

ISSUE 881 20 MARCH 2023

~

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 International Oil Pollution Compensation Funds

ISCO EXECUTIVE COMMITTEE

President, Secretary-General & Vice-Presidents

- Acting President Interim Executive (IE)
- Mr Neil Marson, Secretary General (UK)
- Mr John McMurtrie, VP and Editor (UK)
- Ms Mary Ann Dalgleish, VP M'ship (USA)

Secretariat (Core Management Team) Individuals marked with * are members of IE

 Mr Neil Marson * 	(UK)
 Mr John McMurtrie* 	(UK)
 Ms Mary Ann Dalgleish * 	(USA)
 Captain Bill Boyle 	(UK)
• Mr John Wardrop *	(Australia)
• Mr Marc Shaye	(USA)
Mr Michael Watson	(UK)

Other Executive Committee Members

• Mr Kerem Kemerli	(Turkiye
• Mr Dan Sheehan	(USA)
Mr Matthew Sommerville	(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

COUNCIL (NATIONAL REPRESENTATIVES)

(Australia)

(Canada)

(India)

(Israel)

(Kenya)

(Panama)

(UAE)

(USA)

(Brazil)

(Turkiye)

(Azerbaijan)

(Netherlands)

(South Africa)

•	WIT J	ohn W	ardrop	
•	Mr E	lkhan	Mame	lov

- Dr Merv Fingas
- Captain D. C. Sekhar
- Major Ben Benny
- Mr Sanjay Gandhi
- Mr Dennis van der Veen
- Mr Carlos Sagrera
- Mrs Fatima B. Shaik
- Dr Ali Saeed Al Ameri
- Dr Timothy Gunter
- Mr Flavio P. de Andrade
- Mr Kerem Kemerli

HEADLINE INTERNATIONAL NEWS

PLEASE CLICK ON THE BANNERS BELOW FOR MORE INFORMATION



UN RE-LAUNCHES CROWDFUNDING CAMPAIGN FOR FSO SAFER OIL REMOVAL OPERATION

16 - 18 May 2023 Opatija, Croati

March 10 - With yesterday's news that the United Nations has secured the purchase of an oil tanker to receive oil from the decaying FSO Safer in the Red Sea, the UN is relaunching a crowdfunding campaign to fill budget gaps to complete the safe removal of oil from the vessel.

The replacement vessel is now in drydock for modifications and regular maintenance before setting sail to the FSO Safer, which is moored approximately nine kilometers off Yemen's Ras Isa peninsula. The operation is scheduled to kick off in early May.

The UNDP, which is implementing the operation as part of the UN-led initiative, has contracted marine salvage company SMIT to safely remove the oil and prepare the Safer for towing to a scrapping yard.

"We must accept that this is a very challenging and complex operation. UNDP is working around the clock with experts from UN sister agencies including IMO, WFP and UNEP among others as well as international consultancies on maritime law, insurance and environmental impact to ensure that we are deploying the best possible expertise to successfully complete this operation," added Steiner.

Although the project has received significant international support, high demand for suitable vessels to undertake the operation and spiraling costs attributed to the war in Ukraine means more funds are still required to complete the emergency phase of the plan.

"UNDP's purchase of the vessel is indeed a major step, made possible by the generosity of donors, the private sector and global citizens. The parties to the conflict continue to endorse the plan. Now we are into the operational phase and hopeful the oil will be removed from the Safer within the next three to four months. But we still urgently need funding to implement the plan and prevent disaster," said Sana'a, David Gressly, the UN Resident and Humanitarian Coordinator for Yemen, who has led on UN system-wide efforts on the *Safer* since September 2021. gCaptain/<u>Read more</u>

More about the plan and crowdfunding campaign, along with how to donate, can be found here: <u>https://fundraise.unfoundation.org/give/412602/#!/donation/checkout</u>

THE NEWSLETTER OF THE INTERNATIONAL SPILL RESPONSE COMMUNITY

info@spillcontrol.org | www.spillcontrol.org

ISCO AMBASSADORS

(Members with special responsibilities in specified geographical areas) Carlos Sagrera Latin America (Spanish speaking) Matthew Sommerville UK London LIK London & South'ton John Noble Wu Yue China

MEMBERSHIP OF ISCO

DISCUSSION GROUP ON LINKED-IN

Linked in

FACEBOOK GROUP Click on the link https://www.facebook.com/groups/3885283 12842431

WHATSAPP GROUP FOR STUDENTS, TRAINEES & APPRENTICES

Here is the link for joining this group https://chat.whatsapp.com/KMxdW7lEal79namyNlbVqq

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 gualifications. You can apply for MEMBERSHIP (MISCO) or FELLOWSHIP

(FISCO) About Professional Membership Professional Membership Application Form



Clic here to contact us

for more information

Benefits of Membership

Online Membership Application Form

YOU ARE INVITED TO JOIN THE ISCO

Click on the link below –

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

INTERNATIONAL AND REGIONAL NEWS

PROGRESS MADE ON GLOBAL AGREEMENT ON CHEMICAL AND WASTE MANAGEMENT

March 3 - Governments, industry, civil society organizations and chemical experts from across the world moved closer to a global agreement to better manage chemicals and waste and protect the environment and human health, especially that of vulnerable populations.

In a second round of talks in Nairobi, which concluded on 3 March, the role of youth, women, Indigenous peoples and local communities in chemical and waste management was strengthened to ensure that all voices will be heard, and no one will be left behind. Goals and guiding principles of the new chemicals and waste management framework were agreed to, and essential targets related to sustainable production and use of chemicals were refined. Stakeholders also agreed that science-based decision making should be foregrounded in the implementation of the future instrument. UNEP / Read more

OSPAR WELCOMES NEW GLOBAL AGREEMENT TO PROTECT MARINE BIODIVERSITY IN AREAS BEYOND NATIONAL JURISDICTION

March 4 - Today, Saturday 4 March at 2200 EST, the United Nations concluded the text of a new global agreement (Biodiversity Beyond National Jurisdiction (BBNJ) Agreement) that will provide stronger protection of marine biodiversity in the High Seas. The OSPAR Commission's 16 Contracting Parties welcome this historic moment and look forward to working with other international instruments, frameworks and bodies to deliver the objectives of the new Treaty. **OSPAR / Read more**

SUPPORTING DEVELOPING COUNTRIES IN AFRICA ON THE LONDON PROTOCOL

March 14 - Senior maritime and environmental officials from eight countries* in Africa have met in Morocco to discuss the benefits of ratifying and implementing the London Protocol (LP) for the protection of the marine environment from pollution.

Through a series of presentations, group discussions and case studies the inperson regional workshop, held in Casablanca (8-10 March), addressed the need to strengthen the capacity of North and West African Small Island Developing States (SIDS) and Least Developed Countries (LDCs) to enable implementation. Development of national systems for monitoring, assessment, compliance and enforcement were also discussed. IMO / Read more

MT PRINCESS EMPRESS – IOPC FUNDS CONTINUE TO MONITOR DEVELOPMENTS

March 16 - The IOPC Funds continues to follow developments in the incident currently affecting the Philippines, involving the tanker MT Princess Empress, and is in close contact with the ship's insurer and experts on site.

The Philippines is a Party to the 1992 Fund Convention. However, it is too early to determine whether the Convention would apply to this incident at this stage. The IOPC Funds will continue to liaise with key stakeholders, to monitor developments closely and will respond accordingly. It will report to the upcoming session of the 1992 Fund Executive Committee in May. IOPC Funds / Read more

ISCO NEWS

2

EARLIER RETIREMENT OF MR NEIL MARSON

At our recent 2022 AGM it was announced that Neil Marson would not be standing for re-election to the position of ISCO Secretary-General at the next



ISCO NEWS (CONTINUED)

AGM later this year.

As some of you maybe aware, Neil has not been enjoying good health in recent months. We are sorry to have to tell you that we have heard from Neil that his health has not improved and that, as a consequence, he wishes to retire with effect from 31st March 2023.

Neil is undergoing medical treatment and all at ISCO wish him the very best.

MEMBERSHIP NEWS

Awards of Hon.FISCO at ISCO's 2022 AGM

Mary Ann Dalgleish in recognition of her work over many years in ISCO's Membership Management. Carlos Sagrera in recognition of his work in promoting the work of ISCO in the Latin American Region John Wardrop in recognition of the very substantial amount of work done by him in the upgrading of ISCO's Management System. Neil Marson in recognition of his services as ISCO Secretary-General

ISCO welcomes recently joined new Corporate Members

InterOcean Systems LLC - Based in San Diego, California, USA V. J. Engineering Solutions – Based in Mahalaxmi Nagar, India emTek Canada Inc. – Based in Quebec, Canada

ISCO welcomes recently joined new Individual Members

Darko Domovic (Croatia) Dr Lariissa Montas (USA) Felix Chinwemdu Uzoanya (Nigeria) Dr Scott Pegau (USA)

ISCO welcomes recently joined new Student Members

Jesus Baca (USA) Sam Watson (USA) Daphne White (USA) Marissa Valle (USA) Nin Gan (USA) Miss Eleanor TenBrink (USA) Miss Acadia Tamez (USA) Jared Torres (USA) Ms) L

Ms Laurel Weeks (USA Austin Fuentes (USA) Nathan Nguyen (USA) Ms Mckenna Reinsch (USA) Miss Nikki de Vries (USA) Ms LaNiya James (USA) Nurdaulet Temir (Kazakhstan) Fadi Khagag (Kazakhstan)

CHANGES AFFECTING ADVERTISING IN THE ISCO NEWSLETTER

Relevant campaigns having ended, this will be the last appearance of the small advertisements appearing on the left hand side of Pages 2 and 3 of this newsletter.

In the past the small size of these advertisements has posed problems because in some cases the text content has sometimes been too small to be easily read. Prospective advertisers who only want to have small advertisement are now recommended to select the quarter page options. These will have more impact and allow a larger typeface for display of text.

Larger size advert options are also available and generous discounts are available for multiple entries and longer campaign periods, for example, 3 months, 6 months or annual contracts.

Every advertisement is hyperlinked with a one click link that will automatically open your website or display additional promotional material of your choice. The words "CLICK HERE" chould be included prominently within an advertisement but actually a reader can click anywhere on the advertisement to download and view the hyperlinked content.

Advertising revenue makes an important contribution to ISCO, helping to fund our work and ensure the continued publication of this newsletter.

Because adverts in the ISCO newsletter are viewed by such a highly targeted audience they are a very cost-effective way to remind potential customers about the response capabilities, specialisd equipment, consultancy and training that you provide.

For more information please contact spillcontrol@mwadigital.com



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.

What is the ISCO Newsletter?

P P Full Fage Advert - 188eer with by 188eer date Full Fage Advert - 188eer with by 188eer date

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.

Information culled from Websites of National Environmental Agencies or contributed by oher organisations and members.

AUSTRALIA RAMPS UP GREENWASHING PRESSURE WITH COURT ACTION AND PENALTIES

March 6 - A flurry of activity has seen the country's corporate regulator, ASIC, launch legal action while the consumer watchdog, the ACCC, announced a wave of investigations and the UN Global Compact Network Australia (UNGCNA) added a host of heavyweight leaders from across corporate responsibility, sustainable supply chains, and marketing and diversity to its board. The Drum / <u>Read more</u>

CANADA: 'IMMINENT THREAT': PLANS TO MINE THE BOTTOM OF THE OCEAN RAISE CONCERNS AS CANADA ANNOUNCES MORATORIUM

February 9 - Underwater mining to make batteries could create 'a massive deadzone' on the ocean floor. Canada has issued a temporary domestic ban — but regulating international waters is trickier. The Narwhal / <u>Read more</u>

FRANCE: EMERGENCY RESPONSE REPORT FROM CEDRE

- Mission in Digoin (Saône-et-Loire), following a request by a maritime and river expert organisation, to provide advice on pollution response in the aftermath of a fire involving several barges on the Canal du Centre;
- Request for technical advice from a ship repair yard in relation to pollution in a dry dock;
- Several telephone conversations with the local authorities to provide over-the-phone support after plastic pellets were washed up on the shoreline in Seine-Maritime;
- A leak of hydraulic oil, reported by MRCC Med, caused by damage to a dredging vessel and request for over-the-phone advice following the observation of a possible slick;
- Various discussions with the French Navy's Operational Centre in Brest (Centre Opérationnel de la Marine de Brest) as well as with the Finistère fire and rescue service (CODIS 29) and Penmarc'h townhall in relation to a yellow-coloured matter on the shoreline in Penmarc'h (Finistère). This turned out to be a biological phenomenon;
- Call from OCLAESP for advice following a calamine release in the marine environment;
- Call from the Compagnie Fluviale de Transport for technical advice after a barge transporting a chemical collided with a bridge in Triel-sur-Seine (Yvelines);
- Call from Portugal as part of a MAR-ICE exercise (in preparation for the MODEX workshop, involving 7 chemicals and requiring behaviour and drift modelling for one of them;
- Strandings of plastic pellets on the shoreline reported by the Côte d'Opale Marine Nature Park;
- Request for advice from MRCC Jobourg based on photos and drift modelling after a pleasure boater spotted brown-coloured trails off Calais (Pas-de-Calais). <u>Read more in the Cedre February 2023 Newsletter</u>

FRANCE: VISIT FROM THE DIRECTOR OF MOIG (MEDITERRANEAN OIL INDUSTRY GROUP)



Mr Houcine Mejri, Director of MOIG, came to Brest on 8 February to discuss future collaboration with Cedre's management team. This visit was the opportunity to review the 6 training courses run by Cedre for MOIG members since 2016, based on the training materials developed as part of the DG-ECHO-funded European POSOW projects, and to confirm the continuation of this training cycle in 2024. Practical training with real oil will be organised at Cedre's facilities to offer hands-on application of the theory learnt during previous courses. <u>Read more in the Cedre February 2023 Newsletter</u>

PHILIPPINES: ICM AS A PLATFORM FOR OIL SPILL CONTINGENCY PLANNING AT THE LOCAL LEVEL

March 13 - Oriental Mindoro, a coastal province in the Philippines, harbors critical nearshore habitats, such as coral reefs,

NEWS REPORTS FROM AROUND THE WORLD (CONTINUED

mangroves and seagrass beds. These habitats serve not only as reservoirs of biodiversity, but provide a major source of livelihood for the coastal communities of the province. The sustainable health of these habitats is thus interwoven into the long-term well-being of the province.

Oriental Mindoro has been implementing Integrated Coastal Management (ICM) for almost two decades. In 2004, the province adopted a Coastal Marine and Inland Water Resources Management Code, as mandated by Provincial Ordinance 004 Series of 2004, that provides guidelines for the sustainable use of the coastal and fisheries resources. In addition, the Integrated Coastal Area Management Plan (ICAMP) of the province covering 2010-2015 and 2016-2020 were adopted as frameworks for the integrated management of the land and sea based on the "ridge to reef" approach. PEMSEA / <u>Read more</u>

USA: LATEST NEWS FROM NOAA OR&R

March 13 - Please click on the links below to download and read the latest news from NOAA OR&R

Response Community Briefs County Officials on the F/V Aleutian Isle Response

On March 2, 2023, members of the response community had the opportunity to brief the San Juan Island Council Members on the challenges and successes from the F/V Aleutian Isle response at the Council Chambers on San Juan Island, Washington.

NOAA Presents on North American Coordination to Combat Marine Debris at Collaborative Workshop in Mexico City

On March 1, the Office of the United States Trade Representative (USTR) and the government of Mexico's Secretaría de Medio Ambiente y Recursos Naturales hosted a two-day workshop "Mitigation of Marine Litter and Ghost Nets in Mexico: Building Awareness of Efforts" in Mexico City, Mexico.

Presentation Highlights Marine Debris Response and Planning in the Pacific

Last month, staff from NOAA's Marine Debris Program, within the Office of Response and Restoration, presented to a tour group from the Pacific branch of the Center for Excellence in Disaster



Management and Humanitarian Assistance (CFE-DM)(link is external). CFE-DM is a U.S. Department of Defense organization that builds crisis response capacity and enhances coordination and collaboration with civilian and foreign partners.

PEOPLE IN THE NEWS

MORTEN AXEL PETERSEN APPOINTED GROUP CFO AT DESMI



As of 1st June 2023, Morten Axel Petersen will join the DESMI Group as Group CFO. Morten is an experienced Senior Executive and CFO. His experiences include, among others, CFO roles in both private equity owned and publicly listed companies. From 2012 to 2019, Morten Axel Petersen worked with the private equity owned Bladt Industries as Group Chief Finance & Strategy Officer and since 2019 until 31st May 2023, Morten is the CFO of RTX A/S, publicly listed on Nasdaq Copenhagen. Morten Axel Petersen started his career as a management consultant with BCG (Boston Consulting Group).

Having followed DESMI from the outside for some time, Morten appreciates the successful development of the Group for many years and is excited by the future organic and acquisitive growth strategy by One Equity Partners, the new owners of DESMI since

October 2022. Morten looks forward to taking on the opportunity to be part of further shaping and executing the future strategy of DESMI.Morten Axel Petersen is replacing Jan Thaarup who joined DESMI as CFO in 2001 and has been a shareholder since 2003. As One Equity Partners entered into agreements to acquire the majority stake in DESMI in 2022, Jan Thaarup informed the owners and his management colleagues that he found this milestone in DESMI's history and the time appropriate to dedicate his efforts to other business interests. However, Jan is still holding a minority (25%) stake in DESMI, together with Henrik Sørensen, former CEO and owner of DESMI. Jan Thaarup will also continue his relation to DESMI as member of the Board of Directors. DESMI / <u>Read more</u>

PEOPLE IN THE NEWS (CONTINUED)

UK: PHILIP DUFFY APPOINTED NEW ENVIRONMENT AGENCY CHIEF EXECUTIVE

The Environment Agency has appointed HM Treasury director general Philip Duffy as its new chief executive.

Duffy will start at the EA in July, where he will succeed current chief exec Sir James Bevan at the helm of the organisation's Horizon House headquarters in Bristol.

Bevan is due to step down as chief executive at the end of this month. EA executive director for local operations John Curtin will be interim chief exec until July.

Duffy joined the Treasury in 2017 after serving as chief operating officer of Border Force. He is currently DG for growth and productivity, leading the Treasury's work on the opvironment transport, productivity, business support of



Treasury's work on the environment, transport, productivity, business support and culture. CSW / Read more

NEWS FROM ISCO MEMBERS

Corporate Members of ISCO can by 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. If you have some news you would like to share with readers of the ISCO Newsletter, send it to <u>John.McMurtrie@spillcontrol.org</u>

BALAENA: 2023 TEST RESULTS UPDATE FROM OHMSETT



INDUCED FLOW AUTOMATED COLLECTION SYSTEM - This year's testing results show our best performance yet. Check out the video below to see our deployable skimmer collect emulsified oil.

This system can be used from a trailer or barge and includes a skid with all the equipment necessary to function autonomous and delivers the same oil to water ratio on recovered product.

This year's Ohmsett testing resulted in an overall recovery of 314 gpm with an oil to water ratio of 99%.

FOR THE FIRST TIME EVER AT OHMSETT, WE TESTED OUR SYSTEM WITH FLOATING PLASTIC PELLETS.

A special thank you goes out to the entire

Ohmsett team for their support and allowing our vessel to ingest 3mm "nurdles" to demonstrate how we pull them in to our system and recover floating plastics successfully!

Read more and watch the demonstration videos

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.

As per the advice in last week's newsletter the UKAISA nurdle webinar was both nteresting and well-attended. It kicked off with some respose activities that employed oil spill response techniques – corralling and recovery of floating nurdles on the sea surface and deployment of booms to protect sensitive area, such as salt marshes, from nurdle deposition.

Other techniqus for nurdle recovery and separation were discussed such as sieving, suction devices, flotation, beach cleaning combs, flushing techniques for mangrove areas and commonly available civil engineering equipment for accessing buried nurdle deposits – all with reference to advantages, disadvantage, related problems and other aspects including safety, PPE,

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

and personnel management. A recording of this and previous webinars will be available on the UKAISA website.

The next UKAISA Nurdles Webinar will be scheduled next month but in the meantime a programme of equipment testing will be taking place in Southampton. The results should be interesting.

We are still in the early stages of a learning curve and It was evident that no "silver bullet" with universal application has so far been identified. Selection of methodologies will depend very much on things like the type of shoreline, scale of the problem, and availability of areas with high concentrations of nurdle deposits. Another factor will be local availability of labour and potentially useful equipment.

It also must be borne in mind that nurdle clean-ups will often be repetitive operations as successive tides can result in fresh depositions of more nurdles.

In many oil spill situations speed of response can be a critical factor in securing a successful outcome. In the case of nurdles it may be necessary to make a judgement on whether to aim for a rapid removal of as much as possible (possible use of mechanical shovels and tipper trucks) or to choose to use more selective but potentially slower techniques such as sieving, etc. – or to run different response techniques in parallel.

In situations where large amounts of beach material mixed with nurdles need to be processed (possibly at a secure off-site location) there may be options for purpose-designed on-site construction/purchase/hire of more sophisticted processing equipment for separating out nurdles and achieving cleaned beach material that can be returned to shorelines.

In the meantime, it will be useful to look at what information and experience is being garnered by others. Here are some links that may be of interest –

https://wwz.cedre.fr/en/content/download/10963/file/GPI EN.pdf

https://mfame.guru/shippers-asked-to-stop-nurdle-spills/

https://wwz.cedre.fr/Menu-secondaire/A-la-une/Informations-cles-sur-les-Granules-Plastiques-industriels

https://www.tradewindsnews.com/esg/green-seas-what-can-shipping-do-about-its-plastics-pollution-problem-/2-1-1407812 https://www.clu-in.org/conf/itrc/Microplastics/

https://events.teams.microsoft.com/event/36cf961c-e078-4c60-97c0-7fe183fcd24d@f85ec963-c13e-462e-b2c6-050b5adcd61b

Contributors to this post will continue to look for more sources of useful information but have limited time availability. It will therefore be welcome if readers assist and it will be particularly helpful if new information on potentially practical and productive techniques are passed on for sharing and publication.

SCIENCE & TECHNOLOGY

If you are interested in new technology you may 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/

Problems facing recycling of plastics – An interesting article in Chemistry World

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.

65. Effects of chemical dispersants on feathers from Arctic seabirds,

Fritt-Rasmussen, J., Linnebjerg, J.F., Nordam, T., Rigét, F.F., Kristensen, P., Skancke, J., Wegeberg, S., Mosbech, A., Gustavson, K. (2023) Marine Pollution Bulletin, 188, art. no. 114659, DOI: 10.1016/j.marpolbul.2023.114659

ABSTRACT: Chemical dispersion is an oil spill response strategy where dispersants are sprayed onto the oil slick to enhance oil dispersion into the water. However, accidental application could expose seabirds to dispersants, thereby negatively affecting their plumage. To understand the possible impacts on seabirds, feathers from common eider (Somateria mollissima) and thick-billed

RECENT INTERESTING PEER-REVIEWED OIL SPILL PUBLICATIONS (CONTINUED)

murre (Uria lomvia) were exposed to different dosages of the dispersant Dasic Slickgone NS. For all exposure dosages the feathers increased in weight, and mostly for common eider. Analysing the feather microstructure, e.g., the Amalgamation Index, showed that larger damages were found on thick-billed murre than common eider. A no-sinking limit was established at 0.109 ml/m2. Relating this value to desktop simulations of potential sea-surface dosages in real-life situations, and to published accounts of response operations, showed that the limit is likely to be exceeded. Thus, our results show that chemical dispersants in realistic dosages could impact seabirds.

66. 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 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.

67. Effects of microplastics alone or with sorbed oil compounds from the water accommodated fraction of a North Sea crude oil on marine mussels (Mytilus galloprovincialis)

González-Soto, N., Campos, L., Navarro, E., Bilbao, E., Guilhermino, L., Cajaraville, M.P. (2022) Science of the Total Environment, 851, art. no. 157999, DOI: 10.1016/j.scitotenv.2022.157999

ABSTRACT: Microplastics (MPs) can adsorb persistent organic pollutants such as oil hydrocarbons and may facilitate their transfer to organisms (Trojan horse effect). The aim of this study was to examine the effects of a 21 day dietary exposure to polystyrene MPs of 4.5 µm at 1000 particles/mL, alone and with sorbed oil compounds from the water accommodated fraction (WAF) of a naphthenic North Sea crude oil at two dilutions (25 % and 100 %), on marine mussels. An additional group of mussels was exposed to 25 % WAF for comparison. PAHs were accumulated in mussels exposed to WAF but not in those exposed to MPs with sorbed oil compounds from WAF (MPs-WAF), partly due to the low concentration of PAHs in the studied crude oil. Exposure to MPs or to WAF alone altered the activity of enzymes involved in aerobic (isocitrate dehydrogenase) and biotransformation metabolism (glutathione S-transferase). Prevalence of oocyte atresia and volume density of basophilic cells were higher and absorption efficiency lower in mussels exposed to MPs and to WAF than in controls. After 21 days MPs caused DNA damage (Comet assay) in mussel hemocytes. In conclusion, a Trojan horse effect was not observed but both MPs and oil WAF caused an array of deleterious effects on marine mussels at different levels of biological organization.

68. A Review of Restoration Techniques and Outcomes for Rangelands Affected by Oil and Gas Production in North America

Walsh, K.B., Rose, J. (2022) Ecological Restoration, 40 (4), pp. 259-269. DOI: 10.3368/er.40.4.259

ABSTRACT: Rangelands of the American West host over 600,000 oil and gas production sites. Domestic oil and gas extraction expanded during the last two decades, creating restoration needs. This review article synthesizes the growing body of literature on restoring arid and semi-arid rangelands of the U.S. and Canada following oil and gas production, including restoring soils, re-

RECENT INTERESTING PEER-REVIEWED OIL SPILL PUBLICATIONS (CONTINUED)

establishing vegetation, and preventing or mitigating any surface or water contamination. Existing studies reveal that even soils on treated sites are permanently changed by oil and gas production. However, certain in situ treatment techniques result in less bare ground and increased site revegetation on contaminated sites. Various reseeding techniques are effective, and research results promote the use of diverse, native, locally adapted seed, including plant species known to be better suited to specific post-production conditions. Research suggests that less grazing at restoration sites might generate better restoration outcomes than prolonged moderate or heavy grazing during the full season. Open questions remain regarding: 1) techniques for successfully remediating soil after oil and brine spills; 2) the use of cover crops to accelerate recovery of a perennial plant community suitable to the site; and 3) the effects of cattle grazing on restoration outcomes. Resources needed to complete restoration on an extensive scale are also discussed, including economic and labor requirements, as well as potential ecosystem service benefits.

69. Spatial distribution, composition, and source analysis of petroleum pollutants in soil from the Changqing Oilfield, Northwest China

Yuan, L., Wu, Y., Fan, Q., Li, P., Liang, J., Wang, Z., Li, R., Shi, L. (2022) Marine Pollution Bulletin, 185, art. no. 114338, DOI: 10.1016/j.marpolbul.2022.114338

ABSTRACT: Petroleum contamination surrounding oilfields has attracted more concerns. However, the levels, distribution and source of petroleum of Changqing Oilfield soil still remain lots of knowns, which is important for local environmental protection. Given soil contamination issues in Changqiong Oilfield were investigated. The maximum concentrations of total petroleum hydrocarbons (TPHs), N-alkanes (TNAs) and polycyclic aromatic hydrocarbons (PAHs) were determined to be 1960.29, 96.13 and 0.82 mg/kg, respectively. TPHs were higher in the north than the south of the study area. TPHs decreased in the horizontal and vertical distribution as soil depth and distance from oil wells increased. Source analysis showed that TNAs mainly originated from petroleum, PAHs were controlled by petroleum spills, combustion and traffic. Correlation analysis implied that TPHs residues had an effect on soil environmental quality. This study have important implications for understanding the environmental behavior of petroleum and can provide support for petroleum remediation and risk control.

70 Core metabolism plasticity in phytoplankton: Response of Dunaliella tertiolecta to oil exposure

Kamalanathan, M., Mapes, S., Prouse, A., Faulkner, P., Klobusnik, N.H., Hillhouse, J., Hala, D., Quigg, A. (2022) Journal of Phycology, 58 (6), pp. 804-814. DOI: 10.1111/jpy.13286

ABSTRACT: Human alterations to the marine environment such as an oil spill can induce oxidative stress in phytoplankton. Exposure to oil has been shown to be lethal to most phytoplankton species, but some are able to survive and grow at unaffected or reduced growth rates, which appears to be independent of the class and phylum of the phytoplankton and their ability to consume components of oil heterotrophically. The goal of this article is to test the role of core metabolism plasticity in the oil-resisting ability of phytoplankton. Experiments were performed on the oil- resistant chlorophyte, Dunaliella tertiolecta, in control and water accommodated fractions of oil, with and without metabolic inhibitors targeting the core metabolic pathways. We observed that inhibiting pathways such as photosynthetic electron transport (PET) and pentose-phosphate pathway were lethal; however, inhibition of pathways such as mitochondrial electron transport and cyclic electron transport caused growth to be arrested. Pathways such as photorespiration and Kreb's cycle appear to play a critical role in the oil-tolerating ability of D. tertiolecta. Analysis of photo-physiology revealed reduced PET under inhibition of photorespiration but not Kreb's cycle. Further studies showed enhanced flux through Kreb's cycle suggesting increased energy production and photorespiration counteract oxidative stress. Lastly, reduced extracellular carbohydrate secretion under oil exposure indicated carbon and energy conservation, which together with enhanced flux through Kreb's cycle played a major role in the survival of D. tertiolecta under oil exposure by meeting the additional energy demands. Overall, we present data that suggest the role of phenotypic plasticity of multiple core metabolic pathways in accounting for the oxidative stress tolerating ability of certain phytoplankton species.

TRAINING COURSES

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

USEFUL LINKS

- INTERNATIONAL IMO E-LEARNING PLATFORM <u>e-learning platform</u>
- AUSTRALIA AMOSC https://amosc.com.au/training/
- AUSTRALIA & NEW ZEALAND ALGA <u>https://landandgroundwater.com</u>
- CHINA <u>http://www.sioetc.com</u>

TRAINING COURSES (CONTINUED)

- EUROPE <u>https://www.emsa.europa.eu/newsroom/latest-news/item/3609-emsa-training-catalogue-2019.html</u>
- FRANCE CEDRE https://www.cedre.fr/en/content/download/10912/file/CalendrierFormation2023_EN.pdf
- UK & WORLDWIDE OIL SPILL RESPONSE LTD. <u>https://www.oilspillresponse.com/training/courses/</u>
- UK & WORLDWIDE BRIGGS ENVIRONMENTAL SERVICES LTD. <u>https://www.briggsmarine.com/services/training/</u>
- UK NCEC HAZMAT ACADEMY <u>More info</u>
- 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 <u>https://www.ahmpnet.org/events/event_list.asp</u>

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

CERTIFICATE IN MARINE POLLUTION & MANAGEMENT – LLOYD'S MARITIME ACADEMY Online, 12 weeks, Starts 15th March 2023 Visit website for more info

CERTIFICATE IN ALTERNATIVE FUELS - LLOYDS MARITIME ACADEMY

Online, Starting 25 April 2023 Delivered by digital learning over 14 weeks. Visit website for more info

FRANCE: "Combating accidental oil pollution at sea and on the coast"

There are a few places left. Sign up! A few places are still available for the next session of the training "Combating accidental oil pollution at sea and on the coast" which will take place from 3 to 7 April 2023. Do not hesitate any longer and register. This training is delivered to IMO 2 standard. Find all the information about this training in its dedicated sheet. The next session of this training will take place from 05 to 09 June 2023.

USA: Elastec Fall Workshop, New Harmony, Indiana, 3-5 October 2023. More Info

UPCOMING EVENTS

TO VIEW UPCOMING EVENTS CLICK ON <u>HTTPS://SPILLCONTROL.ORG/UPCOMING-EVENTS/</u>

To see <u>ALL</u> 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

MARCH 2023

- FRANCE CEDRE INFORMATION DAY "Spill Response Training, Responses & Challenges" Tuesday 21st March 2023
- WEBINAR FROM ALGA "MICROPLASTICS POLICIES & RESEARCH AROUND THE GLOBE", THURSDAY 23 MARCH, 8.00AM 9.30AM AEDT
- GABON OSRL Technical Forum, 23 March 2023
- WEBINAR from Cedre "Reducing EPS Litter in the N. E. Atlanti", 27th March
- USA OSPR/Chevron- Hybrid Spill Resonse Technology Worklshop. California, 27-30 March
- PERU IOPC Funds National Workshop, 28th March,
- IRELAND UK & Ireland Spill Association Regional Networking Event Belfast, 29th March 2023
- WEBINAR Maritime Solutions- Classification of Pellets as Harmful at Sea, 29th March, 9.30-10.30 am GMT

APRIL 2023 & ONWARDS

- UK & ONLINE IMO, IOPC Funds & Transport Canada, HNS Workshop, 3-4 April 2023
- UK IMO Workshop on 2010 HNS Convention, 3-4 April 2023
- OSRL WEBINAR "SUBSEA RESPONSE READINESS", WEDNESAY 5 APRIL, 1400 GMT
- USA CLEAN WATERWAYS CONFERENCE & EXHIBITION, DENVER CO, 11-13 APRIL 2023
- WEBINAR FROM UK SPILL & IRELAND ASSOCIATION "SUSTAINABLE SPILL RESPONSE", WEDNESDAY 19 APRIL, 1500 BST
- CROATIA ADRIASPILLCON Conference & Exhibition, Opatija, 16-18 May 2023
- CANADA 45th Technical Seminar on Environmental Contamination & Response, Edmonton, Alberta, 4-6 June, 2023
- AUSTRALIA University of NSW, "Bioremediation Symposium", 7th June 2023
- TUNISIA Regional Workshop on Waste Management & Water Treatment, 9-10 May 2023
- FRANCE European Maritime Day, Brest, France, 24-25 May, 2023
- UK: Hazmat 2023 Conference, 24-25 May 2023
- AUSTRALIA Risk Assessment Symposium, Adelaide, 22 June 2023
- USA Elastec Fall Workshop. New Harmony. Indiana, 3-4 October 2023

UPCOMING EVENTS (CONTINUED)

• 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

Details of more webinars from US EPA at <u>https://clu-in.org/techdirect/td022023.htm</u> Australia – April 26 & 27 – PFAS Training & Workshop, University of Technology, Sydney – <u>More info</u> USA: May 8. 2023 - APICOM GM Meeting, Santa Barbara, CA, Location - MSRC's facility at Carpinteria Recordings of past EM OSR Knowledge Transfer Webinar Recordings – <u>Access and Download</u>

MESSAGES FROM EVENT ORGANISERS

USA: COLORADO - CLEAN WATERWAYS 2023, DENVER, 11-13 APRIL, 2023

Clean Waterway takes place at the Hilton Denver City Center Hotel in Denver, CO, on April 11-13. <u>More News re conference & abstract submission</u> <u>Registration</u> <u>Introduction to the Planning Committee</u> <u>EXHIBIT SPACE AND SPONSORSHIPS ARE AVAILABLE</u> Agenda. Updated information received on 8th February Preview the speaker & session officer line-up for clean waterways 2023 <u>View Conference Programme</u>

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 end 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 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 <u>https://adriaspillcon.com/</u>.

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 / <u>Seminar Information</u>

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 avenueto 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/

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 <u>CLEAN GULF</u> <u>Conference & Exhibition</u>. 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.

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

MESSAGES FROM EVENT ORGANISERS (CONTINUED)

convening in New Orleans, Louisiana, May 13 - 16, 2024. The IOSC is looking for technical and policy papers and posters under five general categories: Prepareness, Prevention, Remediation, Response, Restoration. <u>More info</u> You are invited to submit a proposal by April 24, 2023 for either a paper or poster presentation. <u>More info</u>

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

TEXAS GENERAL LAND OFFICE (GLO) – OIL SPILL PREVENTION & RESPONSE DIVISION (OSPR) FUNDING OPPORTUNITY

The GLO OSPR Research & Development Program's Request for Applications has been posted to the GLO website here: https://www.glo.texas.gov/coast/grant-projects/osr/index.html

Applications are managed through SurveyMonkey Apply (SMA). First time SMA users will need to create an account. Navigate to the Oil Spill R&D portal to get started. If you have any questions, contact me at <u>brent.koza@glo.texas.gov</u>. Brent Koza, State Scientific Support Coordinator, Research & Development, Texas General Land Office. [Thanks to Helena Rowland, ISCO Committee]

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 Menbers 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. ISCO depends on regular receipt of updated URL links for listed publications. If these are not received, relevant entries will be discontinued.

NEW PUBLICATIONS

CEDRE NEWSLETTER – FEBRUARY 2023

In February, numerous calls were received relating to pollution, in particular plastic pellets, various meetings were held with our partners to present projects and equipment, and a number of training sessions were organised... Additionally, the study launched in 2021 on litter in the rainwater networks of Brest Métropole was completed and a PhD thesis project, co-supervised by Cedre, on the economics of marine litter got underway. Finally, we had the pleasure of welcoming the Director of the Mediterranean Oil Industry Group (MOIG), Mr Houcine Mejri, to our premises. More details about these events are available in the articles below and on our website www.cedre.fr Download the February Newsletter

SPILLALERT – QUARTERLY NEWSLETTER OF THE UK & IRELAND SPILL ASSOCIATION



This issue contains –

Industry & Members News + Our New Board + ISAS Update + Autumn Conference, Awards & Look Forward + Our Rising Stars + Case Study – "Fuel was washing out of the walls" – LCM Environmental + Case Study – "Nitrate Selective Resin is used to treat Ammonia impacted surface waters" – RSK RAW + Sustainability in Spill Response – An Introduction + Sustainability in Spill Response – Vikoma Case Study + Regional Networking Event – 29 March 2023 – Crowne Plaza, Belfast + Spring Conference – Chem UK Expo 2023 – 11 May 2023 – NEC Birmingham + Case Study "Torquay Marina Super Yacht Fire" – Adler & Allan + Responder Spill Responder Training by Darcy and Compass + UK & Ireland Spill Association Working Groups Report + UK & Ireland Spill Association Event Plan sponsored by Oamps.

Download and read this issue of SpillAlert

JOB VACANCIES

IMO – REMPEC – HEAD OF OFFICE

The Head of Office of the Regional Marine Pollution Emergency Response Centre (REMPEC) for the Mediterranean Sea provides management oversight and functional and policy direction to the work of REMPEC. In this capacity, the Head of Office formulates and implements the substantive work programme of REMPEC, ensures that programmed activities are carried out in a timely fashion and co-ordinates work in the different technical areas both within the office, and with IMO and UNEP/Mediterranean Action Plan Office. Qualified female candidates are particularly encouraged to apply. For more details please visit https://imo-recruit.azurewebsites.net/vacancies/728 or https://imo-net/vacancies/728 or https://imo-net/vacancies/728 or https://imo-net/vacancies/728 or https://imo-net/vacancies/728 or https://spillcontrol.org/job-vacancies/

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 <u>https://www.maritimebulletin.net/</u>

PHILIPPINES: MT PRINCESS EMPRESS OIL SPILL UPDATES

March 13 - Owner of sunken vessel assures oil spill clean-up equipment, program underway. Business World

- March 14 Philippines Increases Efforts to Contain Oil Spill From Sunken Tanker. Insurance Journal
- March 14 Philippines Steps Up Efforts to Contain Oil Leak from Sunken Tanker gCaptain

March 18 - Remote deep-sea vehicle to detect spot of oil tanker Manila Standard

GULF OF SIAM / THAILAND: FSO OFF THAILAND TAKING ON WATER AFTER FATAL EXPLOSION



Damaged FSO down at the stern . Photo courtesy of Royal Thai Navy.

March 16 - The government of Thailand has ordered the Royal Thai Navy and the Department of Transportation to assist to prevent a potentially significant oil spill from a damaged FSO operated by Chevron 129 miles off the coast of the country. The vessel, the Benchamas 2, was rocked by an explosion during routine maintenance and is taking on water at the stern. <u>The Maritime Executive</u>

March 16 - Thai Navy strives to prevent oil spill in Gulf of Thailand - The Thai government has ordered the Royal Thai Navy to join efforts to rescue an oil tanker operated by a unit of Chevron Corp that was damaged earlier this week during a routine maintenance in the Gulf of Thailand.

According to government spokesman Anucha Burapachaisri, the Navy will focus on helping the crew in plugging a leak that has led to water seeping into the hull of the ship, adding that they will also take steps to prevent oil spill as the tanker is carrying 400,000 barrels of crude oil. <u>Vietnam Plus</u>

INCIDENT REPORTS (CONTINUED)

March 17 Mar 17 UPDATE: Understood situation stabilized, AIS is on, salvage equipment delivered on board, salvors trying to pump out water and prevent water leak further into hull, from engine room. FSO is out of work, reducing daily crude production by 13,000 barrels, gas production by 45 mill. cubic feet.

1230 UTC UPDATE: Confirmed it was an explosion, worker died in explosion. 400,000 barrels of oil on board. No power on board after engine room was flooded. Prime Minister alerted, he's monitoring situation, ordering Navy and Ministry of Transport to assist by all means possible. No leak so far, AIS off, salvage and authorities preparing all available assets to prevent and contain possible spill.

Chevron Offshore (Thailand) Ltd issued a report on Mar 13 accident on board of Float Storage Unit FSO BENCHAMAS 2, positioned in Gulf of Siam, which caused the death of one personnel. During repairs of underwater valves in aft part of the vessel, water ingress occurred, flooding sections or section of FSO, followed by aft heavy tilt. <u>www.maritimebulletin.net</u>

USA: MINNESOTA - XCEL ENERGY CLEANING UP RADIOACTIVE LEAK AT MONTICELLO NUCLEAR PLANT

March 16 - The Minnesota Pollution Control Agency and Xcel Energy has confirmed a radioactive leak caused by a broken pipe at a Monticello nuclear plant is being cleaned up, but claim it poses no risk to people or the environment.

The energy regulator confirmed that 400,000 gallons of water containing radioactive tritium leaked from the the nuclear plant at 2807 County Road 75 NE. on November 22, 2022. The leak was found in a water pipe between two buildings. The tainted water has been diverted to an in-plant treatment system until a permanent solution is installed sometime this spring.

Xcel says the contaminated material did not spread beyond its property, or enter local drinking water supplies or the Mississippi River. Bring Me the News

CANADA: ONTARIO - ANOTHER FUEL OIL SPILL DISCOVERED IN JACKSON CREEK IN DOWNTOWN PETERBOROUGH

March 17 - There's been another fuel oil spill at the south end of Jackson Creek where it empties into Little Lake in downtown Peterborough. "City staff and contractors identified the spill this morning, notified the regulator, and responded to the site immediately today," Istchenko wrote. "Clean up will continue through the night, and until resolved. We are working with the Ministry of Environment and will meet again with our environmental consultants tomorrow morning. The permeable reactive barrier has been installed as designed and specified by our environmental specialists; however, we understand that it requires time to work." Kawartha Now

PERU: INDIGENOUS PERUVIANS SEIZE OIL STATION, DEMAND CLEANUP

March 18 - Indigenous Peruvians have occupied an oil pumping station deep in the Amazon and prevented 41 workers from leaving the installation, state-owned oil firm Petroperu said on Friday.

The Indigenous activists are demanding that Petroperu clean up areas damaged by an oil spill decades ago.

The Indigenous activists said in a letter sent to authorities, which AFP saw, that an oil spill around the pumping station 25 years ago caused damage that was never reversed. They said they would block pumping until mitigation work begins. <u>Macau Business</u>

INFORMATION FOR MEMBERS OF ISCO

HAVE YOU ALLOWED YOUR MEMBERSHIP TO LAPSE?

We need your support. 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.