

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 COMMITTEE & COUNCIL

ISCO is managed by an EXECUTIVE Directors

Mr David Usher, President	(USA)
• Mr Matthew Sommerville , Secretary	(UK)
Mr John McMurtrie, VP and Editor	(UK)
Ms Mary Ann Dalgleish, VP M'ship	(USA)

Members

Mr Li Guobin	(China)
M. Jean Claude Sainlos	(France)
Mr Kerem Kemerli	(Turkey)
Mr Marc Shaye	(USA)
Mr Dan Sheehan	(USA)
Captain Bill Boyle	(UK)
A Lard Pater Simon Pickaby	(LIV)

• Dr Ali Saeed Al Ameri

Dr Manik Sardessai

• Mr Kevin Miller

Assisted by COUNCIL	
(National Representatives)	
Mr John Wardrop	(Australia)
Mr Osman Tarzumanov	(Azerbaijan)
• TBA	(Brazil)
Dr Merv Fingas	(Canada)
Captain Davy T. S. Lau	(China)
Mr Darko Domovic	(Croatia)
• Eng. Ashraf Sabet	(Egypt)
Mr Torbjorn Hedrenius	(Estonia)
Mr Pauli Einarsson	(Faroe Islands)
• TBA	(Greece)
Captain D. C. Sekhar	(India)
Major Ben Benny	(Israel)
Mr Sanjay Gandhi	(Kenya)
• Mr Dennis van der Veen	(Netherlands)
Chief Kola Agboke	(Nigeria)
Mr Carlos Sagrera	(Panama)
• TBA	(Singapore)
Mrs Fatima B. Shaik	(South Africa)

(UAE)

(UK)

(USA)

INTERNATIONAL NEWS

KITACK LIM REAPPOINTED IMO CHIEF FOR SECOND TERM



International Maritime Organization secretary-general Kitack Lim is to serve another four years at the helm of the global maritime regulator.

The IMO Assembly approved Mr Lim's reappointment on Wednesday.

Mr Lim, who hails from South Korea and has a seafaring background, will lead the IMO until the end of 2023. His first term began in 2016.

Approval by the assembly was largely a formality, after the IMO Council — the 40member state body that governs the organisation — endorsed Mr Lim for a second term late last year. Lloyds List / Read more

IMO ASSEMBLY ELECTS NEW **40-MEMBER COUNCIL**

The Assembly of the IMO has elected the following States to be Members of its Council for the 2020-2021 biennium:

Category (a) 10 States with the largest interest in providing international shipping services:

China, Greece, Italy, Japan, Norway, Panama, Republic of Korea, Russian Federation, United Kingdom, United States.

Category (b) 10 States with the largest interest in international seaborne trade:

Argentina, Australia, Brazil, Canada, France, Germany, India, the Netherlands, Spain and the United Arab Emirates.

Category (c) 20 States not elected under (a) or (b) above, which have special interests in maritime transport or navigation and whose election to the Council will ensure the representation of all major geographic areas of the world:

Bahamas, Belgium, Chile, Cyprus, Denmark, Egypt, Indonesia, Jamaica, Kenya, Kuwait, Malaysia, Malta, Mexico, Morocco, Peru, the Philippines, Singapore, South Africa, Thailand and Turkey. The Maritime Executive / Read more

MEMBERSHIP OF ISCO

Benefits pf Membership
Online Membership Application Form

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 Student Membership, Associate Membership (AMISCO), MEMBERSHIP (MISCO) or FELLOWSHIP (FISCO)

About Professional Membership
Application Form (Professional Membership)

TO RECEIVE THE FREE ISCO NEWSLETTER

Go to www.spillcontrol.org and enter your name and email address in the Registration Form (located on the right-hand side of the home page) then click on "subscribe"

INTERNATIONAL NEWS (CONTINUED)

BIMCO CO-SPONSORS IMO PROPOSAL TO REVISE GUIDELINES ON PLACES OF REFUGE

December 3 - Together with EU countries and industry organisations — BIMCO has cosponsored a revision on the guidelines on place of refuge for ships in need of assistance to include, among other things, guidelines for situations with more than one nation-state and recommendations for designation of a national competent authority. BIMCO / Read more

COOPERATION FOR HEALTHY MEDITERRANEAN MARINE AND COASTAL ECOSYSTEMS

December 3 – The 21st session of the Conference of the Parties (COP21) to the Barcelona Convention convenes this week to take stock of progress in achieving Good Environmental Status in the Mediterranean in the context of sustainable development. The meeting will not only provide the system with a clear mandate for a new Medium-Term (2022-2027) Strategy, but also push the boundaries on a number of crucial sustainability-oriented commitments that, if fulfilled, would bolster the region's endeavor to achieve the 2030 Agenda. COP21 will address, at the highest levels, the issues of marine litter, marine protected areas (MPAs), climate change resilience and the blue economy.

The civilizations of Southern Europe, Western Asia, and Northern Africa have prospered around the Mediterranean Sea, a shared resource that has linked the region's diverse cultures and underpinned their economic development. But this prosperity has also led to problems. Stressors such as pollution, single-use plastics, climate change and the unsustainable use of marine resources threaten the health of this ecosystem and the people who depend on it.

This is why, for the last four decades, the Mediterranean Action Plan of the UN Environment Programme (UNEP/MAP) has supported the 21 countries [1] of the Mediterranean Sea and the European Union to forge a better path forward through the implementation of the Barcelona Convention and its Protocols. Under the auspices of UNEP, the Contracting Parties to the Barcelona Convention have adopted legally binding measures and strategic commitments to address anthropogenic threats to the Sea and its coastal regions and to capitalize on opportunities for sustainable development in the region.

Since their adoption in 1975 and 1976 the MAP and the Barcelona Convention, respectively, have evolved into an <u>example of regional</u> action and a gateway to greater environmental governance and sustainable development aligned to the outcomes of the 1992 Rio Earth Summit and, with the guidance of the Mediterranean Commission on Sustainable Development (MCSD), the 2030 Agenda for Sustainable Development.

In the framework of MAP/Barcelona Convention, the Mediterranean countries are agreeing to standards and laying pathways to decouple growth from environmental degradation. With its Mediterranean Trust Fund and other support from the European Union, the GEF and other bilateral and multilateral cooperation mechanisms, the MAP/Barcelona Convention is supporting a green transition by fostering political commitment at the highest echelons, and by building awareness — at all levels and across all sectors — of the resources, technology and know-how needed for countries to set the policies that engender sustainable development.

The UNEP/MAP Programme for the Assessment and Control of Marine Pollution in the Mediterranean (MED POL) and thesix Regional Activity Centres (RACs) have supported the design, adoption and implementation of the Convention's seven Protocols addressing: (1) dumping, (2) pollution from ships, (3) land-based pollution, (4) biodiversity and protected areas, (5) pollution from exploration and exploitation off-shore, (6) hazardous wastes, and most recently, (7) integrated coastal zone management (ICZM).

[1] Albania, Algeria, Bosnia-Herzegovina, Cyprus, Croatia, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Morocco, Monaco, Montenegro, Slovenia, Spain, Syria, Tunisia, Turkey and the European Union.

SDG Knowledge Hub / Continue reading this article

ADRIATIC REGION: FULL SCALE EXERCISE NAMIRG 2019



November 25 - Croatian Ministry of Sea, Transport and Infrastructure, together with Istria County Fire brigade, organized a two-day event in Pula, from 21 – 22 November 2019. The meeting dedicated to "Protecting the marine environment from accidental oil spills from ships" was held on November 21st, while the exercise, which is a part of the EU funded project "North Adriatic Maritime Incident Response Group", took place the next day.

The meeting included presentations from those involved in oil spill from Fidelity ship that

happened in Raša bay in June 2018, and a panel discussion on the "Challenges in the implementation of response measures in case of accidental oil spills", which was moderated by ATRAC's director Vedran Martinić. ATRAC / Read more

NEWS REPORTS FROM AROUND THE WORLD (COUNTRIES LISTED IN ALPHABETICAL ORDER)

Your editor monitors a limited number of websites for news (in English language) of interest to the international spill response community but does not have the resources to visit multiple social media platforms. If you have news you would like to share with readers of the ISCO Newsletter in over 60 countries (probably including your own country), you should send it by email to the editor john.mcmurtrie@spillcontrol.org

AUSTRALIA: KAROON RELINQUISHES AUSTRALIAN PERMITS

December 2 - Chairman Bruce Phillips said the company was focussed on ensuring its broader asset portfolio was "appropriately sized" for its capital capabilities. "In Australia we have relinquished WA-314-P after failing to attract a suitable farminee," Phillips told shareholders. "We have also listened to our broader stakeholder groups and have initiated actions to relinquish EPP46 in the Great Australian Bight." Energy News Bulletin / Read more

CANADA: CNLOPB HOSTS FORUM IN ST. JOHN'S ON OFFSHORE OIL SPILL RESPONSE, PREVENTION

December 4 - Four significant spills in Newfoundland's offshore since April 2018, along with a major injury in September that could have been fatal, have highlighted the need to review and improve safety, prevention and spill response measures in the offshore oil and gas industry.

That was at the top of the agenda during the Canada-Newfoundland and Labrador Offshore Petroleum Board's (CNLOPB) first annual spill prevention and response forum in St. John's this week.

The event featured more than 100 participants from regulatory agencies and government departments, oil and gas industry companies that are — or will soon be — active in the province's offshore area and fishing industry representatives.

"The forum provided an opportunity for regulators, governments and those 'on the water' to undertake a collective review of lessons learned from spills in our offshore between April 2018 and August 2019," said Jeff O'Keefe, CNLOPB chief conservation officer. "I am pleased that the presentations and discussions reflected participants' commitment to continuous improvement, with particular emphasis on ensuring operators have all the right people, processes and equipment in place for incident prevention and preparedness." Gulf News / Read more

CROATIA: "MYSTERIOUS SPILL 2019" – EXERCISE IN ZADAR COUNTY



December 6 - ATRAC, along with Zadar County Operational Centre, prepared and organized the exercise "MYSTERIOUS SPILL 2019" which took place in Zadar on December 4th 2019.

The exercise was aimed to testing the alert systems and incident management system in Zadar county, as well as mobilization and deployment of equipment available in that area. The managing team recorded chronologically all the decisions, actions and communication during the exercise, and all these actions were brought out in real time. We used popcorn in the exercise to simulate the behaviour of oil on the sea surface. The key actors in this exercise were members of County Operational Centre, Harbour Masters Office in Zadar, Marine Police Zadar and company Ciklon d.o.o., whose resources were used in response operations. ATRAC acted as a monitoring body. ATRAC / Read more

CYPRUS: SAFETY-AT-SEA WORKSHOP IN LIMASSOL

November 28 - Following Salamina, Limassol was the next site to host the "Safety-At-Sea Workshop", on Monday 25 November. The fruitful event took place at the Trakasol Cultural Centre in Limassol Marina and was organized by the Cyprus Marine Environment Protection Association — CYMEPA under the auspices of the Shipping Deputy Minister to the President of the Republic of Cyprus, Natasa Pilides.

The Workshop marked the launching in Cyprus of the activities of the 3-year Project titled "Enhancing the Understanding of New and Enduring Challenges in Maritime Safety Culture in the Eastern Mediterranean", which is



supported by Lloyd's Register Foundation* and implemented by the Hellenic Marine Environment Protection Association – HELMEPA between 2019 and 2022, in cooperation with partners CYMEPA, Hellenic Lloyd's and DYNAMARINE. HELMEPA / Read more

INDIA: FUNDS GIVEN TO 10 MAJOR & 8 NON-MAJOR PORTS FOR OIL SPILL RESPONSE EQUIPMENT: MOS SHIPPING MANDAVIYA

December 2 - New Delhi: In a reply to a question in Rajya Sabha today the Minister of State for Shipping (I/C) and Chemicals & Fertilizers, Mansukh Mandaviya, said the Government has developed a standard operating procedure for all ports in the country to deal with oil spills and other accidents that can damage marine ecology surrounding the ports.

He said that the Central Government has formulated a scheme for providing assistance to major ports and oil handling non-major ports under State Maritime Boards and State Governments to combat oil pollution and for mitigation measures.

Under the Scheme, 10 Major Ports and 8 Non Major Ports (total of 18 Ports) have been provided financial assistance so far for procurement of Oil Spill Response (OSR) equipment as per specifications recommended in National Oil Spill Disaster Contingency Plan (NOS-DCP) 2015.

Mandaviya said that the NOS-DCP delineates the role and responsibility of various authorities including ports during an oil spill. An annual calendar is published for the conduct of different levels of exercises involving various stakeholders for exercising their capabilities in mitigating risk of oil spills in their area of jurisdiction. Indus Dictum / Read more

INDONESIA: KOEM, STRENGTHENING AND INPROVEMENT FOR MARINE LITTER RESPONSE IN INDONESIA

November 4 - Capacity Building Workshop on Marine Litter Monitoring - KOEM(CEO Park Seung-gee) said it held a workshop on capacity building monitoring of marine litter monitoring in Indonesia from Oct. 28 to Nov. 1 at the Rabuan Bajo Rwanda Beach Resort in Indonesia.

The "Indonesia Marine Litter Management Improvement Project" is a project jointly developed by South Korea's Ministry of Maritime Affairs and Fisheries and Inni Ministry of Maritime Affairs and Fisheries to transfer Korea's know-how in managing marine litter. The corporation is implementing the project after signing a contract with the Ministry of Maritime Affairs and Fisheries, and plans to build a foundation for marine litter management in Indonesia, one of the major emitters of marine litter, and strengthen its capacity over three years from this year. In particular, KOEM plans to provide education on marine litter policies and monitoring methodologies for Inni officials and NGO, conduct local pilot monitoring, and ultimately develop customized marine litter monitoring guidelines for Indonesia to contribute to reducing marine litter and strengthening its management capabilities. KOEM / Read more

IRAQ: IS STEPS UP NIGHTTIME ASSAULTS NEAR DIYALA OIL FIELDS

December 6 - Insurgents from the self-proclaimed Islamic State (IS) group have launched a barrage of attacks in the past week, including increasingly complex, multi-pronged, nighttime operations against security forces stationed near the Naftkhana oil fields in northeastern Iraq.

On Wednesday, three members of the Peshmerga security forces were killed as they repelled an attack in Dakka, which is an area long under Kurdistan Regional Government (KRG) control, east of Kullajo and north of Khanaqin in Diyala province, a senior Peshmerga officer in the area said. Another eight separate IS assaults in northern Diyala have taken place in the last week alone, killing 14 and injuring 25 members of a variety of Iraqi security forces — including paramilitary groups operating under the government's al-Hashid al-Shabi (Popular Mobilization) program, Peshmerga, and Iraqi Army — according to incident reports gathered from local security officials. Iraq Oil Report / Read more

NIGERIA: 'THIS PLACE USED TO BE GREEN': THE BRUTAL IMPACT OF OIL IN THE NIGER DELTA

December 6 - Almost every day, Udengs Eradiri is informed of another oil spill in Bayelsa state, in the Niger Delta. Most of the time, little or nothing is done to clean up the mess, says Eradiri, the state's commissioner for the environment.

"You just need to take a tour to understand the magnitude of the environmental abuse," he adds. "[Bayelsa] used to be green, you could go to farm or fish. We used to have very impressive harvests. You would spend just an hour in the water and you have a lot of fish." Today, he added, you can spend the whole day without catching anything. The Guardian / Read this article by Rebecca Ratcliffe

PAKISTAN: 10TH EDITION OF INTERNATIONAL EXERCISE BARRACUDA BEGINS AT PMSA

December 3 - The DG PMSA highlighted Pakistan's efforts to curb pollution at sea and reiterated the Pakistan Maritime Security Agency's resolve to fight marine pollution. The International Exercise Barracuda-X is a marine oil spill exercise and is aimed at enhancing the capacity and proficiency of national stakeholders to combat the menace of pollution at sea.

Twenty four observers from 11 countries along with national stakeholders, including the Pakistan Navy, Pakistan Air Force, PMSA, Port Qasim Authority and Karachi Port Trust, are participating in the exercise.

The international participants of Exercise Barracuda-X include Bahrain, China, Indonesia, Japan, Kenya, Maldives, Oman, Qatar, Saudi Arabia, Sri Lanka and Turkey. The exercise Barracuda X will be conducted in Karachi and the Arbaian sea from 2nd to 4th December 2019. The News / Read more

SENEGAL: THIS WEEK - SAMAREX 2019 REAL SCALE EXERCISE IN DAKAR

GI WACAF will participate as observer/evaluator of the SAMAREX 2019 real scale exercise in Dakar, Senegal; 10-12 December 2019

The "SAMAREX 2019" oil spill deployment exercise is organised by the Senegalese authorities with the objective to test their National Oil Spill Contingency Plan in line with the recommendations edited by the International Maritime Organization. This real scale exercise will gather all the Senegalese authorities involved in oil spill preparedness and response, and more generally with responsibilities in maritime affairs. The leading authority, which invited the GI WACAF to attend, is the « Haute Autorité chargée de la Coordination, de la Sécurité maritime, de la Sûreté maritime, et de la Protection de l'Environnement marin » (HASSMAR).

Senegalese authorities have invited their neighbouring counterparts from Cabo Verde, Guinea Bissau, Mauritania, Mali and The Gambia to attend as well and act as observers during the "SAMAREX 2019" exercise.

The hosting organisation for this workshop is the « Haute Autorité chargée de la Coordination, de la Sécurité maritime, de la Sûreté maritime, et de la Protection de l'Environnement marin » (HASSMAR);

The objectives are -

- o To test in real life situation the National Oil Spill Contingency Plan of Senegal;
- o To gather comments and observations from the various stakeholders attending;
- o To analyse all the evaluation report and update the NOSCP accordingly;
- o To train local and national authorities involved in the NOSCP to respond effectively to an oil spill; and
- o To practice on several identified aspects related to oil spill response, such as crisis communication, boom deployment or shoreline response. [Thanks to Emilie Canova, GI WACAF Project Coordinator https://www.giwacaf.net/en/]

SPAIN: NATIONAL SALVAGE AND OIL SPILL RESPONSE EXERCISE POLEX 2019

December 4 – Report received from ITOPF: ITOPF was invited as observers to POLEX 2019, a national salvage and oil spill response exercise organised by the Dirección General de la Marina Mercante (DGMM) and Sociedad de Salvamento y Seguridad Marítima (SASEMAR) in Malaga, Spain from 19th- 20th November 2019. The exercise scenario involved a hypothetical collision between a bulk carrier and containership approaching the port of Malaga, and included search and rescue, oil spill response and place of refuge components and decision-making. The event provided ITOPF with a good opportunity for observing the deployment of oil spill response equipment and vessels, and for networking with representatives from national and local government, port authorities and other stakeholders. ITOPF / Read more

TURKEY: WORKSHOP ON PROMOTING SPILL PREVENTION AND RESPONSE

December 6 - With the rise of transport by sea of chemicals and gases (both in bulk and containerized), proper preparedness for response to potential spill incidents involving hazardous and noxious substances (HNS) is increasingly important.

The Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) hosted a three-day training in Tekirdağ, Turkey (3-5 December).

The workshop brought together over 50 response managers from the public and private sectors to examine considerations and challenges in responding to HNS incidents occurring in national waters.



The workshop was based on the OPRC-HNS Model Training Courses which has been developed to assist IMO Member States in their efforts to build national capacity in preparing for and responding to HNS incidents, in line with the OPRC-HNS Protocol.

The OPRC-HNS Protocol aims to establish national systems for preparedness and response and to provide a global framework for international cooperation in combating major incidents or threats of marine pollution.

The training was hosted by the Government of Turkey and was held on the premises of the recently inaugurated National Maritime Safety and Emergency Response Centre (UDEM), and funded by the IMO's Integrated Technical Cooperation Programme, REMPEC's Mediterranean Trust Fund (MTF) as well as

from the European Commission's Directorate-General for Neighborhood and Enlargement Negotiations. IMO / Read more

UK: GUIDANCE - MARINE POLLUTION (MARPOL) ANNEX II SURVEYORS

December 3 - The International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) Annex II, Regulation 16 requires the Government of each party within the convention to appoint or authorise surveyors for the purposes of exercising control procedures developed by the International Maritime Organisation. The Merchant Shipping (Dangerous or Noxious Liquid Substances in Bulk) Regulations 1996 (Statutory Instrument (S.I.) 1996/3010, as amended by S.I. 1998/1153) implements Annex II of MARPOL and refers to MARPOL surveyors in Regulation 9(2). Download the updated UK MCA Guidelines

USA: TARGET DATE FOR THE REMOVAL OF GOLDEN RAY SET FOR END OF 2020

November 25 - The Unified Command Team in charge of dealing with the disassembly of capsized car carrier Golden Ray (IMO 9775816), and management of the consequences of the accident has set a target date of end-2020 for the removal of the vessel.

The Golden Ray partially capsized on September 8th outside the Port of Brunswick, Georgia, USA shortly after leaving port en route to Baltimore, laden with more than 4,000 new vehicles.

She was deliberately grounded by the pilot after a fire broke out on board in order to avoid a worse disaster. All the crew – six South Koreans, 13 Filipinos and the US ship pilot – were rescued safely, although four of them remained trapped in the upturned hull for more than a day. The Unified Command team includes the US Coast Guard, state officials, Gallagher Marine Systems and other partners. Insurance Marine News / Read more

USA: EPA AWARDS \$4 MILLION TO PROTECT AMERICA'S ESTUARIES AND COASTAL WATERS

December 4 - Today, the U.S. Environmental Protection Agency (EPA) announced a \$4 million cooperative agreement with Restore America's Estuaries to help fund projects supporting National Estuary Program coastal watersheds and estuaries. Restore America's Estuaries will operate a competition that provides entities from across the country an opportunity to apply for funding for projects that will improve the health of our nation's waters.

"EPA is pleased to work with Restore America's Estuaries to advance our shared goal of protecting our nation's waters and supporting aquatic ecosystems," said EPA Administrator Andrew Wheeler. "This cooperative agreement is the first of its kind and solidifies the partnership between EPA and non-governmental organizations as we work together to improve the health of our coastal waters."

The National Estuary Program is an EPA initiative committed to protecting and restoring the water quality and ecological integrity of 28 estuaries across the country. Estuaries play an important role in our environment, providing places for recreational activities, scientific study and aesthetic enjoyment. EPA is committed to working with our partners to protect estuaries from issues that threaten their stability, including coastal flooding and marine litter.

"Restore America's Estuaries is proud to have been selected to administer this critical new program. Combined, Restore America's Estuaries and EPA bring decades of knowledge and experience, and together, we'll have a significant impact on our nation's estuaries

by strategically funding critical projects and programs that will have long-lasting impacts," said Restore America's Estuaries President Jeff Benoit.

EPA is providing \$4 million over four years to Restore America's Estuaries to fund a wide variety of projects. Projects will include those that apply new or innovative approaches and technologies to treat, remove, or prevent pollution before it enters estuaries; build on and implement existing nutrient management strategies; build local capacity to protect and restore coastal watersheds; and prevent trash from entering or removing trash that has entered coastal waters. Restore America's Estuaries will fund awards between \$75,000 and \$250,000. US EPA / Read more

ISCO NEWS

POSTPONED AGM: RECEIPT OF COMMENTS FROM MEMBERS

The response to the invitation to members to comment on matters covered in the AGM Agenda and Papers has so far been disappointing.

In the short briefing note sent to members on 29th November http://spillcontrol.org/downloads/Postponed_2019_AGM.docx we asked that comments be sent in by 9th December. To give a little more time for members to respond, the cut-off date is now being extended to Friday 14th December.

If you would like to share your views with other members, please respond by 12th December to <u>info@spillcontrol.org</u> If you need to be re-sent the Agenda and Meeting Papers circulated to all members on 27th September, these are available on request.

A summary of comments received will be sent to members later this week in advance of the closing date for voting.

POSTPONED AGM: LATEST DATE FOR SENDING IN YOUR VOTES IS MONDAY 23rd DECEMBER

The updated Proxy Voting Form is available for downloading at http://spillcontrol.org/downloads/Postponed 2019 AGM.docx

The results of the voting will be advised no later than Friday 28th December.

CONTRIBUTED ARTICLE

MECHANICAL DISPERSION OF OIL WITHOUT CHEMICALS – A REPORT FROM OHMSETT

Photo: The Blue Impact mechanical dispersion technology uses high pressure water jets instead of chemicals to disperse oil into the water as tiny droplets.

To remediate oil spills without the use of chemicals, Blue Impact, AS has developed a new mechanical dispersion technology that involves using high pressure water jets with enough energy to disperse oil into the water as tiny droplets. The goal is to have the dispersed oil remain suspended in the water column allowing it to be broken down by hydrocarbon-degrading flora naturally found in the ocean. The prototype system was recently tested at Ohmsett during the week of July 8, 2019.



The initial concept of mechanical dispersion was developed in 2011 by SINTEF, an independent research organization headquartered in Norway. In 2016 Blue Impact was created to commercialize the technology. "We have worked on the technology on a daily basis to make it what it is today," said Karl Fjelde Nevland, business development manager and in charge of the testing for Blue Impact.

In 2018 the mechanical dispersion technology was integrated into an unmanned surface vessel (USV) prototype called the Vorax. The 18 feet long, 7 feet wide catamaran was designed for near shore, and harbors and can disperse at speeds of 1-5 knots. "As Vorax uses water to disperse the oil, there is no need to refill chemicals or transport recovered oil to shore. Since the vessel is unmanned, there is no need to risk putting personnel in the polluted area," Nevland said. "We tested it in the oil seeps outside Santa Barbara, California

CONTRIBUTED ARTICLE (CONTINUED)

together with the California Department of Fish and Wildlife Office of Spill Prevention and Response (CDFW-OSPR), U.S. Coast Guard, Marine Spill Response Corporation, The National Oceanic and Atmospheric Administration, and others. Now we have been to Ohmsett to collect quantitative data on the performance of this USV."

According to Nevland, the objective was to test the prototype Vorax USV as an integrated unit at TRL Level 8 using Bureau of Safety and Environmental Enforcement's (BSEE) Technology Readiness Levels for Oil Spill Response Technologies and Equipment. "We wanted to conduct a realistic operation with a fully integrated system in a relevant environment. The testing was designed to collect reproducible data about the dispersion efficiency and operational performance of the USV."

During the test program, oil slicks of HOOPS and Oseberg crude oils (weathered, and emulsified) in known volumes were applied in a controlled area of the tank without using solid barriers. The controlled area was created using near-surface horizontal fan spray nozzles, directed fire monitor broadcast, and subsurface turbines. This setup helped avoid the tendency for barriers such as booms, skirts, and the tank walls to impede the natural spatial characteristics of a free slick. Test instrumentation for data collection and measurements included LISST, SilCam, and the Polaris Polarized Thermal Imaging System.

"Using thermal cameras and different types of underwater instrumentation, data was recorded about the oil on the surface and droplet size distribution of the dispersed oil in the water column," Nevland said. "We had access to a solution-oriented and flexible crew, and a facility with state-of-the-art instruments. The initial results look promising, and we are very happy. The documentation will be used to verify mechanical dispersion as a viable option for modern oil spill response and we have already started the market introduction."

[This article, which was originally published in the Summer 2019 issue of the Ohmsett Gazette, is reprinted here with the kind permission of Ohmsett and BSEE. https://www.ohmsett.com/]

SCIENCE & TECHNOLOGY

STUDY REPORTS ADVANCEMENT IN ENVIRONMENTALLY-FRIENDLY DISPERSANT TECHNOLOGY

November 14 - University and industry scientists are developing a benign alternative to chemical dispersants used for oil spill response, such as COREXIT used during *Deepwater Horizon*. Their earlier investigations revealed that halloysite clay particles, a natural material, that are filled with surfactants provide an **effective delivery vehicle of dispersants** to an oil slick. The team can now form a thin skin around the halloysite's nanotubes, the area where the surfactants are encapsulated, enabling a slow and targeted release of the surfactants and enhancing small oil droplet formation and stabilization in the water column. This technological advancement provides a more efficient means for dispersant delivery by directly targeting the oil-water interface and can potentially minimize the volume of dispersants needed in a response situation. The concepts and scalability of this process have implications for the controlled delivery of pharmaceuticals, pesticides, and plant nutrients.

The researchers published their findings in ACS Applied Nano Materials: Stoppers and skins on clay nanotubes help stabilize oil-inwater emulsions and modulate the release of encapsulated surfactants. Gulf Research Initiative / Read more

POLLUTION FROM ATHABASCA OIL SANDS AFFECTS WEATHER PROCESSES

November 18 - Scientists have been looking at pollution affecting the air, land and water around the Athabaska Oil Sands for some time. After looking at contaminants in snow taken from up-to 25 km away from the oil sands, a McGill-led scientific team now suggests that oil sand pollution is also affecting the weather patterns in the surrounding regions.

"The beauty of frozen precipitation such as snow is that it's like a snapshot of atmospheric processes. The snow absorbs the hard metal particles and embeds it and this allows us to see things that we might not be able to see otherwise," says Professor Parisa Ariya, from McGill's Departments of Chemistry and Atmospheric and Oceanic Sciences. She led the team that recently published their research in Environmental Pollution.

Rodrigo B. Rangel-Alvarado, Chelsea E. Willis, Jane L. Kirk, Vincent L. St Louis, Marc Amyot, Dominic Bélanger, Parisa A. Ariya. Athabasca oil sands region snow contains efficient micron and nano-sized ice nucleating particles. *Environmental Pollution*, 2019; 252: 289 DOI: 10.1016/j.envpol.2019.05.105 Science Daily / Read more

FERMILAB OIL SPILL CLEANUP TECHNOLOGY AMONG FINALISTS FOR R&D 100 AWARD

November 20 - What began as an experiment in a nine-ounce cup of water has been developed into a full-scale technology that recently became a finalist for a 2019 R&D 100 Award in the mechanical/materials category. Achieving that honor was $E-MOP^{TM}$ — electromagnetic oil spill remediation technology — developed from patents owned by Fermilab. E-MOP uses materials that are environmentally safe, reusable and natural.

SCIENCE & TECHNOLOGY (CONTINUED)



Photo: Scientist Arden Warner, left, shows Aaron Sauers, Fermilab licensing and patent executive, the E-MOP system. It consists of solenoidal (doughnut shaped) magnets that are coupled together in groups of six to form a module. Several modules are connected together to form an electromagneticboom (e-boom) structure. The system can be made longer or shorter by adding or removing modules to accommodate the situation. Every magnet in the structure is separated from the next by a fixed distance that optimizes the "gradient" effect of the magnetic fields between them. Photo: Reidar Hahn, **Fermilab**

The technology was sparked by a

question that Warner's wife asked him after the 2010 Deepwater Horizon oil spill in the Gulf of Mexico: "Could we remove oil from water?" It occurred to Warner that electromagnetic forces would probably work.

During the first week of October, his company tested its large-scale prototype in a huge tank at Ohmsett, the National Oil Spill Response Research and Renewable Energy Test Facility in New Jersey. The tank measures 600 feet long, 200 feet wide and holds 2.2 million gallons of ocean water. The tests demonstrated that the E-MOP system was 97.2% efficient in separating oil from water.

"We are getting the oil efficiently off the water without picking up water," Warner said. "That was our goal, to get it as efficient as we could."

Spilled oil is first seeded with a small amount of magnetite (less than 0.5% by volume). The system exploits a unique bond that oil forms with magnetite particles at the molecular scale. Magnetite is a naturally occurring magnetic mineral that can be found on most beaches. Heavier than water, the particles sink in the absence of oil. But the presence of oil in water, either on the surface or below, will attract and confine the particles.

"This bond is exploited as the combination of oil and magnetite are rendered magnetic in the presence of magnetic fields," Warner said. "Viscosity effects are enhanced, the ability to confine, attract and move the spills is increased, and the remediation process is controlled without the use of dispersants and other harmful chemicals and methods." Fermilab / Read more

OIL SPILL RESPONSE BREAKS NEW GROUND

December 5 - The oil is in the water. Sensitive marine environments are under threat. Time, wind, and waves are working against you. The key to effective mitigation is quick action. And a multi-year program by BC Research to develop immediate-response solutions to oil spills in marine environments has now added some novel chemistry to the mix.

Key to the new technology are formulations known as 'herders' and 'gellants'. The herder is applied first to rapidly contract an oil slick, reduce its surface area, and increase the thickness of the oil layer. This is followed by the addition of the gellant, which converts the oil to a semi-solid mass. When used in tandem, the end-result is a stable slick that does not spread, is less susceptible to weathering, and – most importantly - remains afloat. The gelled oil can then be removed using current oil recovery protocols.

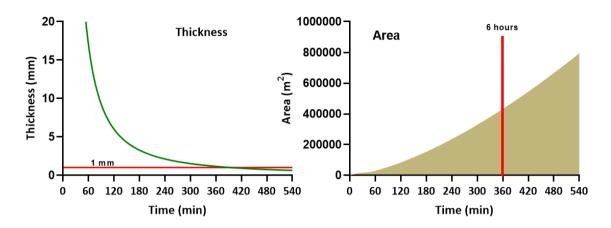
In the projected wake of additional pipeline and oil-tanker traffic, environmental concerns around British Colombia's pristine coastline have propelled development of advanced oil-spill response technologies. New findings in a BC Research-led program, initiated in 2015, set the pace and quickly attracted funding from Canada's Office of Energy Research and Development - NRCan. The program identified a collection of novel oil-spill treating agents, that offer significant advantages over the current strategy of employing absorbent materials, and that have proven effective against a diverse range of oil products including diesel, conventional crude and dilbit.

The experimental herders and gellants were developed and evaluated at BC Research, both in the laboratory, and on the pilot scale using a custom-designed wave simulation tank. In contrast to conventional sorbents, which represent the current benchmark, the gellants can be prepared from bio-based feedstocks, are biodegradable, and are effective at dosing levels as low as 2 % by volume. Sorbents, on the other hand, are typically derived from petroleum-based materials, have long-term environmental persistence, and must be applied in volume ratios of 20-40 %. And while current techniques typically only succeed in recovering 10-20% of the oil, much higher recovery rates appear to be within reach.

SCIENCE & TECHNOLOGY (CONTINUED)

The next phase of the BC Research program will engage a wider group of stakeholders, and propel the spill-treating agents towards commercialization. Activities over the next twelve months include the production and advanced testing of the new formulations on a larger scale.

Figure A – A simple model for oil spill slick thickness and area versus time for 500 m³ spill.



BC Research / https://www.bcri.ca/ [Thanks to Dr Lisa Malin, BC Research. A PDF file with detailed information on this research project is available on request]

CONTRACTS & TENDERS

OPEN TENDER NOTIFICATION SERVICE

This is a subscription service. Have a look to see examples of open tenders.

BUSINESS OPPORTUNITIES

USA: ENVIRONMENTAL RESEARCH AND DEVELOPMENT PROPOSALS

The Department of Defense (DoD) Strategic Environmental Research and Development Program (SERDP) is seeking to fund environmental research and development proposals. SERDP is DoD?s environmental science and technology program, planned and executed in partnership with the Department of Energy and the Environmental Protection Agency, with participation by numerous other Federal and non-Federal organizations. The Program invests across the broad spectrum of basic and applied research, as well as advanced development.

Proposals responding to focused Statements of Need (SONs) in multiple areas including Environmental Restoration? Research and technologies for the characterization, risk assessment, remediation, and management of contaminants in soil, sediments, and water. All Core Solicitation pre-proposals are due to SERDP January 7, 2020 by 2:00 p.m. ET. For more information, visit https://serdpestcp.org/Funding-Opportunities/SERDP-Solicitations.

Source: Tech Direct https://clu-in.org/techdirect/td122019.htm

USA: PARTNERSHIP OPPORTUNITY: USGS NEXT GENERATION WATER OBSERVING SYSTEM

Department of the Interior, U.S. Geological Survey, Reston, VA. Beta.Sam.gov, Solicitation 10_17_2019_OPA, 2019 USGS is soliciting information from industry, academia, nonprofits, and research institutions on innovative technologies that should be considered as part of its Next Generation Water Observing System effort. This RFI seeks to identify promising technologies or interested partners who are capable of jointly developing technologies that can integrate with current USGS R&D efforts. A few items from the list of the types of technologies of interest include (1) new sensors for monitoring continuous water quality, including sediment, nutrients, contaminants, and environmental DNA and (2) innovative technologies for detecting and monitoring hazards such as spills and harmful algal blooms.

Responses are due by 11:59 PM Hawaii Time on December 31, 2019.

https://beta.sam.gov/opp/83a9990fafcb2cbb4c6e9dcdc7ef3e37/view USGS also posted solicitation 10_18_2019_OPA under this same title at https://beta.sam.gov/opp/1f797805cc449ca6826d5caffb28680d/view with the same responses due date.

Source: Technology Innovation News Survey https://clu-in.org/products/tins/

COUNTRY	2019	TITLE OF EVENT	LOCATION	
For more information click on Title of Event				
UAE	Dec. 8-10	Middle East HSE and Sustainability Week	Dubai	
SENEGAL	Dec. 10-12	SAMAREX 2019 real scale OSR exercise	Dakar	
USA	Dec. 17-18	US National Response Team RRT2 Meeting	New York	
COUNTRY	2020	TITLE OF EVENT	LOCATION	
USA	March 24-25	SCAA Annual Meeting & Conference	Arlington, VA	
USA	April 7-9	Clean Waterways Conference	Indianapolis, IN	
USA	May 11-14	International Oil Spill Conference & Exhibition	New Orleans, LA	
CANADA	June 2-4	43rd AMOP Technical Seminar on Environmental	Edmonton, Alberta	
		Contamination and Response.		
USA	June 2-4	Elastec's Spring 2020 River Workshop	Carni, II	
USA	June 9-11	Clean Pacific Conference & Exhibition	Seattle	
NETHERLANDS	June 24-25	European Environmental Ports Conference 2020	Rotterdam	
COUNTRY	2021	TITLE OF EVENT	LOCATION	
NETHERLANDS	March 22-26	Interspill Conference & Exhibition	Amsterdam	
To request posting of an event of interest to the Spill Response Community please send details to the Editor				

LINKS FOR DOWNLOADING & READING OTHER PUBLICATIONS

Alga Chronicle	News from Australia on Contaminated Land Remediation	October 2019
AMSA Update	Latest news from the Australian Maritime Safety Authority	Current issue
ATRAC Newsletter	News from the Adriatic Training and Research Centre	June 2019
AUSMEPA Bulletin	News from the Australian Marine Environment Protection Assoc'n	Winter 2019
BIMCO Bulletin	Marine and shipping-related news from BIMCO	June 2019
Newsletter from George Holliday	News and commentary on HSE issues from George Holliday	On request email
<u>Cedre Newsletter</u>	News from Cedre in Brittany, France	October 2019
Clean Nigeria Associates Newsletter	News from CNA about Oil Spill Response in Nigeria	December2018
EMSA Newsletter	News from the European Maritime Safety Agency	November 2019
GEF Newsletter	Monthly Newsletter from the Global Environment Facility	December 2019
GESAMP	Group of Experts on the Scientific Aspects of Marine Environmental Protection	Latest news
GISEA Quarterly Newsletter	News from Global Initiative for South-East Asia	Q3 2019
IMO News Magazine	News from the International Maritime Organization	Autumn 2019
IMO Publishing Newsletter	New and forthcoming IMO publications	November 2019
ITOPF Ocean Orbit	News from the International Tanker Owners Pollution Federation	October 2019
JOIFF "The Catalyst"	Int'l Organisation for Industrial Hazard Management	Q4 2019 issue
Maritime Executive Magazine	Often contains articles of interest to the spill response community	JanFeb. 2019
MOIG Newsletter	News from the Mediterranean Oil Industry Group	November 2019
Nautical Institute News	News from the Nautical Institute	October, 2019
Navigate Response	Global crisis communications network for shipping & marine	October 2019
NOAA OR&R	Weekly round-up of news from NOAA's Office of Response & Restoration	Latest issue
Oceanbuzz	Newsletter giving news on the Ocean Technology Industry	Current issue
OCIMF Newsletter	News from the Oil Companies International Marine Forum	November 2019
OHMSETT Gazette	Oil Spill Response Research & Renewable Energy Test Facility Quarterly	Summer 2019
OSPAR Newsletter	Protecting & Conserving the N.E. Atlantic and its resources	Spring 2019
PEMSEA Newsletter	Healthy oceans, people and economies in the East Asian Seas	September, 2019
Pollution Online Newsletter	News for pollution prevention & control professionals	Current issue
Safe Seas, Clean Seas	Quarterly Newsletter from Maritime New Zealand	July 2018 issue
Salvage World	Quarterly Newsletter of the International Salvage Union	Current issue
Sea Alarm Foundation Newsletter	Oiled wildlife Preparedness and Response news from Sea Alarm	Current issue
Technology Innovation News Survey	News from US EPA – Contaminated Site Decontamination	Oct. 16-31, 2019
USA EPA Tech Direct	Remediation of contaminated soil and groundwater	December 1, 2019
<u>WestMOPoCo</u>	Western Mediterranean Region Marine Oil & HNS Pollution Cooperation	August 2019

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

INCIDENT REPORTS (IN CHRONOLOGICAL ORDER)

USA: REPORT FROM NOAA OR&R ON INCIDENT RESPONSES NOVEMBER 2019

Every month our Emergency Response Division provides scientific expertise and services to the U.S. Coast Guard on everything from

INCIDENT REPORTS (CONTINUED)

running oil spill trajectories to model where the spill may spread, to possible effects on wildlife and fisheries and estimates on how long the oil may stay in the environment.

This month OR&R responded to 12 incidents, including oil discharges, sunken vessels, and other pollution-related incidents. Here is the complete list of last month's incidents, click on the links to find out more:

- F/V FT Pierce Lady
- HFO Spill, Honolulu Harbor, HI
- Calcasieu Ship Channel Discharge
- F/V Miss Haley sunk
- TPIC Bayou Perot ISB 2019
- Onyx Grounding

- Recreational vessel TUSSLER sunk
- OSV BOTRUC 22 spill
- Crowley Barge 650-2 Crude Oil Spill
- Tugboat Miss Bonnie Allision, Oregon Inlet, NC
- Kitoi Bay Hatchery Release
- TPC Port Neches Explosion

UKRAINE: CREW EVACUATED AS OIL TANKER GROUNDS ITSELF OFF ODESSA

November 24 - A Ukraine oil tanker has beached off the Black Sea port of Odessa, sparking fears it may leak its cargo of petroleum products. The Delfi was moored off Yuzhniy port when it slipped its anchor during a storm late on Friday, with heavy seas carrying the vessel along the coast until it ran aground. SBS News / Read more [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

NIGERIA: SUSPECTED VANDALS RUPTURE SHELL PIPELINE IN RIVERS



Photo of the ruptured Shell high pressure Petroleum products Pipeline allegedly caused by Vandals in Eneka community in Obio-Akpor local government area near Port Harcourt, Rivers State, Friday, November 29

November 30 - The fear of explosion has gripped residents of Eneka Community in Obio-Akpor local government area of Rivers State because of the ruptured petroleum products high-pressure pipeline belonging to Shell Petroleum Development Company, SPDC, which was gushing out products on Friday. A suspected case of pipeline vandalism occurred in a location near the Army shooting range, in an area popularly called Shell Pipeline in Eneka community.

PM News / Read more [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

VIETNAM: THAI SHIP SINKS, OIL SPILL SPREADS OVER VIETNAM COAST

December 2 - An oil spill covered over three km of Ha Tinh's coast after a Thai ship sank near the Son Duong port last Saturday. Local authorities are cooperating with the Central Committee for Natural Disaster Management, and the Vietnam National Committee for Search and Rescue to contain the spill. They have dispatched personnel to the scene to try and prevent the environmental disaster from getting worse. VN Express / Read more

NORWAY: PSA NORWAY INVESTIGATES SPILL AT STATFJORD A PLATFORM

The Petroleum Safety Authority Norway (PSA) has launched an investigation into an oil leak from Equinor's Statfjord A platform on November 26.

Early information indicates that the leak came from one of the storage cells in Statfjord A's gravity based structure (GBS), the giant concrete jacket which rests on the seafloor and supports the platform topsides. The discharge was first detected when oil was sighted on the sea surface alongside the platform. The discharge was quickly halted. According to Equinor, the volume released is estimated at roughly 11,000-21,000 gallons of oil. The Maritime Executive / Read more



THAILAND: BUNKER TANKER SANK OFF BANGKOK, OIL LEAK

December 6 - Tanker GOLDEN BRIDGE sank in the morning Dec 3 in Gulf of Siam off Chao Praya river estuary, just south of Bangkok. The ship isn't registered in known databases, identified by local media, referring to officials, as a tanker, most probably bunker tanker.

INCIDENT REPORTS (CONTINUED)



At the time of an accident she had some 100 tons of bunker fuel on board, cause of sinking unclear sudden and massive aft water ingress was mentioned. 3 crew were rescued. Reportedly, some 20 tons of fuel already leaked, creating a 4-kilometer long slick. which is drifting towards eastern coast of the Gulf. The Royal Thai Navy is tasked with preventing oil slick advance towards the coast. Understood other available anti pollution resources are to be deployed or are already deployed. Dec 8 UPDATE: Tanker was refloated on Dec 6 by floating crane. Oil leak reportedly already removed. Maritime Bulletin / Read more [Thanks to Voytenko Mikhail, vmd@odin.tcl See also related reports in ARX Maritime and Xinhua News

SPAIN: SALVORS PREPARE TO REFLOAT GROUNDED TANKER NEAR A CORUÑA

December 6 - Salvors are planning to refloat the grounded chemical tanker Blue Star in mid-December after defueling and waiting for the right combination of waves and tides.

The Blue Star is high and dry on a rocky shore at Ares, Galicia, just northeast of A Coruña. She drifted aground on the night of November 22 after a mechanical failure, and initial attempts to pull her off the beach with tugs were not successful.

The Blue Star's cargo tanks were empty at the time of the grounding, but she had about 110 tons of fuel oil and a combined 14 tons of oily waste, lubricating oil and other fluids on board. The task of pumping out her fuel and slops tanks was completed on the evening of December 2, paving the way for a refloat attempt.

A team from Smit Salvage intends to refloat her under the right conditions - high tide with high waves, matching the circumstances on the night of her grounding - between December 10-15. However,



14 out of her 18 ballast tanks have been breached, along with her slops tank. Smit's team is sealing off the vessel's cargo tanks so as to preserve buoyancy in the event of further damage during the refloat. The Maritime Executive / Read more and see more photos

USA: LOUISIANA - OIL SPILL NEAR BUTTE LA ROSE CONTAINED, CLEANUP UNDERWAY

December 6 - An oil spill on the Atchafalaya River near Butte La Rose has been contained. The spill according to The US Coast Guard was reported scene Monday December 2, 2019.

During the time since the spill was reported, the oil has been boomed and contained. The oil is leaking from a barge along the Atchafalaya River near Cow Island Lake, according to the Coast Guard. KATC / Read more [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

December 7 - 8 Mile Oil Spill in the Atchafalaya Basin Causes Concern for Wildlife

An oil spill in the Atchafalaya Basin has state and industry officials on alert. This particular spill could have severe impacts on the environment since the barge has been leaking oil since Monday. The oil now reaching 8 miles into the basin. After oil began spewing into the Basin for 5 days Thyssen Petroleum Inc. began the clean up process. "The company has provided resources to be able to recover the oil which includes containment," says one Coast Guard representative. KADN News / Read more [Thanks to Matthew Sommerville]

SOUTH CHINA SEA: DRIFTING CONTAINERS, ABANDONED SHIP, BAY OF BENGAL

December 7 - 16 containers and abandoned ship reported in vicinity 12 15N 110 00E, South China sea off Cam Ranh Vietnam, no other information available, except that sailing N of this position container ship AIS is missing for more than 20 hours, keep monitoring.

INCIDENT REPORTS (CONTINUED)

Bay of Bengal: Two containers were washed ashore on Dec 6 near Paranagampettu, Tamil Nadu State, India, Bay of Bengal, both loaded with expensive electronic equipment. According to local officials, more than 25 containers went overboard from Singapore-flagged container ship on Dec 4, the ship was en route from Sri Lanka to Kolkata. Safmarine was mentioned, no other information available. The ship not yet identified. Maritime Bulletin / Read more [Thanks to Voytenko Mikhail, vmd@odin.tc]

HISTORY

THE HUGE OIL TANKER CRASH OFF EAST YORKSHIRE THAT WAS CLOSE TO BEING ONE OF UK'S WORST EVER DISASTERS



Lady luck was believed to have helped in averting a major ecological disaster when a 21-mile oil slick was kept away from East Yorkshire and Lincolnshire beaches 30 years ago. At 4.54am on September 18, 1989, just off the East Yorkshire coast, there was a huge collision between the Liberian — registered 'Phillips Oklahoma' - and the Maltese registered 'Fiona'.

The crash was believed to have been caused by the weekend's high tides, swelled by a recent heavy rain, with oversight from one of the captains which led to the collision.

The Oklahoma, carrying 52,000 tons of crude oil, collided with the Fiona (carrying 46,500 tons of crude),

which was already at anchor five miles from Spurn Point near the Humber Lightfloat just before 5am.

The Phillips Oklahoma was holed in the collision and both vessels caught fire almost immediately; the slick also caught fire for a time. Amazingly, no-one was injured.

The crash sparked a fireball on the Oklahoma, which spewed 500 tonnes of oil into the sea from a 20 foot gash in her side. At the time of the collision, visibility was reported to be three miles. The only navigational hazard was an above average high tide, causing strong currents and heavy wash from the Humber.

The slick was reported 10 miles east of Easington with two tails of residue stretching over 18 miles from the slick centre. Experts at the time said the pollution threat to wildlife reserves on the Humberside coast would remain for a considerable time.

Wildlife groups were bracing themselves for what could have still been a horrific event for Humberside's teeming bird population. Particularly at risk were the Humber Estuary mud flats, used a feeding ground for scores of different bird species migrating south for the winter.

Hull Daily Mail / Read more, view video and see many more photos

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.