barge Bouchard 120 ran aground on a ledge of bedrock on April 27, 2003. A gash in its hull released 98,000 gallons of fuel oil, polluting nearly 100 miles of Massachusetts and Rhode Island shorelines. The spill damaged many salt marshes and other coastal habitats, killed and injured fish, shellfish, terns, loons, and other bird species, and closed shellfishing and other public uses of coastal resources.



OR&R Takes Leading Role at Duke University Blueprint Conference

Gary Shigenaka, Scientist Emeritus with the NOAA Office of Response and Restoration (OR&R), gave the keynote address at the 2023 Blueprint Conference on Disasters + Resilience, hosted by Duke University Conservation Technology. He also served as a mentor and judge for the sustainable tech ideation competition as part of the conference.

Experts in Exercises: OR&R Develops Earthquake Exercise for SECART All-Hazards Workshop

NOAA's Southeast and Caribbean Regional Collaboration Team (SECART) recently partnered with the Office of Response and Restoration's (OR&R) Disaster Preparedness Program (DPP) to hold a two-day all-hazards workshop in the Charleston, South Carolina area.

USA: EPA RELEASES DRAFT OF NATIONAL STRATEGY TO PREVENT PLASTIC POLLUTION

May 8 - Two years after setting the National Recycling Goal to increase the recycling rate to 50 percent by 2030, the U.S. Environmental Protection Agency (EPA) Office of Resource Conservation and Recovery (ORCR) released a draft National Strategy to Prevent Plastic Pollution (Draft Strategy). This Draft Strategy was issued in accordance with the Save Our Seas Act 2.0 (Public Law 116-224) and in support of EPA's recent efforts to promote a circular economy in the U.S. EPA is soliciting public comments on the Draft Strategy until June 16, 2023. Holland & Knight Law / [Read more](#)

USA: BLM AWARDS CONTRACTS TO REMEDIATE ORPHAN WELLS ON PUBLIC AND TRIBAL LANDS

May 8 - The Bureau of Land Management has awarded 13 Indefinite Delivery Indefinite Quantity (IDIQ) contracts to address ongoing legacy pollution and safety hazards from orphaned oil and gas wells throughout the United States. These contracts create efficient and centralized options for the Department of the Interior, U.S. Forest Service, and Tribal land managers to work with small businesses and Indian Small Business Economic Enterprises on well plugging and remediation operations. Orphaned wells pose a threat to local air and water quality and are a source of climate warming emissions. Bureau of Land Management / [Read more](#)

USA: RAIL SAFETY BILL, INSPIRED BY FIERY OHIO DERAILMENT, CLEARS FIRST MAJOR HURDLE

May 10 - A Senate committee on Wednesday advanced legislation aimed at preventing disasters like February's fiery train derailment and chemical spill in East Palestine, Ohio.

The Railway Safety Act of 2023, championed by Ohio Sens. J.D. Vance (R) and Sherrod Brown (D), has attracted rare bipartisan support in a fiercely divided Congress. Both President Joe Biden (D) and former President Donald Trump (R) have endorsed the measure.

The Senate Committee on Commerce, Science and Transportation voted 16-11 in favor of the measure, advancing it to the full Senate for consideration.

NEWS REPORTS FROM AROUND THE WORLD (CONTINUED)

In its current form, the bill would establish new safety requirements for freight trains hauling hazardous materials, limit the overall size of trains, require at least two-person crews, and drastically increase penalties for rail safety violations. It would also funnel additional funds to law enforcement and first responders for hazardous material training. Huffpost / [Read more](#)

USA: ENVIRONMENTAL DISCLOSURES: CDP ANNOUNCES PLASTICS TO BE ADDED TO REPORTING PLATFORM FOR FIRST TIME

May 10 - On April 19, 2023, the influential CDP1 (formerly known as the Carbon Disclosure Project) announced that nearly 7,000 organizations worldwide can disclose their plastic-related impacts for the first time, as CDP's global environmental disclosure platform opens for 2023 reporting. CDP is adding plastic-related reporting to its online platform in response to a request from more than 740 investors with US\$136 trillion in assets. Mondaq / [Read more](#)

USA: CONSULTATION ON OFFSHORE PETROLEUM ENVIRONMENT PLANS

May 11 - NOPSEMA has recently published a [Consultation on offshore petroleum environment plans brochure](#).

The brochure has been created for members of the community who may be 'relevant persons' under the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (the regulations).

Relevant persons have the right to be consulted on proposed offshore petroleum activities while the titleholder is preparing their environment plan to be submitted to NOPSEMA for assessment and approval. NOPSEMA / [Read more](#)

NURDLES - PREVENTION, CLEAN-UP TECHNOLOGY AND ONGOING R&D WORK



The ISCO Executive Committee is looking into how our organisation can assist by co-operating with others in promulgating better prevention and response capabilities that can be adopted on a worldwide basis. Readers of the ISCO Newsletter are invited to contribute information that can be shared within our community and help to improve our capability to counter this pollution in more effective ways.

ISCO Committee Member, Dr Larissa Montas, is a regular contributor to this section in the ISCO Newsletter and her next update will appear in a later issue.

RECENT INTERESTING PEER-REVIEWED OIL SPILL PUBLICATIONS

A COLUMN CREATED BY DR. MERV FINGAS, MEMBER OF ISCO COUNCIL



This is part of a weekly column which provides the references and abstracts of new peer-reviewed scientific publications on oil spills. These references are selected on the basis of those papers that provide new insights into the fate, effects and control of oil spills. Readers may choose to obtain the full publications and to do so, one of three methods is suggested; contact your library, search the internet with the DOI (digital object identifier) provided, or search the internet for the exact title. These are given in the order of likely success in obtaining the article. Merv Fingas, ISCO Colleague.

117. Radio- and stable carbon isotope analysis reveals minimal assimilation of petrogenic carbon into an oligotrophic freshwater food web after experimental spills of diluted bitumen

Graves, S.D., Mason, J.J., Rodriguez-Gil, J.L., Séguin, J.Y., Blais, J.M., Hanson, M.L., Hollebone, B.P., Palace, V.P., Clark, I., Cundall, L., Layton-Matthews, D., Leybourne, M.I., Orihel, D.M.

(2023) Chemosphere, 329, art. no. 138608,

DOI: 10.1016/j.chemosphere.2023.138608

ABSTRACT: Following an oil spill into water, bacteria can biodegrade petroleum hydrocarbons which could lead to petrogenic carbon assimilation by aquatic biota. We used changes in the isotope ratios of radio- ($\Delta^{14}\text{C}$) and stable ($\delta^{13}\text{C}$) carbon to examine the potential for assimilation of petrogenic carbon into a freshwater food web following experimental spills of diluted bitumen (dilbit) into a boreal lake in northwestern Ontario, Canada. Different volumes (1.5, 2.9, 5.5, 18, 42, 82, and 180 L) of Cold Lake Winter Blend (a heavy crude blend of bitumen and condensate) dilbit were applied to seven 10-m diameter littoral limnocorrals (approximate volume of 100 m³), and two additional limnocorrals had no added dilbit to serve as controls. Particulate organic matter (POM) and periphyton from oil-treated limnocorrals had lower $\delta^{13}\text{C}$ (up to 3.2‰ and 2.1‰ for POM and periphyton, respectively) than the control at every sampled interval (3, 6 and 10 weeks for POM and 6, 8 and 10 weeks for periphyton). Dissolved organic and inorganic carbon (DOC and DIC, respectively) had lower $\Delta^{14}\text{C}$ in the oil-treated limnocorrals relative to the control (up to 122‰ and 440‰ lower, respectively). Giant floater mussel (*Pyganodon grandis*) housed for 25 days in aquaria containing oil-contaminated water from the limnocorrals did not show significant changes in $\delta^{13}\text{C}$ values of muscle tissue compared to mussels housed in control water. Overall, the changes in $\delta^{13}\text{C}$ and $\Delta^{14}\text{C}$ observed indicated small amounts (up to 11% in DIC) of oil carbon incorporation into the food web. The combined $\delta^{13}\text{C}$ and $\Delta^{14}\text{C}$ data provide evidence for minimal incorporation of dilbit into the food web of this oligotrophic lake, suggesting that

microbial degradation and subsequent incorporation of oil C into the food web may play a relatively small role in the ultimate fate of oil in this type of ecosystem.

118. The effect of chemical dispersion and temperature on the metabolic and cardiac responses to physically dispersed crude oil exposure in larval American lobster (*Homarus americanus*)

Scovil, A.M., Boloori, T., de Jourdan, B.P., Speers-Roesch, B.
(2023) Marine Pollution Bulletin, 191, art. no. 114976,
DOI: 10.1016/j.marpolbul.2023.114976

ABSTRACT: Despite their potential vulnerability to oil spills, little is known about the physiological effects of petroleum exposure and spill responses in cold-water marine animal larvae. We investigated the effects of physically dispersed (water-accommodated fraction, WAF) and chemically dispersed (chemically enhanced WAF, CEWAF; using Slickgone EW) conventional heavy crude oil on the routine metabolic rate and heart rate of stage I larval American lobster (*Homarus americanus*). We found no effects of 24-h exposure to sublethal concentrations of crude oil WAF or CEWAF at 12 °C. We then investigated the effect of sublethal concentrations of WAFs at three environmentally relevant temperatures (9, 12, 15 °C). The highest WAF concentration increased metabolic rate at 9 °C, whereas it decreased heart rate and increased mortality at 15 °C. Overall, metabolic and cardiac function of American lobster larvae is relatively resilient to conventional heavy crude oil and Slickgone EW exposure, but responses to WAF may be temperature-dependent.

119. Response of microbial communities in North Saskatchewan River to diluted bitumen and conventional crude under freeze-thaw-refreeze cycle, Saborimanesh

N., Xin, Q., Ridenour, C., Farooqi, H.
(2023) Environmental Pollution, 323, art. no. 121256,
DOI: 10.1016/j.envpol.2023.121256

ABSTRACT: Microorganisms are the first responder to oil spills and their response provides insight into the ecological effects of oils on aquatic ecosystems. Limited information is available about the impact of oil spills on freshwater ecosystems under seasonal river-ice regimes. This study aimed to investigate the microbial response of North Saskatchewan River water to diluted bitumen (DB) and conventional crude (CC) during the freeze-thaw-refreeze cycle. In two separate experiments, equivalent to 2 L of fresh DB and CC were spilled on the ice-covered river water within a mesoscale spill tank. The microbial response (changes in abundance and diversity) to oils under the freeze, thaw, and refreeze cycles were assessed for 10 days using 16S rRNA gene sequencing. The results showed that microbial communities exhibited different responses to the DB and CC oils. The effect of oils was more pronounced than that of the freeze or thaw cycles. The river microbial community rapidly responded to both spills, which coincided with a steady increase in the organic content of water throughout the freeze-thaw-refreeze cycle. Microbial diversity increased after the DB spill, but remain unchanged after the CC spill, regardless of the cycles. A higher number of new taxa emerged during the ice-covered period, while more microbial enrichment (increase in abundance) was observed during the thaw cycle. *Flavobacterium* (37 ± 5%) and *Pseudomonas* (36 ± 4%) remained the most predominant genera post-DB and CC spill, respectively. The results of this study suggest that ice coverage of 5 cm did not prevent the microbial communities from the effects of oils. Thus, a quick clean-up response to an oil spill on ice-covered water is equally critical to avoid the effects of oils on the underlying freshwater ecosystems

120. Transport of Microplastic and Dispersed Oil Co-contaminants in the Marine Environment

Yang, M., Zhang, B., Chen, X., Kang, Q., Gao, B., Lee, K., Chen, B.
(2023) Environmental Science and Technology, 57 (14), pp. 5633-5645.
DOI: 10.1021/acs.est.2c08716

ABSTRACT: Microplastics (MPs) and oil pollution are major concerns in oceans. Although their coexistence in oceans and the associated MP-oil-dispersant agglomerates (MODAs) have been reported, limited attention is given to the behavior of the co-contaminants. This study investigated MODA transport in a simulated ocean system and explored related mechanisms under various oil types, salinities, and mineral concentrations. We found that more than 90% of the heavy oil-formed MODAs stayed at the seawater surface, while the light oil-formed MODAs were widely distributed throughout the seawater column. The increased salinity promoted MODAs formed by 7 and 90 µm MPs to transport from the seawater surface to the column. This was elucidated by the Derjaguin-Landau-Verwey-Overbeek theory as more MODAs formed under higher salinities and dispersants kept them stable in the seawater column. Minerals facilitated the sinking of large MP-formed MODAs (e.g., 40 µm) as minerals were adsorbed on the MODA surface, but their impact on small MP-formed MODAs (e.g., 7 µm) was negligible. A MODA-mineral system was proposed to explain their interaction. Rubey's equation was recommended to predict the sinking velocity of MODAs. This study is the first attempt to reveal MODA transport. Findings will contribute to the model development to facilitate their environmental risk evaluation in oceans.

121 The Role of Bacteria in the Formation and Migration of Oil-Particle Aggregates (OPAs) after Marine Oil Spills and the Associated Mechanism,

Dong, R., Wan, Z., Wang, X., Bai, Y., Bao, M., Li, H.
(2023) Environmental Science and Technology,
DOI: 10.1021/acs.est.3c00647

RECENT INTERESTING PEER-REVIEWED OIL SPILL PUBLICATIONS (CONTINUED)

ABSTRACT: Oil spills interact with mineral particles to form oil-particle aggregates (OPAs), which promotes the oil's natural diffusion and biodegradation. We investigated the effect of bacteria on the formation and vertical migration of OPAs under different concentrations and types of particles and proposed and elucidated an oil-particle-bacteria coupling mechanism. The depth of particle penetration into oil droplets (13-17 μm) was more than twice that of the nonbacterial group. Oil that remained in the water column and deposited to the bottom decreased from 87% to 49% and increased from 14% to 15% at high/low concentration, respectively. Interestingly, the median droplet diameter showed a negative correlation ($R^2 = 0.83$) and positive correlation ($R^2 = 0.60$) at high/low concentration, respectively, with the relative penetration depth first proposed. We further demonstrated that bacteria increased the penetrating depth by a combination of reducing/increasing the interfacial tension, reducing the oil amount (C17-C38) in the OPAs, and increasing the particle width. These effects reduced the droplet size and ultimately changed the vertical migration of OPAs. Finally, we provided a simple assessment of the vertical distribution of OPAs in nearshore environments based on experimental data and suggested that the role of bacteria in increasing the depth of particles penetrating into the oil droplets should not be ignored. These findings will broaden the research perspective of marine oil spill migration.

122. Insights into abundance, adaptation and activity of prokaryotes in arctic and Antarctic environments

Holmberg, S.M., Jørgensen, N.O.G.
(2023) Polar Biology,
DOI: 10.1007/s00300-023-03137-5

ABSTRACT: Microorganisms perform many important functions in Arctic and Antarctic environments, but their activity and occurrence can be difficult to detect. At sub-zero temperatures, many bacteria retain their viability, but they may stay inactive for long periods. In this review, we describe essential elements of adaptation, abundance and activity of microorganisms in Arctic and Antarctic environments, and we give examples on their participation in key biogeochemical processes in permafrost soils, snow and ice. Microbes have adapted to low temperatures by adjusting the content of fatty acids and proteins in the cell membranes, and some bacteria produce a thicker cell wall. In the cytoplasm, cryoprotectants reduce freezing effects, chaperones ensure correct folding of macromolecules, and enzyme are optimized by lowering enthalpy and increasing the proportion of α - vs β -helices. Abundant microbial taxa in cold environments often belong to Proteobacteria, Actinobacteria and Acidobacteria, possibly due to their ability to survive at low nutrient levels and a high metabolic diversity, e.g., production of extracellular enzymes and fixation of N_2 . Some bacteria demonstrate growth at subzero temperatures (lower than -10°C) by adjusting vital processes e.g., protein synthesis, maintenance metabolism and by reducing mobility. Important microbial ecosystem functions are exemplified by cycling of methane in oxic and anoxic conditions and by bioremediation of oil spills by indigenous microbes. Further, the significance of microbial transformation of the pollutants mercury, polychlorinated biphenyls (PCBs) and perfluorinated alkylated substances (PFAS) in polar regions is discussed.

123. Simulating oil-driven abundance changes in benthic marine invertebrates using an ecosystem model

Dornberger, L.N., Montagna, P.A., Ainsworth, C.H.
(2023) Environmental Pollution, 316, art. no. 120450,
DOI: 10.1016/j.envpol.2022.120450

ABSTRACT: Field studies showed that benthic macrofauna and meiofauna abundances increased with sediment oil concentration in areas affected by the Deepwater Horizon (DWH) oil spill. Benthic invertebrate biomass shows a dome-shaped relationship with respect to petrogenic hydrocarbon concentrations suggesting a positive effect on biomass at low-to-medium oil concentrations and a negative effect at high concentrations. If this is due to enrichment of the benthic food web, then this adds to an emerging picture of a food web response over a large spatial area with both abundance increases and decreases as a result of DWH. We would be obliged to consider long term multispecies effects beyond the initial pulse disturbance in modeling impacts and recovery of economically valuable species. An Atlantis ecosystem model of the Gulf of Mexico is used to simulate three mechanisms that could explain observed changes in the invertebrate community. Scenario 1 is that stimulation of surface primary productivity occurred as a result of nutrient loading caused by diversion of Mississippi River water into Barataria Bay (a mitigation action taken during the DWH oil spill). Scenario 2 is that enrichment of the benthos occurred due to detrital loading from marine oil snow sedimentation and flocculent accumulation (MOSSFA). Scenario 3 is that predator declines and/or avoidance of oiled areas caused a release of predation mortality on benthic invertebrates. Scenario 2 (MOSSFA) stimulated the detritus-driven food web and was best able to cause a net increase in invertebrate biomass despite a realistic amount of oil toxicity. Scenario 3 (predator release) plausibly could have contributed to changes in benthic invertebrates. Scenario 1 (nutrient loading) had little impact on the benthos suggesting the benthic food web is decoupled from local pelagic production sources.

CONTRIBUTED ARTICLE (

EFFECT OF SURFACE MICROGEOMETRIES ON OIL SKIMMING DRUMS

An article received from Kristi McKinney, Program Manager, Mechanical Containment & Recovery, US Bureau of Safety and Environmental Enforcement.

Preface: BSEE Oil Spill Preparedness Division has completed a project to investigate innovative skimmer surfaces for improved oil recovery in oil slicks less than 12.7mm. This project leveraged additive manufacturing (3D printing) to investigate unique and innovative surface geometries that could improve an oleophilic skimmer's oil recovery rate and/or efficiency in thin oil slicks. Deep

Analytics evaluated multiple 3D printed surface geometries in a series of tests at their facility. These culminated in an innovative drum skimmer design based on a gyroid surface mapped to a cylinder to create a volumetric recovery capacity. This, used in conjunction with a unique vacuum recovery method, showed potential to improve rate of oil recovery in thin slicks. The article provides highlights of the project, and the full project report can be found at [Bureau of Safety and Environmental Enforcement Oil Spill Preparedness Division - The use of additive manufacturing to investigate novel surface geometries for improved oil skimmer recovery in thin oil slicks \(bsee.gov\)](#).

EFFECT OF SURFACE MICROGEOMETRIES ON OIL SKIMMING DRUMS

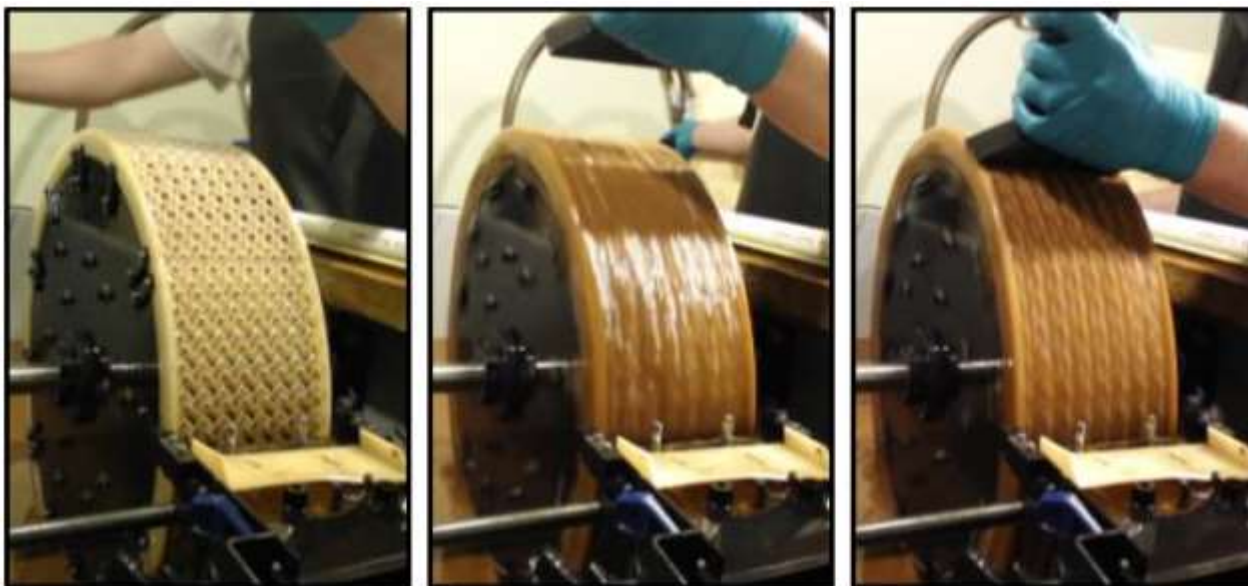


Figure 1: Deep Analytics' gyroid-based skimmer drum design and innovative vacuum recovery method in testing: Pre-test (left), ramp-up (center), and vacuum recovery (right).

With funding from the Bureau of Safety and Environmental Enforcement (BSEE), Deep Analytics LLC (DA) studied the effectiveness of microgeometries added to the surface of drum skimmers for the purpose of improving recovery efficiency in thin oil slicks.

Drum-type skimmers collect oil from bodies of water by submerging and rotating a drum made of a material that has an affinity for oil. The oil adhered to the drum is mechanically scraped and diverted into a collection system. Historically, drum skimmers have employed smooth, cylindrical drums, relying on the oleophilic properties of the drum surface for oil recovery. Research and commercial efforts have since attempted to exploit additional factors that increase effectiveness, one notable success being the introduction of grooved drum surfaces, which under certain conditions have led to increases in recovery efficiency up to 200% in testing when compared to smooth drums (Broje and Keller 2007). While these results are promising, recent validation testing of several common oil-skimming technologies found that these skimmers achieve maximum performance when recovering in oil slicks of 75 millimeters (McKinney et al. 2017); however, recovery performance appears to degrade significantly in thin slicks, especially when less than ½ inch or 12.7mm. Thin slicks are often encountered during an oil-spill response, as such, improvement of recovery under these conditions has become a key concern for the BSEE.

DA has executed a multiphase research and development (R&D) effort to design innovative microgeometries for the surfaces of the drums used in drum-type oil skimmers, such that they are more effective in thin slicks. DA's aggressive approach utilized 3D-printing to manufacture and evaluate many test drums throughout the project. 3D-printing enables the rapid production of complex and undercut geometries not possible via standard manufacturing processes in addition to a wide range of manufacturable materials, including but not limited to many currently utilized for existing skimmer drums. DA leveraged not only the speed, but the ability to design surfaces that could leverage factors critical to recovery without many of the constraints imposed by classical manufacturing methods.

Development and testing were executed over the course of two project phases. Phase 1 involved testing drum surface geometries using a reduced-scale experimental skimmer apparatus. First, DA identified numerous critical design factors found in the literature and designed test drums that isolated these factors with the intention of determining which had an outsized effect on recovery performance. Next, DA combined promising factors into innovative geometries and, based on performance, down selected three geometries for testing in Phase 2. Phase 2 consisted of design and evaluation of drums with full-scale diameter and reduced width, when compared to common practice, to facilitate realistic comparison to documented results.

DA's final design consisted of a fillable surface based on an approximation of a gyroid, a common internally connected surface used by 3D printers to support structures. By arraying unit cells of a gyroid in three-dimensions, a network of interconnected channels that are open to each other can be created, allowing the whole volume to be filled with a liquid. DA utilized a combination of mathematical modelling in python and standard mechanical drafting in 3D-CAD programs to create the gyroid-based surface and map it to a cylinder.

From there, side walls and a solid base were added to ensure oil and water are collected and removed from the drum surface. The design was split into 6 identical cladding pieces and 3D-printed in polypropylene using Selective Laser Sintering (SLS) for testing.

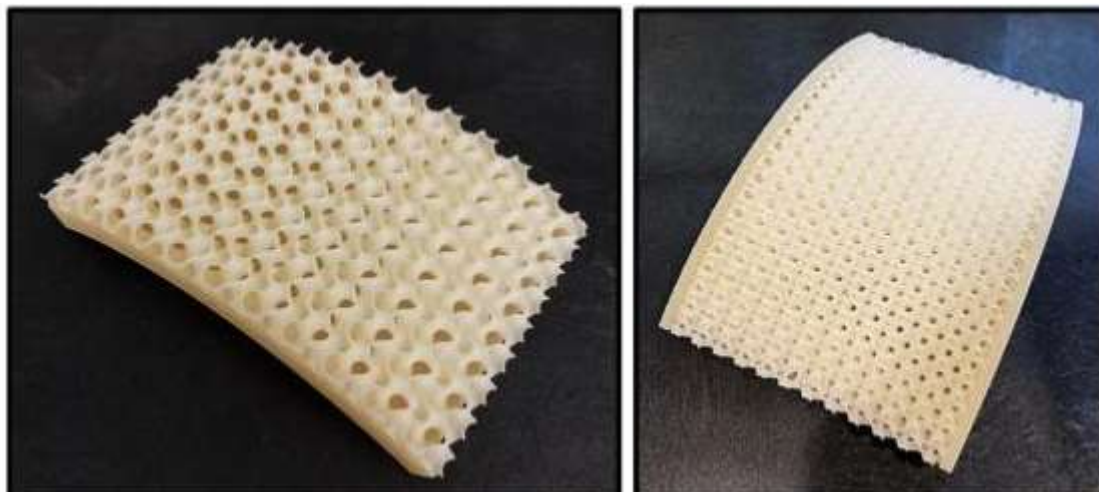


Figure 2: Gyroid-based drum cladding examples.

Phase-1 testing of drums with fillable surface volumes, such as dimples, showed that certain surfaces visibly filled with liquid, though it was clear that not all was being recovered via conventional mechanical scraping. This led to another innovation, dubbed vacuum recovery. DA developed a proof-of-concept vacuum system featuring a custom 3D-printed nozzle, used to vacuum liquid from the drum surface during rotation.

In the final project phase, DA demonstrated that the gyroid-based design paired with vacuum recovery was able to improve the Oil Recovery Rate (the oil volume collected per minute) by 36%-89% over a smooth control drum, depending on oil type. The amount of water collected, reported as Recovery Efficiency (RE) (calculated as a ratio of oil volume to total fluid volume) remained above 75% in 1/2inch slicks. It is believed that fillable geometries paired with vacuum recovery could improve recovery performance in thin slicks.

References:

1. Broje, V. and Keller, A.A., 2007. Effect of operational parameters on the recovery rate of an oleophilic drum skimmer. Journal of hazardous materials, 148(1-2), pp.136-143.
2. McKinney, K., Caplis, J., DeVitis, D. and Van Dyke, K., 2017. Evaluation of oleophilic skimmer performance in diminishing oil slick thicknesses. In International Oil Spill Conference Proceedings (Vol. 2017, No. 1, pp. 1366-1381). International Oil Spill Conference.

TRAINING COURSES (

Training Course Providers – Please check entries below and advise editor on any necessary updates.

USEFUL LINKS

- INTERNATIONAL – IMO E-LEARNING PLATFORM [e-learning platform](#)
- AUSTRALIA – AMOSC - <https://amosc.com.au/training/>
- AUSTRALIA & NEW ZEALAND – ALGA - <https://landandgroundwater.com>
- CHINA - <http://www.sioetc.com>
- EUROPE – <https://www.emsa.europa.eu/newsroom/latest-news/item/3609-ems-a-training-catalogue-2019.html>
- FRANCE - CEDRE - https://www.cedre.fr/en/content/download/10912/file/CalendrierFormation2023_EN.pdf
- UK & WORLDWIDE – OIL SPILL RESPONSE LTD. - <https://www.oilspillresponse.com/training/courses/>
- UK & WORLDWIDE – BRIGGS ENVIRONMENTAL SERVICES LTD. - <https://www.briggsmarine.com/services/training/>
- UK – NCEC HAZMAT ACADEMY – [More info](#)
- USA – TEXAS A&M UNIVERSITY – NATIONAL SPILL CONTROL SCHOOL <https://www.tamucc.edu/research/nscs/>
- USA – MPC, DETROIT - <https://marinepollutioncontrol.com/services/training-and-compliance>
- USA – ALLIANCE OF HAZARDOUS MATERIALS PROFESSIONALS - https://www.ahmpnet.org/events/event_list.asp

Members who would like to be listed here, please contact your editor – john.mcmurtrie@spillcontrol.org

USA: Elastec Fall Workshop, New Harmony, Indiana, 3-5 October 2023. [More Info](#)

SCIENCE & TECHNOLOGY

If you are interested in new technology you will find it useful to visit Technology Innovation News Survey at <https://clu-in.org/products/tins/> and Tech Direct at <https://clu-in.org/techdirect/archive/>

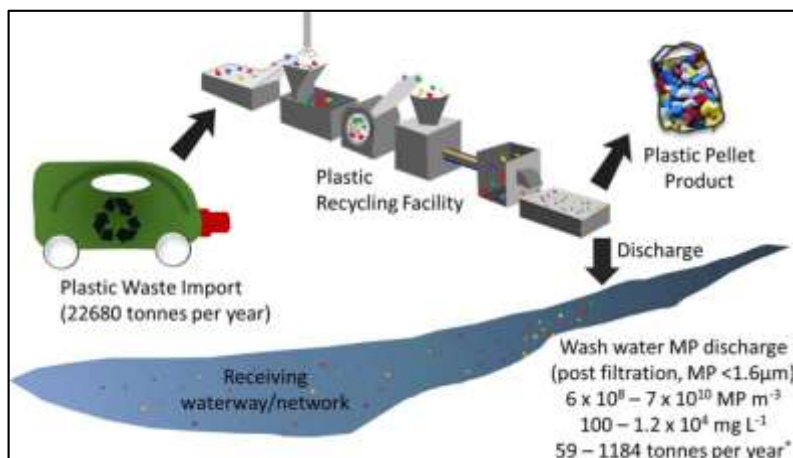
SCIENTISTS FIND POLLUTANTS IN SOME OF THE OCEAN'S DEEPEST WATERS

April 30 - By Anna Sobek - I was part of a team that recently discovered human-made pollutants in one of the deepest and most remote places on Earth – the Atacama Trench, which goes down to a depth of 8,000 meters in the Pacific Ocean. The presence of polychlorinated biphenyls (PCBs) in such a remote location emphasises a crucial fact: no place on Earth is free from pollution.

PCBs were produced in large quantities from the 1930s to the 1970s, mostly in the northern hemisphere, and were used in electrical equipment, paints, coolants and lots of other products. In the 1960s, it became clear they were harming marine life, leading to an almost global ban on their use in the mid-1970s. The Maritime Executive / [Read more](#)

Anna Sobek is Professor Anna Sobek is Professor of Environmental Chemistry and Head of Department of Environmental Sciences, Stockholm University. This article appears courtesy of The Conversation and may be found in its original form [here](#).

RECYCLING PLASTICS MIGHT BE MAKING THINGS WORSE



Graphical abstract. Credit: Journal of Hazardous Materials Advances (2023). DOI: 10.1016/j.hazadv.2023.100309

May 8 - A team of environmental engineers at the University of Strathclyde in Scotland and Dalhousie University Halifax in Canada has found that techniques for recycling plastics may inadvertently lead to increased environmental microplastics. In their study, reported in the Journal of Hazardous Materials Advances, the group tested water used to clean plastic at a recycling plant.

The problem, the researchers note, is that for plastic to be recycled, it must first be cleaned. This is done by washing it in water several times. The rest of the process involves shredding and melting to create pellets. Prior research has suggested washing may result in the release of microplastics into the water. In this new effort, the group found that the plastic was being washed four times. Each water source was tested to find out how much plastic (in the form of micron-sized particles) remained in the water.

Phys. Org. / [Read more](#)

UPCOMING EVENTS

TO VIEW UPCOMING EVENTS CLICK ON [HTTPS://SPILLCONTROL.ORG/UPCOMING-EVENTS/](https://spillcontrol.org/upcoming-events/)

To see ALL of the posted events you will need to click on “LOAD MORE” at the foot of each opened “upcoming events” page. Event organisers are requested to notify ISCO immediately if a listed event is cancelled or postponed. Your Editor does his best to keep the listing up-to-date but it should not be assumed that listed events have not been cancelled or postponed. It is recommended that you check with event organisers before finalising your attendance plans. Please advise the Editor if any of the entries require correction or updating. If you are holding an event you would like to be featured here, please send details to John.mcmurtrie@spillcontrol.org

MAY 2023

- WEBINAR From UK & Ireland Spill Association – “Plastic Pollution Work Group Webinar” 1500 hrs BST, 17th May 2023
- CROATIA – ADRIASPILLCON Conference & Exhibition, Opatija, 16-18 May 2023
- WEBINAR – “Incident Command in Canadian Waters”, 23rd May, 1500 UTC
- WEBINAR From Woods Hole Oceanographic Institution – “How new technologies are advancing ocean research, exploration, and science-based solutions”, 24th May, 7.30-8.30 pm ET
- WEBINAR – From UK & Ireland Spill Association – “Alternative Fuels for Shipping – Risks & Implications for Responders & Salvors”, 1500 hrs. BST, 24th May 2023
- FRANCE – European Maritime Day, Brest, 24-25 May
- UK – NCEC Hazmat Conference, Stratford-upon-Avon, 24-25 May
- WEBINAR From ALGA – “Treatment Technologies for PFAS destruction – How far are we from Off-the-shelf Solutions?” 30th May 2023

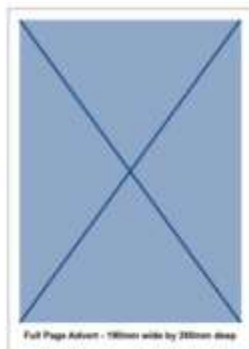
New advertising opportunities available within the ISCO Newsletter

Why Advertise?

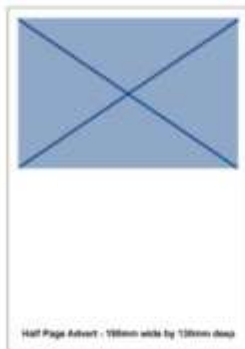
With a dedicated readership, the ISCO Newsletter is sent to nearly 3000 invested individuals once a week.

This loyal readership continues to find value in the ISCO Newsletter since it started more than 17 years ago.

Advertising in the newsletter gives advertisers direct access to highly motivated and niche audience of senior business people and decision makers.



Full Page Advert - 100mm wide by 200mm deep



Half Page Advert - 100mm wide by 100mm deep



Quarter Page Advert - 50mm wide by 100mm deep

What is the ISCO Newsletter?

ISCO's weekly newsletter is focused in international, regional and national news that is of interest to professionals, companies and organisations involved in oil and chemical spill control and the emerging field of CBRN incident response.

Through the Newsletter and its other activities, ISCO is disseminating information on new developments – technical advances, legislation, events and other matters that affect the international spill response community.

**To receive a copy of the new media pack please contact
spillcontrol@mwadigital.com**

By advertising in the ISCO Newsletter you will be directly supporting the work of ISCO and helping to ensure the continuation of this publication. ISCO is 100% dependent on the support of the international spill response community it serves.

UPCOMING EVENTS (CONTINUED)

JUNE 2023 & ONWARDS

- CANADA – 45th Technical Seminar on Environmental Contamination & Response, Edmonton, Alberta, 4-6 June, 2023
- AUSTRALIA – University of NSW, "Bioremediation Symposium", 7th June 2023
- WEBINAR – From ITRC & ALGA, "Microplastics", 13th June
- AUSTRALIA – Risk Assessment Symposium, Adelaide, 22 June 2023
- AUSTRALIA – SPILLCON Conference & Exhibition, Brisbane, 11-15 September 2023
- USA – Elastec Fall Workshop. New Harmony. Indiana, 3-4 October 2023
- UK – Seatrade Maritime Salvage & Wreck Conference, 6-7 December 2023

WHEN YOU OPEN THE UPCOMING EVENTS PAGE YOU WILL SEE MORE UPCOMING EVENTS

SOME OTHER INFO AND UPCOMING EVENTS

Recordings of past ExxonMobil OSR Knowledge Transfer Webinar Recordings – [Access and Download](#)

MESSAGES FROM EVENT ORGANISERS

CROATIA: ADRIASPILLCON 2023, OPATIJA, 16th - 18th MAY, 2023

ADRIASPILLCON 2023 will be held in Opatija, Croatia, between 16 and 18 May 2023 and is being organized by ATRAC - Adriatic training and education centre for accidental marine pollution preparedness and response, with the support of the Ministry of Maritime Affairs, Transport and Infrastructure. The Conference, complemented with an exhibition of relevant products and services, aims at providing a forum for exchange of experience and knowledge in the fields of prevention, preparedness for and response to accidental marine

MESSAGES FROM EVENT ORGANISERS (CONTINUED)

pollution by oil and other hazardous and noxious substances (HNS), among the participants from the Adriatic region and their counterparts from other parts of Europe and the Mediterranean.

All the relevant information is now available on the Conference website <https://adriaspillcon.com/>.

CANADA: 45TH AMOP TECHNICAL SEMINAR ON ENVIRONMENTAL CONTAMINATION AND RESPONSE: EDMONTON, 6-8 JUNE 2023

The Seminar provides a forum for professionals working in the field of oil and hazardous materials spills. The forum facilitates the transfer of scientific results and is intended to link research and the operational community. All submitted papers are peer-reviewed by scientific and technical experts. The Technical Seminar features plenary sessions of 10- or 20-minute presentations on spill-related topics including Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE). Sessions will begin at 8:00 a.m. each day. The presentations are followed by a 5- or 10-minute question and answer period. Sessions may also conclude with Speaker's Corner presentations at which results of more recent research can be discussed without an associated paper. Government of Canada / [Seminar Information](#)

AUSTRALIA: BRISBANE - SPILLCON 2023: 11-15 SEPTEMBER 2023

The Australian Institute of Petroleum (AIP) and the Australian Marine Oil Spill Centre (AMOSC) invite you to attend the international oil spill conference for the Asia-Pacific region, Spillcon 2023. Spillcon 2023 will bring together local, regional and global environmental and shipping representatives across industry, government and non-government organisations to provide an avenue to discuss issues including causes and prevention, preparedness, response management and environmental issues. Spillcon 2023 has been confirmed for 11 – 15 September 2023 at the Brisbane Convention and Exhibition Centre, Queensland, Australia. This website will be regularly updated with further information for sponsors, exhibitors and delegates. <https://www.spillcon.com/>
<https://mailchi.mp/64c839ee8f69/spillcon-2023-delegate-bookings-open?e=ce373d43ca>

USA: CLEAN GULF CONFERENCE & EXHIBITION – SAN ANTONIO, NOVEMBER 7-9, 2023

Now Accepting Reservations for Exhibit Space and Sponsorships for CLEAN GULF 2023 - Make an impact on buyers from oil & gas, maritime, rail, environmental companies and regulatory agencies with an exhibit space or sponsorship at the [CLEAN GULF Conference & Exhibition](#). Attendees at CLEAN GULF are looking for new products, services, and technologies to help them better prepare or respond to a hazardous spill or environmental emergency. Clean Gulf Conference & Exhibition | November 7-9, 2023 | <https://ssl.linklings.net/conferences/IOSC/> Henry B. Gonzalez Convention Center | San Antonio, TX [Registration Now Open for CLEAN GULF 2023 + Sessions Announced!](#)

USA: IOSC 2024 CALL FOR PAPERS AND POSTERS

The International Oil Spill Conference (IOSC) brings together the broadest range of global oil spill response professionals to discuss the latest research, technology, and resources impacting our community today. Submit a proposal to become a leader at our next convening in New Orleans, Louisiana, May 13 - 16, 2024. The IOSC is looking for technical and policy papers and posters under five general categories: Preparedness, Prevention, Remediation, Response, Restoration. [More info](#)

The Deadline to Complete Your #IOSC24 Submission has Been Extended. Paper and poster submissions are now due Friday, May 12, 2023.

CONTRACTS, TENDERS AND BUSINESS OPPORTUNITIES

INTERNATIONAL OPEN TENDER NOTIFICATIONS

This is a subscription service. <https://www.tender247.com/keyword/oil+spill+tenders+global>

OTHER OPPORTUNITIES: USA & EUROPE

US Government solicitations are frequently posted in Technology Innovation News Survey <https://clu-in.org/products/tins/> US EPA Tech Direct <https://clu-in.org/techdirect/archive/> and USA Federal Contracts Updates <https://clu-in.org/Federal-Contract-Opportunities> European Maritime Safety Agency invitations to tender are often posted in The EMSA Newsletter <https://www.emsa.europa.eu/newsroom/newsletters.html>

NEW PUBLICATIONS

CEDRE NEWSLETTER FOR APRIL 2023

In April, Cedre attended various meetings and events abroad, in particular in London, at the headquarters of the International Maritime Organization, in Singapore for the International Chemical and Oil Pollution Conference and Exhibition 2023 (ICOPCE) and in Switzerland to meet with AXA XL underwriters. Numerous discussions were also held to make headway on Cedre's projects such as IRA-MAR and in relation to the national monitoring networks for which sampling, training and meetings are coordinated by Cedre.

NEW PUBLICATIONS (CONTINUED)

Finally, training sessions continue to provide theory and practical knowledge to our clients and partners, which this month included Perenco and the Finistère fire and rescue service (SDIS 29). Download the CEDRE April 2023 Newsletter at - <https://mailchi.mp/2abadaf78147/la-lettre-du-cedre-17380739?e=388f6944fd>

LINKS FOR DOWNLOADING AND READING OTHER PUBLICATIONS

TO VIEW LINKS FOR DOWNLOADING AND READING OTHER PUBLICATIONS PLEASE CLICK ON

<https://spillcontrol.org/2021/10/19/links-for-downloading-and-reading-other-publications/>

As a service to its Members ISCO provides a listing of publications that may be of interest to our community. This page provides details and links for downloading more than 40 publications most of which can be accessed at no cost.

INCIDENT REPORTS

MARITIME ACCIDENT REPORTS FROM THE MARITIME BULLETIN

In the Maritime Bulletin, Mikhail Voytenko regularly advises on vessel abandonments, groundings and sinkings – several every week – but, unless there is an immediate and significant release of oil or chemicals, spillages are not reported. However, many of Mikhail's reports cover incidents that may have potential to cause pollution. To view all of his reports, visit <https://www.maritimebulletin.net/>

PHILIPPINES: MT PRINCESS EMPRESS UPDATES

May 11 <https://mb.com.ph/2023/5/11/gov-t-clears-almost-85-of-oil-spill-affected-shorelines-vows-continuous-aid-to-coastal-communities>

May 12 <https://www.rappler.com/nation/is-there-black-oil-left-mt-princess-empress-siphoning-june-2023/>

MALAYSIA: AN OIL TANKER ABLAZE IN THE SOUTH CHINA SEA IS A GLOBAL PROBLEM



Photo courtesy Malaysian Maritime Enforcement Agency

May 7 - Off the coast of Malaysia, in one of the world's busiest shipping channels, an explosion on board the aging oil tanker Pablo

INCIDENT REPORTS (CONTINUED)

ripped off its deck like a sardine can and began a fire that sent dark plumes of smoke into the sky.

It was a tragic accident that could have been a much larger catastrophe. The Gabon-registered ship, capable of carrying some 700,000 barrels of crude oil, was coming through the South China Sea after offloading a cargo in China — and so was nearly empty. Out of its international crew of 28, officials report that 25 were rescued by passing vessels. The blast happened just beyond Singapore's congested waters. gCaptain / [Read more](#)

ECUADOR: OIL SPILL IN AMAZON REGION BLAMED ON 'SABOTAGE'

May 11 - A state oil pipeline in Ecuador was hit by an act of "sabotage" on Wednesday, causing an oil spill into a river in the Amazon basin, the national company Petroecuador said.

The "sabotage" on the Trans-Ecuadorian Pipeline System (SOTE) caused a leak of crude that was "intentionally near a body of water" on the outskirts of Lago Agrio in the east, the company said in a statement, without specifying the amount of oil spilled or what the act of sabotage was.

"The emergency has been controlled," said Petroecuador, which temporarily suspended its operations and mobilized personnel to contain and clean up the spill. Oil company workers placed containment barriers on the banks and across a river, according to photographs released by the firm on Twitter. Macau Business / [Read more](#)

INFORMATION FOR MEMBERS AND SUBSCRIBERS

ANNOUNCING NEW PRODUCTS & SERVICES

Disseminating news about new technical developments is of value to our community. Corporate Members are invited to contribute articles.

Corporate Members of ISCO can benefit from submitting news about new products and services in the "News from ISCO Members" section of the ISCO Newsletter. This is a free facility for Members. Given that the ISCO Newsletter has a large and highly targeted readership in over 60 countries, it's a cost-effective way to promote your company.

Because the ISCO Newsletter is initially prepared as a Word document it's essential that text and photographs submitted can be easily copied and pasted into the preliminary draft of the newsletter. Please note that submissions must also comply with ISCO's editorial policy. Submissions should not include photos that cannot be used without permission of copyright owners.

1. The Editor has sole discretion over what is accepted for publication
2. The Editor reserves the right to edit press releases
3. Information in press releases must be factual and free from sales hype and exaggerated claims
4. Subject matter of press releases must be relevant to the interests of the spill response community
5. Space availability for printing press releases is limited and they should be kept short
6. If a press release is too long only part of it will be printed but a link can be included for downloading its entirety
7. Links for downloading additional information or viewing video material can be included
8. Depending on space press releases may be included in the next newsletter or held over for inclusion in a later issue.

HAVE YOU ALLOWED YOUR MEMBERSHIP TO LAPSE?

ISCO welcomes lapsed members who decide to re-join. This way you can preserve your access to all our membership benefits, including delivery of the ISCO Newsletter. To re-join, just click on <https://spillcontrol.org/membership-application-form/>

Legal disclaimer: Whilst ISCO takes every care to ensure that information published in this newsletter is accurate unintentional mistakes can occur. No liability for consequences of errors is accepted but, if an error is brought to our attention, a correction will be printed in a following issue of this newsletter. Products and services featured in the ISCO Newsletter and/or the ISCO website, including the International Directory of Spill Response Supplies and Services, have not been tested, approved or endorsed by ISCO. Any claims made by suppliers of products or services are solely those of the suppliers and ISCO does not accept any liability for their accuracy. It should not be assumed that views and opinions expressed in linked reports, articles and other content reflect the views of the organization. Subscription is subject to acceptance of ISCO's Terms and Conditions as published on the website www.spillcontrol.org and your acceptance of ISCO's Data Protection and Privacy Policy.
