



ISCO & THE ISCO NEWSLETTER

The International Spill Control Organization, a not-for-profit organization dedicated to raising worldwide preparedness & co-operation in response to oil and chemical spills, marine & freshwater pollution by plastics, promoting technical development and professional competency, & 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 & Observer Status at the International Oil Pollution Compensation Funds

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INTERNATIONAL NEWS

TOWARDS SUSTAINABILITY: A LOOK AHEAD TO ENVIRONMENTAL MOMENTS IN 2024

The year 2024 will be marked by a number of events and observances with important implications for the environment, biodiversity, and global sustainability. From advancing sustainable nitrogen management to fostering inclusive collaboration for biodiversity and addressing critical threats like antimicrobial resistance, the UN Environment Programme (UNEP) will work to support multilateralism, science-based dialogue and actions, innovation, partnerships for people and planet and much more.

Here are some key international events and meetings planned (dates and details subject to change): UNEP / [Continue reading](#)

“P&I INSURANCE RENEWALS: NAVIGATING THE 20TH FEBRUARY 2024 CHANGES”: UNDERSTANDING P&I INSURANCE IN 2024

Protection and Indemnity (P&I) insurance is a cornerstone of maritime commerce, safeguarding shipowners and operators against third-party liabilities. As we approach the 20th February 2024 renewals, it's crucial to understand the latest industry shifts and how they impact your cover. Hellenic Shipping / [Read more](#)

ITOPF CELEBRATES 55 YEARS

2023 marked 55 years since ITOPF began. A lot has changed in this time, but we remain ready and available to provide expert and objective advice on marine pollution incidents worldwide. Learn about our story, and where we're going in our video here: <https://vimeo.com/894568948/9295c2b076?ts=0&share=copy>

ISCO NEWS

In 2024 ISCO will be marking its 40th anniversary. In 1983 representatives of the national spill control / trade associations in the United States, United Kingdom, France, and Sweden (SCAA, BOSCA, SYCOPOL and SWEMARPOL) met at the

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
Flavio P. de Andrade Brazil


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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)
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ISCO NEWS (CONTINUED)

International Oil Spill Conference in San Antonio, Texas to discuss the formation of an organization to represent their members in international forums and with the following wider mission.

One of the organisation's founders, David Usher, followed up and registered the company in London in 1984.

At its 2005 AGM held at IOSC in Miami membership of ISCO was opened up to all entities, public and private, as well as private individuals with a legitimate interest in furthering the objectives of the organisation.

The International Spill Control Organization's continuing mission is to raise worldwide preparedness and co-operation in response to oil and chemical spills. In more recent times ISCO's mission has been broadened to address the growing problems of pollution caused by plastics.

ISCO is a worldwide organisation with members in over 60 countries.

ISCO members comprise leading response contractors, consultants, training providers and manufacturers of spill response equipment and materials, together with many individuals who support the organisation's objectives.

With Consultative Status at IMO and Observer Status at IOPC Funds ISCO is the only international organisation representing the spill control industry and those who work in it to mitigate environmental damage. For more information, visit www.spillcontrol.org

REGIONAL NEWS

EUROPE - EU/EFTA STATES PRACTICAL GUIDELINES ON HEALTH AND SAFETY OF OIL SPILL RESPONDERS

December 21 - This document was developed by a group of experts within the Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR). It aims to provide practical guidance based on real-incident experience on how best to plan for and integrate health and safety measures in oil spill response operations. Download the Practical Guidelines by clicking on the link - <https://www.emsa.europa.eu/newsroom/latest-news/item/5104-eu-efta-states-practical-guidelines-on-health-and-safety-of-oil-spill-responders.html>

PLASTIC POLLUTION IN WEST ASIA: CHALLENGES AND SUSTAINABLE SOLUTIONS

December 23 - Much like elsewhere around the world, West Asian countries are coping with growing concerns related to plastic pollution. These issues are particularly pronounced in areas where environmental governance is weak, and

waste management infrastructure often proves ineffective. While West Asian countries are aware of and are actively responding to these challenges, a far more concerted effort is required to transition toward a circular economy for plastics.

In light of this pressing need, the UNEP West Asia Office has undertaken a comprehensive study that adopts a life cycle perspective to assess the current state of plastic pollution in West Asia. The study aims at assessing the scale and extent of plastic production, consumption and disposal in the region and provide recommendations to policy makers across the region concerning sustainable practices for plastic consumption, production and end-of-life management. UNEP / [Read more](#)

NURDLES: EUROPE'S WORST UNKNOWN PLASTIC POLLUTION CRISIS

December 27 - From the rugged coastlines of the North Sea to the sun-drenched beaches of the southern Mediterranean, Europe faces a pervasive yet little-known environmental threat: pollution from tiny, round plastic pellets. They are called nurdles, and they are the foundational building blocks for nearly all plastic products, from yogurt cups to toothbrushes, computer casings, and car bumpers. But as essential as they are for consumer goods, nurdles are also a vast source of plastic pollution.

REGIONAL NEWS (CONTINUED)

Each year, more than 250,000 tonnes of these minuscule spheres are reckoned to enter the world's oceans, equivalent to about 10 trillion pellets, or 15 billion plastic bottles. By weight, they make up the second-largest source of ocean microplastics after tire dust. (Nurdles are microplastics from the start due to their diminutive size, something also known as primary microplastics.)

Currently, there are no mandatory regulations at the international level compelling pellet-handling companies to implement proactive measures for preventing nurdle loss or reporting pollution incidents. Euobserver / [Read more](#)

NEWS FROM AROUND THE WORLD

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CANADA: THE GOVERNMENT IS SEEKING FEEDBACK ON DEVELOPING A FEDERAL PLASTICS REGISTRY TO HELP TACKLE PLASTIC POLLUTION

January 2 Plastic pollution litters our beaches, parks, streets, shorelines, and other places Canadians value. Its harmful impacts on nature and wildlife must be addressed. That is why the Government of Canada is taking action to reduce plastic pollution and move toward a circular economy addressing the entire lifecycle of plastics, keeping it in the economy and out of the environment.

On December 30, 2023, the Minister of Environment and Climate Change, the Honourable Steven Guilbeault, launched a consultation on the creation of the Federal Plastics Registry, which will be used as a tool to monitor and track plastic from the time it is produced to its end of life. This is another step to deliver on Canada's comprehensive plan to reduce plastic pollution and waste.

The Registry would require producers to report annually on the quantity and types of plastic they place on the Canadian market, how that plastic moves through the economy, and how it is managed at end of life. The Registry would collect information to help monitor plastic in the economy over time. The Government would use this information to measure progress toward zero plastic waste and inform actions to accelerate the transition to a circular economy.

Canada Environment Climate Change / [Read more](#)

CANADA: ALBERTA'S OILSANDS CLEANUP PIGGY BANK 'UNFIT FOR PURPOSE,' RESEARCHERS SAY

January 3 - The Alberta Energy Regulator's (AER) plan for making sure taxpayers are not stuck with a multi-billion dollar cleanup bill from oilsands producers is "entirely unfit for purpose," say researchers at the University of Calgary calling for a public inquiry on the issue.

"The AER estimates over \$45 billion in remediation and reclamation liabilities in the oilsands. This number may be a dramatic underestimate, with figures in leaked, official presentations suggesting as much as \$130 billion in liabilities covered by less than \$2 billion in security deposits," University of Calgary School of Public Policy researchers Martin Olszynski, Andrew Leach, Drew Yewchuk

Finance Yahoo / [Read more](#)

wrote in a recent paper.

CANADA: SHIP-SOURCE OIL POLLUTION FUND ANNUAL REPORT

2022-2023 Highlights and Annual Report. https://sopf.gc.ca/?page_id=309#AnnualReport

CHINA: ACTION TAKEN TO CLEAN UP POYANG

January 3 - Jiangxi environmental regulation targets phosphorus pollution in freshwater lake

Jiangxi province has taken a step toward protecting the water quality of Poyang Lake by introducing the country's first local regulation aimed at preventing and controlling phosphorus pollution in a lake. China Daily / [Read more](#)

EGYPT: CEDARE HOSTS NISE FOUNDING MEMBERS' FIRST MEETING

December 18 - On 18 December 2023, the [Egyptian Ministry of Environment](#) and [Centre for Environment & Development for the Arab Region and Europe \(CEDARE\)](#) co-organized the first meeting of the founding members of the [National Initiative for Sustainable Entrepreneurs \(NISE\)](#). With 22 stakeholders onboard, the participants represented relevant government authorities and ministries, development organizations, banks, venture capital, private equity & financial institutions, NGOs and entrepreneurial and business

associations, and business support organizations. With a diversified structure of stakeholders, [NISE](#) platform will ensure synergy and create a market need for financing and promoting sustainable startups as attractive investment opportunities. NISE engaged all stakeholders who are capable of leveraging and supporting promising sustainable entrepreneurs to become qualified and bankable MSMEs, providing an integrated set of services and bridging any market gaps. CEDARE / [Read more](#)

FINLAND: HORIZON EUROPE FUNDING FOR SYKE'S OBSGESSION PROJECT

December 20 - The Horizon Europe project OBSGESSION receives over 5 million euros funding and will commence from 2024. The OBSGESSION project, which advances monitoring of biodiversity change, is coordinated by the Finnish Environment Institute (Syke) and the funding for Syke's part of the project is almost a million euros. Syke also received a total of 1.6 million euros of funding from the EU's research and innovation programme Horizon Europe for five other projects in which Syke is a partner.

Starting in 2024, the Observation of Ecosystem Changes for Action (OBSGESSION) project is coordinated by Syke and will run for four years. The goal of the project is to monitor and predict biodiversity change and its direct and indirect drivers in terrestrial and freshwater ecosystems. SYKE / [Read more](#)

INDIA: ENNORE CREEK EMERGENCY OIL SPILL RECOVERY WORK COMPLETED

December 21 - Around 900 people were involved in the clean-up operation. The Hindu / [Read more](#)

NIGERIA: CLOSURE OF UNEP'S TECHNICAL ASSISTANCE PROJECT TO SUPPORT HYPREP ON THE REMEDIATION AND ENVIRONMENTAL RESTORATION OF OGONILAND

December 20 - The Federal Government of Nigeria and the UN Environment Programme (UNEP) today announced the end of UNEP's formal engagement with the Hydrocarbon Pollution Remediation Project (HYPREP) under the Ministry of Environment, which comes to a close with the completion of the organization's five-year technical assistance project. The HYPREP project will continue under the leadership of the Nigerian Ministry of Environment.

The Federal Government of Nigeria and UNEP have partnered to improve the environmental situation in Ogoniland since 2008. At the time, UNEP was requested to support the Federal Government of Nigeria in assessing the heavily oil-polluted environment of Ogoniland and provide recommendations on its clean-up. UNEP completed its comprehensive scientific study with an assessment report published in 2011 and recommended a major clean-up initiative that may last up to 25 years and cost up to US\$ 1 billion for the first five years <https://www.unep.org/news-and-stories/statements/closure-uneps-technical-assistance-project-support-hyprep-remediation>

PAKISTAN: BARRACUDA EXERCISES OPEN TUESDAY

January 1 - KARACHI: The 12th Barracuda exercise of the Pakistan Maritime Security Agency (MSA) is set to commence tomorrow (Tuesday) and will continue until January 4. These exercises will involve practical scenarios simulating a mock oil spill in both coastal and open sea environments. Search and rescue operations will also be a significant component of the exercise. Leveraging experiences from prior Barracuda exercises, the MSA successfully executed the operation to rescue the stranded ship, 'Hang Tong', off the coast of Karachi in 2021, ensuring no oil spill occurred. Tribune / [Read more](#)

SOUTH KOREA: ITOPF AND KOREA COAST GUARD WORKSHOP TAKES PLACE IN YEOSU



Photo courtesy of ITOPF –

January 17 - ITOPF spent time in Yeosu, South Korea for a joint training workshop with Korea Coast Guard (KCG) covering oil spill preparedness and response, followed by an international cooperation conference in marine pollution incident response.

Over the three-day training workshop, ITOPF covered various topics of spill response to participants from KCG representing different districts in Korea and attendees from the Northwest Pacific Action Plan Marine Environmental Emergency Preparedness and Response Regional Activity Centre (NOWPAP MERRAC)

The international cooperation conference followed with presentations from the Korean, Philippines and US Coast Guards on recent case studies and highlighted the importance of international support during oil spill events. Source / [ITOPF Press Release](#)

UK: UNLIMITED PENALTIES INTRODUCED FOR THOSE WHO POLLUTE ENVIRONMENT

December 11 - Department for Environment, Food & Rural Affairs, Environment Agency, and The Rt Hon Steve Barclay MP

Companies who pollute the environment can be hit with unlimited financial penalties from the Environment Agency from today (11 December 2023).

The previous £250,000 cap on Variable Monetary Penalties (VMPs) has now been scrapped and the range of offences they cover has been expanded, meaning the Environment Agency has more tools with which to hold the water industry, and others, to account.

The range of offences that can be punished with a VMP now include:

- Breach of permit conditions from sites that discharge into rivers and seas - for example from sewage treatment works and permitted storm overflows;
- Illegal discharges to water where there is no permit, such as in the event of agricultural pollution from slurry stores;
- Illegal waste offences, such as from illegal scrapyards or unpermitted waste management facilities;
- Permit breaches from manufacturing industries and power stations which contribute to air pollution.
- The new unlimited penalties - a measure in the UK Government's Plan for Water - form part of work to ensure there is more investment, stronger regulation and tougher enforcement across the water system UK Government / [Read more](#)

UK: NATIONAL STANDARD FOR MARINE OIL SPILL RESPONSE ORGANISATIONS

Updated December 20 - A document outlining standards to be met by organisations delivering Tier 2 response services in the UK.

The Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention(OPRC)) Regulations 1998 (SI 1988 No.1056) (as amended) state that certain UK ports, harbours and oil-handling facilities and all offshore installations on the UK Continental Shelf must submit OPRC Plans to the Maritime and Coastguard Agency (MCA) (in the case of ports, harbours and oil handling facilities) or the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) (in the case of offshore installations, as defined in the Regulation) for approval.

As part of the approvals process for ports, harbours and oil handling facilities to which the Regulations apply, the MCA require contingency plans to detail the contract they hold with an accredited third-party Tier 2 Oil Spill Response Organisation (OSRO). OPRED similarly require responsible persons of offshore installations to detail in Oil Pollution Emergency Plans (OPEPs) any arrangements in place with an OSRO.

Following a consultation with industry on the creation of a UK National Standard for OSROs, carried out between January and March 2018, a final version has been published. The Standard will remain a living document, evolving with the requirements of industry and new best practice guidance, but any new amendments will be based on further dialogue and consultation between the appropriate government departments and agencies, approved Accrediting Bodies and the OSRO industry. UK Govt. / [Read more](#)

UK: GUIDANCE - COUNTER POLLUTION TRAINING COURSES

December 20 - Information on training courses from the Counter Pollution and Salvage team including who should attend, course content and objectives, and how to apply.

The Counter Pollution and Salvage (CPS) team offers two areas of training.

LA01 – National training course on oil pollution, contingency planning and response

A three-day course for local authority management staff involved in contingency planning and oil spill response. The course is organised and run by the Maritime and Coastguard Agency (MCA). To sign up, apply directly to the MCA to join one of the regional courses.

LA02 – Beach supervisor

A two-day course for local authority staff who may be involved in supervising beach clean-up operations and protective booming operations. The MCA provides this training course for individual local authorities or collaboratively with adjoining authorities on a request basis.

Both training courses are formally accredited by the Nautical Institute on behalf of the MCA. You can find out more information, and get the training materials for these courses, at ResilienceDirect. You will need to register to create an account.

https://www.gov.uk/government/publications/oil-pollution-contingency-planning-and-response-training-courses?utm_medium=email&utm_campaign=govuk-notifications-topic&utm_source=e1d52f21-baef-4677-b799-15294876289f&utm_content=daily

NEWS FROM AROUND THE WORLD (CONTINUED)

USA: LATEST NEWS REPORTS FROM NOAA OR&R

January 8 – Please click on the links below to view the latest news from NOAA OR&R



Photo: OR&R was requested to provide scientific support after a pipeline spill occurred in April 2023, discharging crude oil into a marsh area on the Gulf Intracoastal Waterway. Image Credit: Louisiana Oil Spill Coordinator's Office.

OR&R Proudly Presents 2023 Accomplishments

In December of 2023, OR&R released its [2023 Accomplishments Report](#). The report highlights key accomplishments by OR&R during the fiscal year 2023, with a focus on the Office's four mandates: oil and chemical emergency response, natural resource restoration, marine debris, and disaster preparedness.

How We Count Counts: A NOAA Publication on Marine Debris Detection

In early January, a new NOAA publication, [How we count counts: Examining influences on detection during shoreline surveys of marine debris](#)(link is external), was published in the journal *Marine Pollution Bulletin*.

Regulatory Updates Released in Latest CAMEO Data Manager and Tier2 Submit

Recently, NOAA and the U.S. Environmental Protection Agency (EPA) jointly released their annual updates for [CAMEO Data Manager](#) and [Tier2 Submit™](#), two programs that aid users in meeting regulatory filing and emergency response planning efforts under the Emergency Planning and Community Right-to-Know Act (EPCRA).

PEOPLE IN THE NEWS

THE IMarEST WELCOMES NEW CHIEF EXECUTIVE

The IMarEST has announced the appointment of Chris Goldsworthy as the new Chief Executive. Chris replaces Gwynne Lewis who is retiring, having been in the position since 2020.

Chris is a Fellow of the IMarEST and former Cyprus Branch Chair. He embarked on his career as an Engineer Cadet with P&O Containers, where he spent 16 years at sea, achieving the rank of Chief Engineer Officer. He transitioned to shore-based roles in 2005 as a Technical Superintendent, and his journey has led him to technical, fleet, management and director positions. Throughout his career, he has overseen diverse fleets, nurtured strong teams, and provided strategic leadership to boards and executives, exemplifying his technical acumen and leadership prowess.



Chris Goldsworthy, IMarEST Chief Executive says: "It's an honour to take on this role for the Institute that I have been a passionate member of since I started my career. The Institute is unique in bringing together engineers, scientists and technologists in the sector and I am looking forward to working with our members to solve some of the biggest challenges we have ever faced, to shape a more sustainable future for the marine sector."

RECENT INTERESTING PEER-REVIEWED OIL SPILL PUBLICATIONS

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



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.

287. Oil/Water Mixtures and Emulsions Separation Methods—An Overview

José M.H., Canejo J.P., Godinho M.H.
(2023) *Materials*, 16 (6), art. no. 2503,

ABSTRACT: Catastrophic oil spill accidents, oily industrial wastewater, and other types of uncontrolled release of oils into the environment are major global issues since they threaten marine ecosystems and lead to a big economic impact. It can also affect the public health of communities near the polluted area. This review addresses the different types of oil collecting methods. The focus of this work will be on the different approaches to materials and technologies for oil/water separation, with a special focus on water/oil emulsion separation. Emulsified oil/water mixtures are extremely stable dispersions being, therefore, more difficult to separate as the size of the droplets in the emulsion decreases. Oil-absorbent materials, such as sponges, foams, nanoparticles, and aerogels, can be adjusted to have both hydrophobic and oleophilic wettability while displaying a porous structure. This can be advantageous for targeting oil spills in large-scale environmental and catastrophic sets since these materials can easily absorb oil. Oil adsorbent materials, for example, meshes, textiles, membranes, and clays, involve the capture of the oily material to the surface of the adsorbent material, additionally attracting more attention than other technologies by being low-cost and easy to manufacture.

288. Comprehensive Two-Dimensional Gas Chromatography in Petroleum Derived Samples: A Review on Advances in Source and Weathering Studies of Spilled Oil

Corrêa A.M., Sousa J.M., Leal K.Z., Bernardes M.C.
(2023) *Critical Reviews in Analytical Chemistry*,
DOI: 10.1080/10408347.2023.2250858

ABSTRACT: Since its introduction comprehensive two-dimensional gas chromatography (GC × GC) has been widely applied to analyze complex samples due to its enhanced peak capacity and selectivity, thereby increasing the number of identifiable peaks and improving coelution issues. Even though it is still undergoing development, GC × GC provides many advantages in the analysis of petroleum-derived samples, whether in reservoir geochemistry applications or in environmental studies associated with spilled oils. In general, it facilitates more thorough fingerprinting and compositional evaluation. In environmental studies, it helps enhance understanding of weathering processes and the environmental behavior of hydrocarbons, as its chromatographic retention indices can robustly estimate liquid vapor pressures, aqueous solubility and other physical chemical properties. This review presents a brief history of GC × GC instrumentation, discussing recent and significant advances in petroleum applications, from data handling techniques to reservoir geochemistry and environmental forensics, as well as some specific advantages achieved and certain limitations that continue to be encountered.

289. Impact and Remediation of Petroleum Hydrocarbon Pollutants on Agricultural Land: A Review

Mohanta S., Pradhan B., Behera I.D.
(2023) *Geomicrobiology Journal*,
DOI: 10.1080/01490451.2023.2243925

ABSTRACT: Petroleum hydrocarbons, which are organic molecules consisting of carbon and hydrogen, are found in crude oil. Due to human activities like oil spills, leaking storage tanks, and transportation accidents, they are pervasive environmental toxins. This contamination can have negative consequences on the ecosystem, including soil, water, and air pollution, and agricultural land is not immune. There are several variables that can affect how petroleum hydrocarbons affect agricultural land, including the particular hydrocarbon, the properties of the soil, and the current climatic circumstances. The porosity, permeability, and water-holding capacity of soil have been influenced by petroleum hydrocarbons. This might result in soil compaction, decreased infiltration, and higher runoff, affecting agricultural land production. Hydrocarbons can also impair soil aeration, resulting in anaerobic conditions that can harm the soil microbiome and hinder plant development. Petroleum hydrocarbons can change soil's pH and nutrient availability, which can affect its chemical characteristics. Through modifications to microbial activity, diversity, and composition, petroleum hydrocarbons can affect the soil's biological characteristics. Reduced soil fertility and production may result from this. The kind of hydrocarbon, the properties of the soil, and the type of crop are only a few of the factors that affect how petroleum hydrocarbon pollution affects agricultural productivity. Some crops are significantly more susceptible to hydrocarbon contamination than others, which can impact their yield. To limit the spread of petroleum hydrocarbon contamination, a number of physicochemical strategies have been used to the contaminated areas, but this has resulted in significant chemical consumption, high treatment costs, and the production of secondary pollutants that harm the environment. The biological remediation method, on the other hand, makes use of microorganisms or plants to break down or remove toxins from the soil. This review articles focus on the effects of petroleum hydrocarbon pollution on agricultural land and elaborates the remediation methods that may be applied to lessen these effects.

290. Parameterization modeling for wind drift factor in oil spill drift trajectory simulation based on machine learning

Liu D., Li Y., Mu L.

(2023) *Frontiers in Marine Science*, 10, art. no. 1222347,

DOI: 10.3389/fmars.2023.1222347

ABSTRACT: Marine oil spill simulations typically employ the oil particle method to calculate particle trajectories, considering various factors such as wind, current, and turbulence. The wind drift factor (WDF), a random element determining the proportion of wind's effect on oil particles, is often empirically set as a constant in traditional oil spill models, introducing limitations. This study proposes a support vector regression-based parameterization modeling (SVR-PM) for the WDF. Using extensive buoy data and ocean hydrodynamic reanalysis data, we trained an SVR model to compute the WDF in real-time based on real-time wind speed. The SVR-PM was integrated into an oil spill model to enhance the computation of the wind-induced velocity term. We validated the model using satellite images of two significant oil spills, resulting in an excellent average agreement. The SVR-PM's advantage lies in enhancing the accuracy of wind-induced velocity term in oil spill simulations and demonstrating strong adaptability and generalizability over time and space. This advancement holds significant implications for maritime departments and emergency disaster response units.

SOURCE: Scopus

291. Biomarkers Profile of the Mysterious 2019 Oil Spill on the Northeast Coast of Brazil and Discrimination from Unreported Events

dos Santos I.R., Lucena P.G.C., Moraes A.S., Carregosa J.C., Santos T.M., Wisniewski A., Jr., Santos J.M.

(2023) *Journal of the Brazilian Chemical Society*, 34 (11), pp. 1698 - 1706,

DOI: 10.21577/0103-5053.20230120

ABSTRACT: In 2019, large amounts of oil reached the northeast coast of Brazil, causing damage to the environment and the local economy, especially in the state of Pernambuco. In order to correlate with possible sources, investigation was made of the geochemical biomarkers of the oils using "gold standard" forensic protocols from the European Committee for Standardization (CEN). The biomarkers study was improved by using gas chromatography-tandem mass spectrometry (GC-MS/MS), rather than the standard protocol that suggests use of the selected ion monitoring (SIM) method. Analysis was made of thirteen oil samples from the Pernambuco coast, in order to identify their degrees of similarity and the possible presence of oils from unreported spills. The use of eighteen diagnostic ratios and multivariate analysis revealed a cluster formed by eleven samples with biomarker distributions typical of oil from the 2019 spill. However, two samples had anomalous fingerprints, especially due to the absence of the 18 α (H)-oleanane and 18 β (H)-oleanane isomers. Both the CEN protocol applied for the classical biomarkers and a comprehensive Fourier transform mass spectrometry (FT-MS) analysis of polar compounds confirmed the dissimilarities between the samples. The findings suggested that these two oils could have originated from an event unrelated to the mysterious 2019 spill.

292. Photo-Enhanced Oil Toxicity to Alcid Immune Function

Counihan K.L., McKenna A.M., Hebert D., Tomco P., Zito P.

(2023) *Environmental Toxicology and Chemistry*,

DOI: 10.1002/etc.5742

ABSTRACT: Oil spills are devastating to seabirds, causing high levels of mortality and toxic physiological effects, especially to immune function. Sunlight exposure can further enhance the toxicity of oil to marine species by generating photodegradation products. Photo-enhanced oil toxicity to marine birds has not been studied. Therefore, the goal of the present study was to investigate the toxicity and photo-enhanced toxicity of oil to lymphocyte proliferation, macrophage phagocytosis, and reactive oxygen species production in three alcid species, common murre (*Uria aalge*), tufted puffins (*Fratercula cirrhata*), and horned puffins (*Fratercula corniculata*). Intrinsic factors (species, age, and sex) had a more significant effect on lymphocyte proliferation than exposure to oil or photoactivated oil. Macrophage phagocytosis was significantly reduced in oil and photoactivated oil treatments, whereas hydrogen peroxide production was significantly increased. Interestingly, nonphotoactivated oil stimulated significantly more hydrogen peroxide than photoactivated oil. The results suggest that alcid immune function could be variably influenced during an oil spill depending on the species, sex, and age of the bird as well as the season and level of sunlight exposure.

293 Effects of automotive diesel oil on germination of *Avicennia germinans* and *Laguncularia racemosa* mangrove propagules

Martins J.C.D.S., Mochel F.R., Zanandrea I., de Jesus AZEVEDO J.W., de LIMA L.G., Bezerra D.S., Abreu E.G.D.N., Lima A.M.S.

(2023) *Acta Amazonica*, 53 (3), pp. 264 - 270,

DOI: 10.1590/1809-4392202202342

RECENT INTERESTING PEER-REVIEWED OIL SPILL PUBLICATIONS (CONTINUED)

ABSTRACT: Mangrove ecosystems are sensitive to oil, as spills can impair developmental processes of mangrove vegetation. Since the 2010s, the Brazilian equatorial margin, more specifically the Pará-Maranhão Basin and the mouth of the Amazonas River, has been affected by oil runoff from urban activities and the increased risk from exploratory deepwater drilling for oil extraction. Dispersal of mangrove propagules occurs during the tidal cycles, when the presence of tensors in the water can affect germination. We analyzed the effects of diesel oil on the germination of propagules of the two most common mangrove species in the region, *Laguncularia racemosa* and *Avicennia germinans*, in six treatments of diesel oil in the water (0.5%, 1%, 1.5%, 2%, 3% and 4%) and a diesel-free control. The response variables were germinability (G%), mean germination time, mean germination speed and the germination speed index (GSI). G% and GSI in *L. racemosa* propagules differed significantly between the control and all treatments (G% and GSI < 10% in the 3% treatment). Propagules of *A. germinans* were more resistant, and the physiological variables did not differ significantly among treatments and control (G% > 90% in all treatments). Our results indicate that, at the germination stage, *L. racemosa* was more susceptible than *A. germinans* to contamination by automotive diesel oil.

294. Photochemistry of oil in marine systems: developments since the Deepwater Horizon spill

Elsheref M., Messina L., Tarr M.A.

(2023) Environmental Science: Processes and Impacts,

DOI: 10.1039/d3em00248a

ABSTRACT: Oil spills represent a major source of negative environmental impacts in marine systems. Despite many decades of research on oil spill behavior, photochemistry was neglected as a major factor in the fate of oil spilled in marine systems. Subsequent to the Deepwater Horizon oil spill, numerous studies using varied approaches have demonstrated the importance of photochemistry, including short-term impacts (hours to days) that were previously unrecognized. These studies have demonstrated the importance of photochemistry in the overall oil transformation after a spill and more specifically the impacts on emulsification, oxygenation, and microbial interactions. In addition to new perspectives, advances in analytical approaches have allowed an improved understanding of oil photochemistry after maritime spill. Although the literature on the Deepwater Horizon spill is extensive, this review focuses only on studies relevant to the advances in oil photochemistry understanding since the Deepwater Horizon spill.

SCIENCE & TECHNOLOGY (

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REMEDICATION OF HAZARDOUS WASTE CONTAMINATED SOILS (ENVIRONMENTAL SCIENCE AND POLLUTION CONTROL SERIES)

Donald I. Wise: "This unique, single-source reference offers a thorough treatment of the remediation of soils contaminated by hazardous wastes and the scientific and engineering issues that must be addressed in creating practical solutions for their reclamation." Z-lib.io/book / [Read more](#)

DEGRADING PLASTIC WASTE USING THE POWER OF SUPERWORM GUTS

Microbes found in the guts of plastic-munching worms may help us break down plastic more efficiently, according to a new study published in [Environmental International](#).

In short –

- By extracting the gut microbiome of “superworms,” the authors were able to create a stable colony of plastic-degrading microbes.
- Isolated microbes could prove to be more practical for breaking down plastics than worms, which are challenging to work with.
- The study results suggest that microbes may be capable of processing many different types of plastic. EHN.org / [Read more](#)

MICROPLASTIC POLLUTION IN MARINE ECOSYSTEM AND ITS REMEDIATION

Since the initiation of the plastic industrial manufacturing, its production rate has been continuously increasing and attaining high records. However, along with the increase in its production, generation of the huge plastic waste also begins. Plastic polymers are extremely difficult to degrade and might accumulate within the environment for years. Also, poor plastic waste handling or management issues are responsible for the huge plastic pollution, most of which have also reached the marine environment. Eventual degradation of the plastics in the marine environment from long time generates microplastic pollutants there. Presence of microplastics in the marine environment would be responsible for evolution of the potential plastic-consuming organisms. Microorganisms attached to plastic surface make biofilm by electromagnetic interaction forces. Further, extracellular and intracellular microbial catalysts or enzymes metabolize plastics eventually. Although remediation of such microplastics in the marine environment is a difficult task, potential strategies could be implemented for the removal of such pollutants. Based on the technique of ocean

SCIENCE & TECHNOLOGY (CONTINUED) (

currents, these microplastic pollutants would have transferred from their high concentration in ocean to low concentration at coastal regions and eventually settled there in coastal sediments. Potential microplastic remediation techniques could be applied on the different coastal region such as coastal sediment circulation, implementation of controlled natural reactors in intertidal regions, and use of specialized membrane. This would establish a continuous transport of microplastic pollutants from ocean to coastal region to maintain microplastic particulate equilibrium, thereby evacuating microplastics from the marine environment. Researchgate / [Read more](#)

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://wwz.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 & WORLDWIDE – AMBIPAR GROUP** <https://ambipar.com/uk/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
- **CANADA - CONTAMINATED SITES HEALTH & SAFETY REFRESHER (8-HOUR HAZWOPER) – FROM ECONEXT –** [MORE INFO](#)
- **ONLINE – LLOYDS MARITIME ACADEMY – CERTIFICATE IN ENVIRONMENTAL MARITIME MANAGEMENT.** Starts on 24th January <https://informaconnect.com/certificate-in-maritime-environmental-management/>
- **ONLINE - LLOYDS MARITIME ACADEMY – CERTIFICATE IN MARINE POLLUTION PREVENTION & MANAGEMENT.** Starts on 14th March 2024 - <https://email.informaconnect.com/q/12ErXbQNGaNK08IQrkPeg62v/wv>

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

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

The listings below give only very basic details – To get access to all information visit <https://spillcontrol.org/upcoming-events/>

JANUARY 2024 & ONWARDS

- **UAE – International Conference on Environmental Pollution & Remediation, (ICEPR), Dubai, 15-16 February 2024**
- **AUSTRALIA – Alga – “Chlorinated Hydrocarbons Groundwater Fate & Transport Symposium”, Adelaide, 22-23 February 2024**
- **PORTUGAL – Economist – “11th Annual World Ocean Summit & Expo”, Lisbon, 11-13 March 2024**
- **GERMANY – “14th International Conference on Environmental Pollution & Remediation”, Berlin, August 25-27, 2024**
- **SPAIN & ONLINE – “14th International Conference on Environmental Pollution & Remediation, Barcelona, August 25-27, 2024**

SOME OTHER INFO –

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

UK & Ireland Spill Association Alternative Marine Fuels and their Implications For Spill Response Webinar is [available to watch on YouTube](#).

All six of UK & Ireland Spill Association’s Webinar Series on the Wakashio Spill are also available to watch. [More info](#)

UPDATES FROM EVENT ORGANISERS

USA: CLEAN WATERWAYS 2024 – REGISTRATION NOW OPEN - CLICK ON LINKS BELOW

If you have leftover funds in your marketing budget from last year, use it to invest in your business for 2024 and secure participation at the [CLEAN WATERWAYS Conference](#), April 9-11 in Cincinnati, OH. We are accepting exhibit/ sponsorship applications and registration is open, with early bird discounts expiring at the end of January!

[TRACK PLANNING & PREPAREDNESS](#) [PRELIMINARY AGENDA ANNOUNCED](#) [2024 PRELIMINARY SESSION LINE-UP](#)

Registration has officially opened for the 2024 CLEAN WATERWAYS Conference, taking place at the Duke Energy Convention Center in Cincinnati, OH, April 9-11. [Registration information](#) April 9-11, 2024, Cincinnati, OH – “Incident Prevention & Response for Inland Regions & Waterways” [View the website](#)

The CLEAN WATERWAYS program is developed by a government/industry-based committee of approximately 50 professionals, and the committee is looking for leaders to help shape the conference. All abstracts submitted are reviewed for content and relevance by the committee and are selected by consensus

USA: REGISTRATION NOW OPEN FOR IOSC 2024

[International Oil Spill Conference \(IOSC\)](#) in New Orleans, May 13-16, 2024

Registration has officially opened for the International Oil Spill Conference (IOSC), May 13-16, 2024 at the New Orleans Convention Center in New Orleans, LA USA.

Meet Dr. Leonard Marcus, IOSC 2024 Keynote Speaker. Join us, May 13 - 16, 2024 in New Orleans, LA for the 2024 International Oil Spill Conference (IOSC) and be inspired by our opening keynote speaker, Dr. Leonard Marcus. [Read about Dr. Marcus](#)

[Why are Sponsorships at IOSC So Valuable?](#) Click to read more

IOSC provides a vital forum for professionals from the international response community, private sector, government, and non-governmental organizations to come together to tackle the greatest challenges facing us with sound science, practical innovation, social engineering and imagination.

Mark your calendars and start planning your trip to join over 1,500 attendees from over 50 countries, representing government agencies, contractors, researchers, industry, and other stakeholders as they exchange ideas and lessons learned from actual spill responses and research around the world.

Learn More about IOSC 2024 Be sure to follow IOSC on [Facebook](#), [Twitter](#), and [LinkedIn](#) for updates and announcements about #IOSC2024. Please contact registration@iosc.org for questions or additional information. Interested in exhibiting or sponsorship? Please reach out to: exhibits@iosc.org

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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 Federal Contract Opportunities are posted at <https://clu-in.org/Federal-Contract-Opportunities>

European Maritime Safety Agency invitations to tender are often posted in The EMSA Newsletter at -

<https://www.emsa.europa.eu/newsroom/newsletters.html>

ISCO Members can post requests for submission of invitations to tender for supplies / services in this section. The ISCO Newsletter is circulated to nearly 3,000 registered subscribers in 60 countries worldwide and represents a well targeted audience for sourcing invitations to tender. Send requests to the Editor – john.mcmurtrie@spillcontrol.org

LINKS FOR OTHER PUBLICATIONS

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<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. This page is managed by Mike Watson mike@mwadigital.com

NEW PUBLICATIONS

INTERNATIONAL GUIDE FOR THE ASSESSMENT OF OIL SPILL RESPONSE PLANNING AND PREPAREDNESS

From the Association of Oil, Gas and Renewable Energy Companies of Latin America and the Caribbean



This Guide is the outcome of years of practices and lessons learned from spill prevention and response. The work recognizes the many contributors to the field of oil spill response preparedness efforts, in formal and informal publications, regulations, and many associated tools of the trade. Continued developments, learnings, and best practices are certain to evolve; hence, these guidelines are offered as a reflection of current practices as of the date of publication. The authors' opinions expressed in this Guide do not necessarily represent those of their institutions or companies.

This publication represents an update to the Guidelines published as part of the International Oil Spill Conference (IOSC) in 2008 ("Assessment of Oil Spill Response Capabilities: A Proposed International Guide for Oil Spill Response Planning and Readiness Assessments"). That effort, spearheaded by the IOSC Sponsors in conjunction with ARPEL and the then Clean Caribbean Cooperative, is updated in the release through the collaborative efforts of Ipieca, (www.Ipieca.org), IMO (www.imo.org), and ARPEL (www.arpel.org).

IOSC is jointly sponsored by: American Petroleum Institute (API), United States Coast Guard (USCG), United States Environmental Protection Agency (USEPA), International Maritime Organization (IMO), Ipieca, United States National Oceanic and Atmospheric Administration (NOAA), United States Bureau of Safety and Environmental Enforcement (BSEE)

Read more - https://arpel.org/media/apps/library/539/files/international_guide_2023_vfinal_2.pdf



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INCIDENT REPORTS

USA: FROM NOAA OR&R INCIDENT RESPONSES FOR NOVEMBER 2023

INCIDENT REPORTS (CONTINUED)

December 18 - Every month, NOAA's Office of Response and Restoration (OR&R)'s Emergency Response Division provides scientific expertise and services to the U.S. Coast Guard (USCG), ranging from producing oil spill trajectories that estimate where a spill may spread; to identifying possible effects on wildlife and fisheries; to estimating how long oil may stay in the environment. We also receive requests to track and model other floating objects, such as log booms or shipping containers that have broken free, whale carcasses, fish die-offs, and algal blooms.



Above: A Clean Gulf Associates response vessel skims crude oil approximately four miles southeast of South Pass, Louisiana, Nov. 17, 2023. Image credit: USCG; courtesy Clean Gulf Associates.

Here is the complete list of November's incidents. Click on the links to find out more:

- [Sheen and Shoreline Oiling](#), Gravesend Bay, Brooklyn, NY
- [Diesel Discharge Near/Into Glacier Creek at Alyeska Resort](#), Girdwood, AK
- [Sporadic Tar Balls on Northern New Jersey Beaches](#); Long Branch, NJ
- [Little Diomed Building Collapse](#); Diomed, AK 99762, USA
- [Spill of #6 Oil at IMTT Pier](#); Bayonne, NJ Navy Aircraft in Kaneohe Bay; Oahu, Hawaii
- [Tug Releasing Residual Sheen](#); Orcas Island, WA
- [Fishing Vessel Aground](#); Pleasant Beach, NJ
- [Pipeline Release](#): Main Pass, LA
- [Tug and Barge Collide with Pipeline on Columbia River](#); Clatskanie, OR
- [M/V American Courage - St Clair River](#), Marine City, MI
- [Release on Oil Platform, Main Pass Block 35](#); Buras-Triumph, LA
- [Iced-in Barges in Lake Johnson](#); Nunapitchuk, AK

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/>

TAIWAN CHINA RESCUES CREW AND WORKS TO CONTAIN OIL LEAK FROM GROUNDING CARGO SHIP



Above: Taiwan works to contain an oil spill from a grounded cargo ship (photo courtesy of Ocean Affairs Council)

December 18 - Taiwan rescued nine crewmembers from a small general cargo ship that was driven up on shore after losing power during a strong storm. While the crewmembers from Myanmar are safely on shore, the Taiwan Coast Guard and Ocean Conservation Administration are now working to contain a spreading oil spill.

The Ocean Conservation Administration is working to contain the spill which has already covered 300 meters of the shoreline. They are placing booms and using absorbing rags to clean up the oil from the coastal reef. The Maritime Executive / [Read more](#)

DENMARK & NORWAY: 46 CONTAINERS LOST OFF NORTHERN JUTLAND COAST

December 23 - Container ship Mayview Maersk lost 46 containers off northern Jutland Coast in Skagerrak early in the morning dec 22, while en route from Bremerhaven to Gdansk. several containers have been already washed ashore, some damaged, with goods scattered along coastline. the ship continued voyage, after making a wide loop in Kattegat, probably in order to stabilize container on board. maersk said containers were lost due to rough weather. Maritime Bulletin / <https://www.maritimebulletin.net/>

December 23 - There are widespread reports of debris washing up on beaches along the northern part of Denmark's North Sea shoreline after a Maersk containership lost boxes overboard. The shipping line is confirming that it learned of the incident early on Friday, December 22, and will be investigating the extent of the damage. The Maritime Executive / [Read more](#)

December 27 - Maersk is ready to foot bill for cleanup after lost containers wash ashore. Nynne Scheuer, environmental manager of Maersk's fleet, says in a written response that the shipping company is taking the situation very seriously and assumes responsibility for the cleanup. On Monday, Maersk sent out a salvage vessel to try to locate containers on the beaches and at sea for later salvage. However, the windy weather has made things difficult for the vessel, the firm reports. Shipping Watch / [Read more](#)

INDIA: IRAN STRIKES TANKER 200 NM OFF INDIA AS ATTACKS FROM YEMEN RESUME

December 23 - The Indian Navy and Coast Guard are assisting a tanker 200 miles offshore after it was hit by a drone launched from Iran on Saturday morning, December 23. Analysts are raising concerns because of the distance from shore in an area where the attack took place. It also came as the Houthis in Yemen resumed targeting tankers in the area near the Bab al-Mandab Strait on Saturday after a few days lull in their activity. The Maritime Executive / [Read more](#)

December 25 - Damage Photos: Tanker Attacked by Iran Arrives in India - The Indian Navy released photos showing the damage to the chemical tanker Chem Pluto which was stuck on Saturday by an attack that the United States said was launched with a one-way

INCIDENT REPORTS (CONTINUED)

attack drone from Iran. The vessel was approximately 200 miles off the coast of India in the Arabian Sea at the time it was hit and reported a fire which the crew was able to extinguish. The Maritime Executive / [Read more](#)

VENEZUELA: OIL SPILL BLACKENS PART OF VENEZUELA'S WESTERN COAST

December 28 - An oil spill is sloshing tarry ooze onto beaches in the state of Carabobo along Venezuela's western coastline, several environmental groups said on Wednesday. The spill was first detected on Tuesday, Yohan Flores, a regional director of the Azul Ambientalistas NGO, told AFP. "A large part of the beaches of Puerto Cabello are affected," he said, referring to the country's largest port 210 kilometers (130 miles) west of the capital Caracas. State oil giant PDVSA has not addressed the spill even as NGOs such as the Caribe Sur Foundation say it originated at a waste lagoon near the El Palito refinery, one of the most important in Venezuela.

December 28 - Unaddressed Oil Spill Threatens Venezuela's Carabobo State - Venezuela's picturesque Carabobo state, known for its pristine beaches, is now grappling with an environmental crisis as an oil spill spreads a sticky, tarry substance across its shores. The spill, detected earlier this week, is reportedly originating from a waste lagoon near the El Palito refinery, which is operated by the state-owned oil giant, Petróleos de Venezuela, S.A. (PDVSA). Despite the growing environmental concerns, PDVSA has remained silent on the issue, neither acknowledging the spill nor initiating cleanup efforts. BNN / [Read more](#)

December 29 - Venezuela oil giant says 80 percent of oil spill cleaned up - Venezuela's state oil company said Thursday that an oil spill at a refinery on the country's western coastline was no longer "active" and that more than 80 percent of the affected area had been cleaned up. Wednesday's spill at the El Palito facility in the northwestern state of Carabobo occurred when heavy rainfall caused fluids to overflow from lagoons at the site, PDVSA said on social media platform X. Menafn / [Read more](#)

December 29 – Report received from Carlos Sagra, ISCO representative for Latin America



With the Essequibo conflict latent between Guyana and Venezuela, with the presence of a United Kingdom warship and Venezuelan military maneuvers on the border which have surely served to distract attention, once again and on festive dates, a spill incident of significant scale occurs due to its environmental impacts at the facilities of PDVSA's El Palito Refinery, in Puerto Cabello, in the State of Carabobo on the central coast of Venezuela. According to the initial information from the NGOs that reported the incident, which occurred on December 26, the reason could be the overflow of the oxidation lagoon (production waste, crude oil and contaminated water) of the El Palito Refinery, due to intense rains, although the photos that have been published of the contaminated beaches surrounding the Refinery and the thickness of the stain in the water leave room for doubts about other possible causes. The PDVSA company reported for its part that they were working on cleaning the contaminated areas, which was confirmed with local photos that showed personnel working only with buckets, which did not seem very efficient and was quickly criticized by social media. The companies also pointed out that they had already completed 80% of the cleaning, which cannot be seen in the images circulating on networks not controlled by Government censorship. The National Union of Press Workers (SNTP) denounced on the afternoon of Wednesday, December 27, that officials from the Directorate of Military Counterintelligence (DGCIM) prevented journalistic coverage of the oil spill at the El Palito refinery. This same El Palito Refinery had a memorable spill in August 2020 with multiple environmental and socio-economic consequences that affected the entire region (<https://www.bbc.com/mundo/noticias-america-latina-53779454>). Photos and Spanish links from Venezuelan NGOs and regional press on the subject are attached.

<https://www.elmundo.es/internacional/2023/12/28/658caf8ee4d4d80b0e8b45da.html>

<https://efectococuyo.com/la-humanidad/derrame-petrolero-el-palito-consecuencias/>

<https://www.elnacional.com/venezuela/residuos-de-petroleo-de-la-refineria-el-palito-contaminaron-playas-de-puerto-cabello/>

<https://www.bancaynegocios.com/derrame-en-refineria-el-palito-afecta-el-eje-costero-del-estado-carabobo/>

<https://elestimulo.com/medio-ambiente/2023-12-27/el-palito-derrame-de-petroleo-afecta-a-comunidades-vecinas-y-playas/>

<https://talcuadigital.com/aruba-permanece-en-alerta-por-derrame-de-petroleo-en-el-palito/>

<https://mundour.com/2023/12/28/pdvsa-afirma-que-saneamiento-mas-del-80-de-las-costas-afectadas-por-derrame-en-el-palito/>

<https://2001online.com/nacionales/pdvsa-reporta-saneamiento-tras-el-derrame-en-refineria-de-el-palito/>

[With thanks to Carlos Sagra, Hon.ISCO, ISCO Exec. Committee Member & Council Member]

CANADA: ONTARIO - OIL SPILL INVESTIGATED IN LITTLE RIVER

December 29 - The source of an oil spill in east Windsor is under investigation. The City of Windsor and the Ministry of the Environment, Conservation and Parks are trying to determine the source of the oil spill in Little River. City engineer Mark Winterton tells AM800 they became aware of the spill on Dec. 26 and immediately put into effect their protocol of going to the spill and calling in the ministry. "In this case we determined that it was an organic material that was released, like an oil and gas product. So we employed booms across Little River and contained the spill as best we could. We've those employed since. So we're now in the investigation stage to see if we can track where the source is," says Winterton. Windsor CTV News / [Read more](#)

UK: SCOTLAND - SEPA REPORTS 'SMALL' OIL SPILL OFF ARGYLL AND BUTE

January 3 - The Scottish Environmental Protection Agency (SEPA) has reported a "small quantity of crude oil surfacing" in the area near Petroineos' Finnart oil terminal. The spill was brought to the attention of SEPA by Petroineos and the environmental protection agency is working with the Finnart Ocean Terminal incident response team. SEPA says that the oil is surfacing from an underground pipeline near Argyll and Bute and the agency is currently coordinating a multi-agency response. Energy Voice / [Read more](#)

PHILIPPINES: DAVAO OIL SPILL PROBE UNDERWAY – PCG

January 5 - The Philippine Coast Guard (PCG) is investigating an oil spill off the coast of Davao City. The PCG-Southeastern Mindanao on Wednesday said it cleaned up an estimated 30 liters of oil off Davao Port after receiving a report in the evening of Jan. 2. The PCG-Southeastern Mindanao on Wednesday said it cleaned up an estimated 30 liters of oil off Davao Port after receiving a report in the evening of Jan. 2. CNN News / [Read more](#)

RED SEA & GULF OF ADEN: UPDATE ON VESSEL ATTACKS

January 5 - Attacks by Houthi forces have continued over the Christmas period and into the New Year. Two major attacks occurred on containerships which have been prolonged and involved multiple types of munitions. In another incident, the US sank three skiffs, killing those on board, during an attack on another containership.

Since the start of the crisis, at least 25 specific attacks on ships have occurred. Munitions have included ballistic anti-ship missiles, conventional anti-ship missiles, small arms fire from skiffs, and drones, both aerial and water borne. The naval forces have intercepted the majority of the munitions and skiffs. The Houthis continue to state that they are only targeting Israeli-linked ships. However, the links have been non-existent in many of the attacks and even if there were links, such attacks against innocent seafarers carrying the world's trade are completely unjustified.

Military forces have been deployed in relatively large numbers. The US/UK-led Operation Prosperity Guardian aims to deter attacks through presence – and contains forces from 10 nations with warships from the US and UK. France, Spain, Italy, Republic of Korea, China and India have all deployed naval forces into the region. The naval forces of several nations have also undertaken close escorting of their own nationals' merchant ships on an ad-hoc basis.

The UN Security Council was addressed by the IMO Secretary General on 3 January and was informed of the latest developments. The Council members unanimously condemned the attacks and the continued holding of the Galaxy Leader. Related to this was a wider group of countries that similarly condemned the attacks and called on the Houthis to stop further attacks or face the consequences. INTERTANKO / [Read more](#)

NORWAY: UPDATE ON NOVEMBER 2023 ALVHEIM FPSO OIL SPILL

January 6 - "Oil spill response effective at Alvheim FPSO, says Aker BP. Aker BP has issued details of how it responded to an oil spill.

Aker BP has issued details of how it responded to an oil spill at the Alvheim field in the Norwegian North Sea at the end of November.

During a production re-start on the Alvheim FPSO following an unplanned shutdown, with one well online, an estimated 51 cu m of oil were discharged through the produced water outlet. The company responded by closing all necessary valves immediately to stop the flow and mobilized its emergency response organization alongside the Norwegian Clean Seas Association for Operating Companies (NOFO) and the Norwegian Coastal Administration (NCA) to deal with the oil on the sea surface.

NOFO and the NCA opted to implement a technique known as mechanical degradation, which involved the standby vessel Esvagt Stavanger mixing the oil down into the water column until it dissolved. Satellite and aerial surveillance measures also took place, in addition to the standby vessel's oil radar.

According to Aker BP, the response was effective with the size of the oil slick significantly reduced by the following day. That led the NCA, in consultation with NOFO and Aker BP, to end the operation on December 1. By that point no oil was visible on the sea surface either in satellite images or via flyovers, and no harm was found to have been caused to birds or marine life in the area. "Our co-operation with NOFO and the Norwegian Coastal Administration shows that the Norwegian shelf has sound and effective oil spill preparedness in place, should the need arise," said Marit Blaasmo, Aker BP's Senior Vice President—People & Safety.

Source - Offshore Magazine / <https://www.offshore-mag.com/regional-reports/north-sea-europe/article/14303179/oil-spill-response-effective-at-alvheim-fpso-says-aker-bp> [Just received – Thanks to Daniel F. Sheehan. P.E., Hon.FISCO]

HISTORY

NEW ZEALAND: MARITIME NZ MARKS DECADE SINCE RENA GROUNDING, OIL SPILL

Maritime NZ Marks Decade Since Rena Grounding, Oil Spill - It is almost ten years since the Liberian-flagged MV Rena hit Ōtāiti - Astrolabe Reef, off the Bay of Plenty coast in the early hours of 5 October 2011.

"The Rena response was unprecedented in its scale and complexity and we are better prepared for future events as a result of what we learned," said Kirstie Hewlett, Director of Maritime NZ.

Rena was carrying 1,700 tonnes of heavy fuel oil and 1,368 containers on board at the time of grounding. Over the following few days and weeks, an estimated 350 tonnes of oil spilled into the sea and many containers washed overboard.

Over time, the vessel broke up and significant debris was released into the ocean.

Response efforts, led by Maritime NZ, focused on cleaning up the oil and debris that had reached the beach, while a team of salvors worked to remove the oil and containers remaining on the ship. Over the following months and years, a complex salvage and environmental remediation operation was undertaken, with the majority of the vessel removed and an extensive clean-up of the affected environment.

While the incident response from Maritime NZ was immediate and comprehensive, an independent review found areas for development to create resilience for any future events. Over the past decade, Maritime NZ has made a number of improvements to its preparedness for major maritime incidents. Mirage News / [Read more](#)

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