

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

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INTERNATIONAL NEWS

CLICK ON THE BANNERS BELOW FOR MORE INFO ON THE EVENTS FEATURED



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MORE EVENT POSTPONEMENTS ANNOUNCED

CANADA: 43RD AMOP TECHNICAL SEMINAR ON ENVIRONMENTAL CONTAMINATION

AND RESPONSE - SEE PAGE 9

USA: SCAA ANNUAL MEETING AND CONFERENCE - SEE PAGE 9

USA: APICOM GM MEETING - SEE PAGE 9

Note from Editor – Sadly, the above event postponement announcements are unlikely to be the last. If any further cancellation announcements are received before this issue goes to press, they will be announced under "Stop Press" on the last page of the newsletter. See also "Messages from Event Organisers" and "Upcoming Events" on Pages 9 - 10

ARAB NATIONS SOUND ALARM OVER OIL TANKER MOORED OFF YEMEN



March 21 - Six Arab countries are urging the UN Security Council to exercise "maximum efforts" to persuade Yemen's Houthi rebels to allow the United Nations to inspect a tanker moored in the Red Sea while loaded with over a million barrels to prevent "widespread environmental damage, a humanitarian disaster and the disruption of maritime commerce".

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INTERNATIONAL NEWS (CONTINUED)

In a letter to the council circulated on Thursday, they warned that in the event of an explosion or leak "the possibility of a spill of 181 million litres of oil in the Red Sea would be four times worse than the oil disaster of the Exxon Valdez Exxon, which took place in Alaska in 1989".

The tanker *Safer*, which stayed moored to operate like a mini-terminal to store and offload oil from Yemen's inland oil fields, has reportedly not been used since March 2015, when the region fell under control of the Houthis, and there are serious concerns its structure has deteriorated significantly.

The tanker is moored north of Yemen's main port of Hodeidah, which handles about 70 per cent of the country's commercial and humanitarian imports. The UN ambassadors from Djibouti, Egypt, Jordan, Saudi Arabia, Sudan and Yemen said in the letter that an explosion or leak from the Safer would close the port of Hodeidah for several months. A leak or explosion would also affect 1.7 million people working in the fishing industry and their families, the six countries said. Al Khaleej Today / Read more

ARRANGEMENTS FOR MEETINGS OF THE IOPC FUNDS' GOVERNING BODIES IN 2020 FOLLOWING THE COVID-19 PANDEMIC

March 23 - Further to IOPC/2020/Circ.4 announcing the postponement of the March 2020 meeting of the IOPC Funds' governing bodies, the purpose of this circular is to inform delegations and other meeting attendees of the latest developments and arrangements for meetings in 2020.

The International Maritime Organization (IMO) has announced that, due to the rapid increase of COVID-19 cases worldwide and the continuing difficulties for delegates travelling from abroad to attend meetings, the decision has been taken to postpone IMO meetings until the end of May.

In light of the growing number of IMO meetings that need to be rescheduled, the Director regrets to announce that it will not be possible to reschedule the March 2020 meeting of the governing bodies and that therefore, this meeting is cancelled. Therefore, documents issued for that meeting are no longer valid and new documents will be issued for consideration at the next meeting.

The Director would like to point out that the next regular meeting of the governing bodies is still expected to take place in 2020 and is currently scheduled to be held during the week of 2 November 2020. However, since IMO will be looking to reschedule its meetings, there is a possibility that these dates may change. The Secretariat is continuing to work in close cooperation with the IMO Secretariat to monitor developments and find suitable dates. The Secretariat will confirm the dates of this next meeting as soon as possible and in good time for delegates to make appropriate arrangements.

The Secretariat is currently working remotely and will continue to provide services as usual. Staff remain contactable via their email addresses. For any general enquiries, please email info@iopcfunds.org

The Director would like to emphasise that despite this temporary operational change, the Secretariat remains fully committed to its work in supporting Member States and would like to thank all those affected for their understanding and patience during these exceptional circumstances. https://www.iopcfunds.org/

ITOPF SERVICES & CORONAVIRUS

March - ITOPF continues to provide its core services and remains ready and prepared.

As a result of the COVID-19 pandemic and ensuing advice from the UK Government, ITOPF staff members are now working remotely. The physical office is closed, as a precautionary measure, and we are operating virtually.

In the event of an incident, our usual emergency notification procedure still applies. Please call +44 (0)20 7566 6998 for immediate attention. (Do not email for an emergency situation.) Your call will be put through to a Duty Officer, who will take details and provide you with technical advice.

The team remains well prepared and fully able to provide technical advice remotely and will support any incident and response operations 100%. However, due to global travel restrictions, we cannot, for the time being, guarantee mobilisation to the site of the incident. We will work with you to evaluate the options available should an incident arise.

ITOPF staff also remain available for non-emergency response matters. For ongoing cases, damage assessment, claims analysis or advice on contingency planning, advisory work or training we remain ready to assist in the usual manner. All staff members are contactable through their usual email addresses (i.e. namesurname@itopf.org). For general enquiries please email central@itopf.org. If you dial the usual ITOPF office number, you will receive instructions to the above effect. www.itopf.org

MEMBERS OF THE INTERNATIONAL SALVAGE UNION RESPOND TO CORONAVIRUS

March 13 - Members of the International Salvage Union have confirmed that they will work hard to maintain full service to their clients during the global Coronavirus outbreak, including providing emergency response services to casualty vessels. It has to be appreciated that the previous destinations of vessels and crew pose an additional challenge when assessing how best to respond to a vessel in distress.

Travel restrictions could affect the way salvors would normally deploy teams but the ISU's members are spread strategically around the world and larger members have people and equipment in multiple locations and on vessels already at sea.

President of the International Salvage Union, Richard Janssen, said: "Salvors are nothing if not problem solvers and we have a track record of responding to incidents whatever the circumstances. Our priorities are to save live, protect the environment and save property and we will jointly work towards a situation whereby service can be maintained to our shipowner clients during the current difficult times. We are all in competition, but we also work cooperatively together in the service of our clients on many jobs whilst respecting the safety of our teams." The ISU has 49 full members providing emergency response, wreck removal, environmental protection and other marine services around the world. http://www.marine-salvage.com/

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

Note from your Editor: World news is currently dominated by reports on the advance of the Coronavirus pandemic. One consequence is that my usual sources of news that is specifically relevant to the interests of the spill response community have temporarily gone very quiet. Under this circumstance I would be particularly grateful to Members and other readers who send me news reports that will be of interest to Members and readers in their own countries and the wider world. john.mcmurtrie@spillcontrol.org

BRAZIL: TRACKING AND TRACING POLLUTING SHIPS

March 24 - Brazilian environmental authorities, sailors and volunteers are still cleaning up part of the country's northwest coastline after a disastrous crude oil spill that first took place in July last year and persisted until December 2019.

The oil spill is being approached as one of the most severe environmental catastrophes ever recorded in tropical coastal regions and is likely to affect anything from marine life to seagrass beds, mangroves and beaches. Ship Technology / Read more

USA: OIL SPILLS IN U.S. WESTERN STATES THREATEN WATER AND HEALTH, RESIDENTS FEAR

March 18 - Oil spills and gas leaks in the U.S. West, along with the oil industry's boom-and-bust business model, are worrying people who live near fossil fuel operations.

With the international price of oil collapsing this month to under \$30 a barrel, smaller operators might be on the verge of bankruptcy and could go broke without cleaning up their well operations, as has happened before, industry observers say.

The oil companies are in a precarious position. We will see how much they can endure, said Jesse Prentice-Dunn, conservation and energy analyst at the Denver-based Center for Western Priorities conservation and policy group.

Small operators are hit the hardest, and that's where you see some real environmental problems, he said. That's where communities are at risk, because [small operators] can go bankrupt and not shut down wells safely.

Almost 3,000 oil spills were reported in top drilling states of Wyoming, Colorado and New Mexico in 2019, an average of eight a day, an analysis by the nonprofit center showed. Oil & Gas 360 / Read more

USA: CALIFORNIA - DECON/DISINFECTION OF FIRE STATION COVID 19

March 22 – This report will be of interest to Members who are involved in coronavirus decontamination work. Vance Bennett, Emergency Management Coordinator/Instructor II, CalOES/CSTI Hazardous Materials Section, writes "When I forward something I leave out the information about who sent it for privacy reasons. In this case if you want to get in touch with the individual who sent this let me know and I'll forward your request. He has put in a lot of work on this and he has some good information".

"Yesterday we disinfected one of our fire stations in Roseville after multiple members came down with fever and flu like symptoms with testing for COVID 19. We also briefly used this station to house self quarantined member who was unable/ unwilling to go home (concerned about young child, immunocompromised elderly parents). The sprayer process came from experiences that Aaron Herman from San Jose Fire passed along. Any decon solution you choose should be able to work with this process. Our original plan was to use Dahlgren, however we have had issues receiving a supply. We ultimately went with D7 which is Sandia DF200 (same as Intelegard DF200/ Crystal Clean, or about 5 other remediation distributors licensed to sell it). We evaluated using a Merlin and for this particular operation, the HVLP sprayer worked exponentially better (better coverage, less product used and wasted, we did not need the long

NEWS REPORTS FROM AROUND THE WORLD (CONTINUED)

contact times provided by foam, etc). I have attached information we have compiled on it, as well as information we pushed out to our personnel before and after the procedure. No issues to this point.

Separately, I have a case of the CIO2 Ultrashok tabs enroute which we will be doing some evaluation on for effective decon with Chlorine Dioxide (amount used to generate effective concentration per volume). This was used in Texas by USAR teams to decon vehicles (prevent mold/ bio growth) as well as disinfection of Hart building during Anthrax. As we gather more info, we will push it out". [Thanks to Vance Bennett, hazmat101@yahoogroups.com]

USA: LATEST ACTIVITY REPORTS FROM NOAA OR&R

March 27 – Please click on the links belw to read the latest News Reports from NOAA OR&R

Disaster Preparedness Program Continues to Support NOAA's Internal Response to COVID-19

The NOS Disaster Preparedness Program continues to provide Incident Coordination for the NOS Incident Management Team (IMT). The NOS IMT was activated on March 2, 2020, to collect information on NOS impacts to personnel, mission, and infrastructure related to COVID-19. The IMT, composed of representatives from every NOS program and staff office, develops daily situation reports in the NOS Disaster Coordination Dashboard.

How OR&R's Emergency Response Division Continues to Provide Services

As a result of the COVID-19 pandemic, NOAA's Emergency Response Division (ERD) staff are working remotely, though our staff continues to take calls and to provide our core service of scientific support during spills and other emergencies.

Marine Debris Program Presents at Virtual 2020 Virginia Marine Debris Leadership Team Meeting to Update the Virginia's Marine Debris Reduction Plan

On March 17, NOAA's Marine Debris Program participated in the virtual 2020 Virginia Marine Debris Leadership Team Meeting to update Virginia's Marine Debris Reduction Plan hosted by Virginia's Coastal Zone Management Program and Longwood University.

Article on Long-Term Data Management Published in Special Deepwater Horizon 10-Year issue of Shore & Beach

NOAA's Office of Response and Restoration and the Restoration Center are pleased to announce a new publication in the journal Shore & Beach that highlights our work and leadership on long-term data management in the Gulf of Mexico.

PEOPLE IN THE NEWS

NOAA OR&R SCIENTIFIC SUPPORT COORDINATOR STEVE LEHMANN



Steve Lehmann is a NOAA senior scientific support coordinator (SSC) based outside of Boston. He is part of NOAA's Office of Response and Restoration and along with other SSCs has a unique mission. That is to support our outside partners such as the U.S. Coast Guard by responding to oil and chemical spills as "objective advisers" to the federal on-scene coordinator and the Incident Command, rather than solely representing NOAA interests. They draw on their scientific education and background, as well as years of experience responding to such spills. Steve describes his role as similar to an experienced trail guide, helping responders avoid the pitfalls and dangers of past spills. His job requires that he be on call for emergency response to provide sound scientific advice; advice that the lead agency, such as the Coast Guard is not obligated to follow. Read more

ISCO NEWS

NEW DOCUMENT UPLOADED IN MEMBERS' AREA OF ISCO WEBSITE

The draft of the updated January 2020 Constitution of the International Spill Control Organization can now be viewed by Members.

CORONAVIRUS PANDEMIC

The problems caused by the pandemic are going to be with us for a long time and ISCO Members are asked to share information on the practical measures they are taking to cope with the ongoing situation. It will be of benefit to all of us to do this and the ISCO Newsletter will support this sharing process by publishing helpful contributions received from members and other sources.

ISCO EMERGENCY ASSISTANCE FACILITY

This service will continue to be available during the Coronavirus emergency. See http://www.spillcontrol.org/emergency-assistance

TECHNICAL SUPPORT

USA: LIST N: DISINFECTANTS FOR USE AGAINST SARS-COV-2

List N includes products that meet EPA's criteria for use against SARS-CoV-2, the novel coronavirus that causes the disease COVID-19.

When purchasing a product, check if its **EPA registration number** is included on this list. If it is, you have a match and the product can be used against SARS-CoV-2. You can find this number on the product label – just look for the EPA Reg. No. These products may be marketed and sold under different brand names, but if they have the same EPA registration number, they are the same product.

- Frequently Asked Questions about List N: Disinfectants for Use Against SARS-CoV-2
- Emerging Viral Pathogen Claims for SARS-CoV-2: Submission Information for Registrants

Note: Inclusion on this list does not constitute an endorsement by EPA. There may be additional disinfectants that meet the criteria for use against SARS-CoV-2. EPA will update this list with additional products as needed.

List N was last updated on March 26, 2020. EPA / Download the list

USA: SAN JOSE FIRE DEPT. DECON7 (D7) VIDEO

Video and helpful advice received from Vance Bennett of Hazmat 101 Group

Below is the Video we put together for the use and system set-up of the D7 Fogging System utilizing an SCBA, and an HVLP spray gun.

Please note, in the video we suggest not using the system in the kitchen area. We will be updating the video providing information on how to utilize the product in the kitchen.

- Clear the area of any food products in the open area
- Put away any utensils, pots, pans, or any other cooking items not built in to the kitchen area (i.e. toasters, etc...)
- Ensure all cabinets, refrigerators, dishwashers, microwaves, ovens, etc... are closed.
- Spray exterior surfaces of cabinets, doors, countertops, ceiling, and floors, etc... without over-spraying to avoid saturation and seepage of D7 product into the cabinet areas.
 - o Should you choose to Decon the interior of cabinets, ensure you remove all food products.
- After the D7 product dries, 30 60 mins, utilize <u>soap and water</u> to clean all food prep, eating, and any surfaces where utensils, pots, pans, or any other cooking items not built in to the kitchen area (i.e. toasters, etc...) will be placed.
- Wash any pots, pans, and utensils that may have come into contact with the product.
- Cleaning doors, walls, ceiling, and floors is not necessary as the D7 product stays active for up to 30-days to kill any bacteria, viruses, and fungus.
 - o Note: Cleaning these areas with soap and water is at your discretion, as it does leave a thin film.

This is a link to Vimeo for the video on the Fogging System set-up, and how to apply the new Decon 7 solution.

https://vimeo.com/399077486 The password is Fire. hazmat101@yahoogroups.com

UV LIGHTS FOR COVID-19 CORONAVIRUS

UV light is a powerful disinfection tool against many viruses, harmful bacteria, mold and spores. The solution is one of the most effective and safest in sanitizing the COVID-19 corona virus, as it does not require any contact with the surface or object.

But how does UV light eliminate microbes? And how does it compare to using traditional, liquid-based cleaning or sanitation?

This type of cutting-edge light leverages the UV-C range (wavelengths ranging between 200 nm and 280 nm) to target the DNA of the virus. The exposure causes cellular mutation in the virus, resulting in damage and eventually killing the microbe.

To better understand the functions and advantages of UV light, we published an article on our website. Larson Electronics / Read the article

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INCINERATE YOUR WASTE FROM COVID-19 CLEAN-UP OPERATIONS ON SITE

Large Businesses and public spaces are turning to environmental contractors for decontamination operations during the COVID-19 pandemic. These deep cleaning operations produce waste in the form of used personal protective equipment (PPE) such as, gloves,

TECHNICAL SUPPORT (CONTINUED)

rags, masks, Tyvek suits and other cleaning materials.

The Elastec MediBurn is a portable waste incinerator that can be used on site to eliminate and sterilize this waste instead of taking it to a landfill, limiting the potential for secondary contamination.

The MediBurn reaches temperatures of 1000°C (1832°F) and has been used to eliminate waste during the 2014 Ebola outbreak. It is available in two sizes and is able to incinerate up to 10 cubic feet (0.28 cubic meters) of waste with a burn rate of 18 to 30 kg per hour with no smoke or smell during operation. Both models offer modulating burners and under-air technology. They also offer easy-to-use electronic controls for improved safety and system control and require minimal training. Multi-language support is available. The entire system only requires an electrical outlet and diesel fuel.

References - COVID-19 Control & Prevention OSHA Regulations Learn More about Elastec MediBurn.

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SCIENCE & TECHNOLOGY

ROBOTS TO SNIFF OUT OIL SPILLS AND ALGAL BLOOMS IN THE ICE-COVERED ARCTIC

Photo: Engineers from MBARI and WHOI transport the LRAUV Polaris across the frozen surface of Bog Lake. Credit: Ben Yair Raanan © 2020 MBARI

March 4 - Bundled in snow gear and wielding a chainsaw, a team of engineers cut a rectangular block from the solid ice underfoot, carving an entryway for their underwater robot. They plopped the torpedoshaped vehicle, named Polaris, into the dark hole notched out of the surface of Bog Lake, Maine, and it slid smoothly into the water. The field trial—a collaboration between MBARI and Woods Hole Oceanographic Institute (WHOI)—marked the first time **MBARI** long-range



autonomous underwater vehicle (LRAUV) had ever traveled beneath an ice sheet. But it won't be the last—Polaris or similar robots may eventually be used to sniff out oil spills and algal blooms in the ice-covered Arctic. Phys.Org. / Read the complete article

BIOLOGICAL APPROACHES OF FLUORIDE REMEDIATION: POTENTIAL FOR ENVIRONMENTAL CLEAN-UP

March 9 - Fluoride (F), anion of fluorine which is naturally present in soil and water, behaves as toxic inorganic pollutant even at lower concentration and needs immediate attention. Its interaction with flora, fauna and other forms of life, such as microbes, adversely affect various physiochemical parameters by interfering with several metabolic pathways. Conventional methods of F remediation are time-consuming, laborious and cost intensive, which renders them uneconomical for sustainable agriculture. The solution lies in cracking down this environmental contaminant by adopting economic, eco-friendly, cost-effective and modern technologies. Biological processes, viz. bioremediation involving the use of bacteria, fungi, algae and higher plants that holds promising alternative to manage F pollution, recover contaminated soil and improve vegetation. Physicians weekly / Read more

NEW HULL REPAIR KIT LAUNCHED TO SAVE SHIPS HOLED BY ICE

March 10 - The first Miko Plaster Polar Kits have been supplied to ship operators providing passenger cruises in polar waters. Using magnetic patches and a special application technique, the kits have been developed to enable ships, for the first time, to effectively repair hull damage caused by polar ice while still at sea and without a diver. Such damage is a recognized risk, even for ice-class vessels, and is likely to increase as climate change releases more free-floating ice into open water.

The Maritime Executive / Read more

CONTRIBUTED ARTICLE

Note from your Editor — For some time I have been conscious that the content of the ISCO Newsletter tends to be very marine orientated despite the fact that many of our Members are more involved in provision of services, materials and equipment for Inland Spill Response. In preparing your newsletter, I find that marine-related content is much easier to source than inland / onshore matter and I would like to redress the balance. Contributions of news, articles, case histories, etc. from our inland spill response members would be very much appreciated.

In the meantime ... IPIECA and IOGP have kindly given me permission to re-publish their article on Inland Spill Response.

INLAND RESPONSE - GOOD PRACTICE GUIDELINES FOR INCIDENT MANAGEMENT AND EMERGENCY RESPONSE PERSONNEL

Part 5 of a serialised article contributed by IPIECA and IOGP



Preface

This publication is part of the IPIECA-IOGP Good Practice Guide Series which summarizes current views on good practice for a range of oil spill preparedness and response topics. The series aims to help align industry practices and activities, inform stakeholders, and serve as a communication tool to promote awareness and education.

The series updates and replaces the well-established IPIECA 'Oil Spill Report Series' published between 1990 and 2008. It covers topics that are broadly applicable both to exploration and production, as well as shipping and transportation activities. The revisions are being undertaken by the IOGP-IPIECA Oil Spill Response Joint

Industry Project (JIP). The JIP was established in 2011 to implement learning opportunities in respect of oil spill preparedness and response following the April 2010 well control incident in the Gulf of Mexico.

Response management (continued)

Safety and health issues

The safety of response teams and the community affected is the top priority during an oil spill response. Hazards to responders include physical ones (such as slips, trips and falls) and chemical hazards (such as spilled oil). Four dominant factors that influence the degree of hazard to responders are:

- the properties and composition of the spilled oil;
- environmental circumstances at the time of an oil spill and during the response;
- the location and types of tasks (including duration); and
- measures to minimize exposures.

Evaporation can produce high levels of flammable gases, and the risk of igniting a fire is a serious consideration, particularly for spills of light crude oils and light refined products (especially gasoline). An early task during an oil spill response is often to monitor for explosive limits of volatile hydrocarbons, as crude oils and gasoline can often contain high levels of light aromatics.

Hydrogen sulphide and other sulphur compounds are not carcinogenic but they are highly acutely toxic. The human nose can detect these compounds at very low levels. Sulphur compounds cause irritation well before toxic levels are reached. However, since our ability to detect odours is quickly deadened, spilled oils with sulphur compounds should be approached carefully.

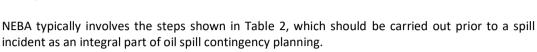
Sulphide levels in crude oils vary widely. Some crudes pose few problems, but the ones that do can present serious health issues even with concentrations at non-toxic levels, due to their highly irritating effects (e.g. headaches and nausea etc.).

CONTRIBUTED ARTICLE (CONTINUED)

Further information and details on managing safety and on how responders are protected from potential hazards is provided in the IPIECA-IOGP Good Practice Guide entitled Oil spill responder health and safety (IPIECA-IOGP, 2012).

Net environmental benefit analysis (NEBA)

Net environmental benefit analysis (NEBA) is a process used by the response community for making the best choice of response options to minimize the impacts of oil spills on people and the environment—see the IPIECA-IOGP Good Practice Guide on NEBA (IPIECA-IOGP, 2015). It involves consideration and judgment to compare the likely outcomes of using different oil spill response techniques alongside recommendations as to the preferred tactics from experienced response/ NEBA practitioners.





The NEBA process

Table 2 Typical steps involved in the NEBA process

NEBA Step	Description			
Evaluate data	The first stage is to consider where the spilled oil is and to where it will drift under the influence of currents			
	and wind—various oil spill trajectory models exist to support this. It is also useful to know how an oil will			
	'weather' as it drifts. This is part of evaluating the available data.			
Predict	The second stage is to assess what is likely to be affected by the spilled oil if no response is undertaken. This			
outcomes	may include ecological resources offshore, nearshore and on shorelines, alongside socio-economic resou			
	The efficiency and feasibility of the response toolkit should also be reviewed. This covers the response			
	techniques, the practicalities of their utilization and how much oil they can recover or treat. If areas under			
	threat include oil-sensitive coastal habitats, the role of oil spill response at sea is to either prevent or limit the			
	spilled oil from reaching these habitats. Previous experience can help assess which oil spill response techniques			
	are likely to be effective. Pragmatic, operational considerations should form a very important part of the NEBA			
	process applied to all feasible response techniques.			
Balance	The advantages and disadvantages of the potential response options are considered and weighed against the			
trade-offs	ecological and socio-economic impacts of each to understand and balance the trade-offs.			
Select best	The process concludes with the adoption of response technique(s) within oil spill contingency plans that			
options	minimize potential spills' impacts on the environment and promote the most rapid recovery and restoration of			
	the affected area.			

NEBA in practice

The simple NEBA example below raises the question of whether or not to use controlled in-situ burning (to be addressed later in this series) in an oiled wetland:

- The oil may be pooled in substantial amounts, so it would be easily ignitable. Yet, burning would create unaesthetic black smoke, and combustion would damage and/or destroy the oiled vegetation above the surface water level.
- Traditional manual/mechanical clean-up operations could destroy the same vegetation (e.g. after oiled sediment and oiled vegetation removal). Equipment operations and responders could unintentionally push or trample oil down towards root systems where the effects of the oil exposure could create long-term damage.
- What is the degree of oiling and the forecast recovery potential for the oiled wetland?
- What is the predicted oil removal efficiency of the response options?
- How unique is this habitat and what is the seasonal sensitivity of these plants?
- Both the controlled in-situ burning and mechanical recovery options (see the following section on Response techniques) need to be evaluated against each other, and also against the additional option of no clean-up with monitoring of the natural recovery of the wetland.

These NEBA considerations can be assessed beforehand and incorporated into oil spill contingency planning. This planning then facilitates effective decision making, with equipment and personnel identified, staging areas selected and priority protection needs in place. NEBA considerations are also applicable during a specific incident to guide the process of assessing the spill circumstances and response options, and estimating the potential outcomes.

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To be continued next week

MESSAGES RECEIVED FROM EVENT ORGANISERS

CANADA: 43RD AMOP TECHNICAL SEMINAR ON ENVIRONMENTAL CONTAMINATION AND RESPONSE RESCHEDULED

March 23 - We regret to inform you that the 43rd AMOP Technical Seminar on Environmental Contamination and Response - originally scheduled to take place June 2-4, 2020 in Edmonton, Alberta, Canada - will be delayed until June 8-10, 2021. The global Covid-19 Pandemic made it necessary for the AMOP Organizing Committee to make this decision. We assure you that this decision was not taken lightly and only made after all possible avenues were explored. The health and safety of all participants is our utmost priority. With the Covid-19 situation evolving daily and currently including travel advisories or restrictions and a ban on gatherings with more than 50 people, we felt an obligation to respect the expert advice from public health officials and postpone. On behalf of the AMOP Organizing Committee we regret any inconvenience that may result from this decision. We want everyone to have the time to focus on your well-being over the coming months. We will continue to move forward with seminar organization. The peer review and paper submission process is underway. In consideration of the international response to the virus, the submission deadline for draft paper will be extended until January 12, 2021. Final papers will be due April 9, 2021. Measures will be taken to accommodate currently accepted presentations. We will be in contact with authors to address any questions or concerns.

We will inform you of the revised schedule for the 43rd AMOP Technical Seminar in the coming weeks to months as soon as the arrangements have been confirmed. If you have any questions please contact: Natalie Jones, Technical Seminar Coordinator, Emergencies Science and Technology Section, Environment and Climate Change Canada, 335 River Road, Ottawa, Ontario, Canada K1A 0H3 Telephone: (613) 991-1114 Fax: (613) 991-9485 E-mail: ec.colloquetechniqueamop-amoptechnicalseminar.ec@canada.ca We thank you for your patience, understanding, and your continued support during these unprecedented and rapidly changing times. Stay safe! Yours sincerely, Patrick G. Lambert, Emergencies Science and Technology Section, Environment and Climate Change Canada

USA: SCAA ANNUAL MEETING & CONFERENCE

This event is in the process of being rescheduled as an annual meeting and webinar. For those who have not cancelled their Hilton Hotel reservations for the cancelled in-person Annual Meeting: You must cancel your reservation or you will be charged. For privacy reasons, SCAA is unable to cancel your reservation on your behalf. HILTON CRYSTAL CITY AT WASHINGTON REAGAN NATIONAL AIRPORT Reservations: 800-695-7551

USA: CLEAN WATERWAYS CONFERENCE & EXHIBITION RESCHEDULED

March 26 – Message received from Carey Buchholtz, CEM, Marketing Director - CLEAN Events – "I am pleased to let you know that the 4th Annual CLEAN WATERWAYS Conference has been rescheduled for August 3-5, 2020. The event will take place in the originally scheduled venue, the JW Marriott Indianapolis in Indianapolis, IN. The health and safety of the community we serve is very important to us. Due to the escalation of severity with COVID-19 and the recommendations of both local and federal government, event management made the decision on March 16 to postpone CLEAN WATERWAYS to future dates. Over the past 2 weeks our staff has been working diligently to reschedule the event, and we are pleased to announce that CLEAN WATERWAYS will now take place August 3-5, 2020.

USA: CLEAN PACIFIC

March 20 - Message received from Carey Buchholtz, CEM, Marketing Director - CLEAN Events. "We are still moving forward with the event, but monitoring the situation closely. If the status of the event changes and we have to cancel, we will let all of our partners and participants know".

CONTRACTS, TENDERS & BUSINESS OPPORTUNITIES

INTERNATIONAL OPEN TENDER NOTIFICATION SERVICE

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

OTHER OPPORTUNITIES: USA & EUROPE

USA - Government solicitations are frequently posted in Technology Innovation News Survey and US EPA Tech Direct. EUROPE – European Maritime Safety Agency invitations to tender are often posted in The EMSA Newsletter. See "Links for other publications" for links to download current issues. ISCO Members are welcome to post tender invitations in this section.

Event organisers are requested to notify ISCO immediately if a listed event is cancelled or postponed

Your Editor is doing his best to keep this 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.

If an event title is not printed in blue ink it is not hyperlinked to the event website, this because the website is not yet available.

COUNTRY	2019	TITLE OF EVENT	LOCATION
	Fo	r more information click on Title of Event	
COUNTRY	2020	TITLE OF EVENT	LOCATION
UK	POSTPONED	IMO Marine Environment Protection Committee	London
TUNISIA	April 1-2	Regional Workshop on Oil Spill Waste Management	Tunis
USA	POSTPONED	Clean Waterways Conference	Indianapolis, IN
GHANA	POSTPONED	Workshop on the ratification and effective	Accra
		implementation of IMO conventions relating to oil	
		pollution and liability and compensation	
CROATIA	April 28	National workshop on liability and compensation	Rjeka
USA	CANCELLED	Oil Spill Response Strategies & Tactics Training	Leonardo, NJ
USA	POSTPONED	APICOM GM Meeting	New Orleans, LA
USA	POSTPONED	International Oil Spill Conference & Exhibition	New Orleans, LA
UK	May 13-14	HAZMAT 2020 Conference	Stratford on Avon
IRELAND	POSTPONED	European Maritime Day Forum Event	Cork
CANADA	POSTPONED	43rd AMOP Technical Seminar on Environmental	Edmonton, Alberta
		Contamination and Response.	
USA	CANCELLED	Elastec's Spring 2020 River Workshop	Carni, Il
USA	June 8 -	Science of Oil Spills Class	New London, CT
UK	June 8-12	2020 IOPC Funds' Short Course	London
NORWAY	POSTPONED	INTERTANKO Annual Tanker Event	Oslo
USA	June 9-11	Clean Pacific Conference & Exhibition	Seattle, WA
USA	June 22 -	Science of Oil Spills Class	Seattle, WA
NETHERLANDS	June 24-25	European Environmental Ports Conference 2020	Rotterdam
USA	August 3-5	Clean Waterways Conference & Exhibition	Indianapolis, IN.
SAO TOME &	August 3-7	National workshop on the National Oil Spill	Sao Tomé
PRINCIPE		Contingency Plan	
ESTONIA	August 25-27	BALEX DELTA 2020 pollution response exercise	Talinn
USA	Sept. 8-11	HazMat Emergency Response Workshop	Sacramento, CA
AUSTRALIA	Sept. 15-17	Ecoforum Conference & Exhibition	Darwin
MALTA	October 6-7	Regional Meeting of National Experts on the Post-	Valetta
		2021 Mediterranean Strategy for Prevention of and	
		Response to Marine Pollution from Ships	
UK	October 19-23	IMO Marine Environment Protection Committee	London
USA	October 20-22	Clean Gulf Conference & Exhibition	San Antonio, TX
MONACO	October 27-29	Regional Workshop to enhance Marine Oil and HNS	Monaco
		regional cooperation in the	
CDEECE	DOCTRONED	Mediterranean (MEDEXPOL 2020)	A.1
GREECE	POSTPONED	Posidonia 2020	Athens
COUNTRY	2021	TITLE OF EVENT	LOCATION
NETHERLANDS	March 22-26	Interspill Conference & Exhibition	Amsterdam
MALTA	May 25-27	Fourteenth Meeting of the Focal Points of the Regional Marine Pollution Emergency Response	Valetta
		Centre for the Mediterranean Sea (REMPEC)	
CANADA	June 8-10	43rd AMOP Technical Seminar on Environmental	Edmonton, Alberta
C. III IDI	34110 0 10	Contamination and Response	Lamonton, Alberta

LINKS FOR DOWNLOADING & READING OTHER PUBLICATIONS

AMSA Update Latest news from the Australian Maritime Safety Authority February 2020 **ATRAC Newsletter** News from the Adriatic Training and Research Centre December 2019 News from the Australian Marine Environment Protection Assoc'n Summer 2020 AUSMEPA Bulletin **BIMCO Bulletin** Marine and shipping-related news from BIMCO December 2019 Newsletter from George Holliday News and commentary on HSE issues from George Holliday On request email Cedre Newsletter News from Cedre in Brittany, France February 2020 Clean Nigeria Associates Newsletter News from CNA about Oil Spill Response in Nigeria December 2018 **EMSA Newsletter** News from the European Maritime Safety Agency Current issue **GEF Newsletter** Monthly Newsletter from the Global Environment Facility December 2019 Group of Experts on the Scientific Aspects of Marine Environmental Protection Latest news **GESAMP** Q4 2019 **GISEA Quarterly Newsletter** News from Global Initiative for South-East Asia **IMO** News Magazine News from the International Maritime Organization Winter 2019 **IMO Publishing Newsletter** New and forthcoming IMO publications March 2020 **ITOPF Ocean Orbit** News from the International Tanker Owners Pollution Federation October 2019 JOIFF "The Catalyst" Int'l Organisation for Industrial Hazard Management Q1 2020 issue **Maritime Executive Magazine** Often contains articles of interest to the spill response community Jan.-Feb. 2019 **MEDNEWS** News from UNEP Mediterranean Action Programme 01 / 2020 MOIG Newsletter News from the Mediterranean Oil Industry Group January 2020 **NCEC Newsletter** News from the National Chemical Emergency Centre March 2020 **Nautical Institute News** News from the Nautical Institute Jan.-Feb. 2020 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 February 2020 **OHMSETT Gazette** Oil Spill Response Research & Renewable Energy Test Facility Quarterly Summer 2019 **OSPAR Newsletter** Protecting & Conserving the N.E. Atlantic and its resources End of year 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 Quarterly Newsletter from Maritime New Zealand July 2018 issue Safe Seas, Clean Seas 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 News from US EPA – Contaminated Site Decontamination **Technology Innovation News Survey** Feb. 1-15, 2020 **USA EPA Tech Direct** Remediation of contaminated soil and groundwater March 1, 2020 WestMOPoCo Western Mediterranean Region Marine Oil & HNS Pollution Cooperation January 2020

News from Australia on Contaminated Land Remediation

February 2020

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

PUBLICATIONS

Alga Cronicle

A MESSAGE FROM THE PUBLISHERS OF THE MARITIME ADVOCATE

Editor: I know that many ISCO Newsletter readers enjoyed reading "The Maritime Advocate" which ceased publication after its editor, Sam Ignarski, sadly died last year. Humphrey Hill (contactus@afterofficehours.com) has written to advise that the publication has restarted.

"Since Sam Ignarski's untimely death last year we have been looking to identify the next editor of The Maritime Advocate. We are now delighted to announce that the new editor is Nick Elliott. Nick, who will be known to many of you, has spent his entire career in the maritime sector, as agent and operator, claims handler, publisher and editor. Nick is a Fellow of the Institute of Chartered Shipbrokers and worked for thirty years in Hong Kong, Tokyo and Piraeus as well as the UK. He is married with a family and divides his time between Scotland and Greece. He also writes maritime thrillers. He can be contacted on nick@n-elliott.co.uk"

Nick Elliot writes "Stepping into the late Sam Ignarski's shoes is no trifling matter. Sam was not only highly knowledgeable in his fields of marine insurance, the law and shipping-related journalism, he was also a great character, his wit appreciated as much as his knowledge. For myself, I'm looking forward to exploring and reporting on developments within our industry and connecting with our readers along the way. We shall shortly be asking you for your own thoughts and ideas - whether we're on the right track, whether you'd like more of this or less of that... Meanwhile, across the diverse yet connected threads of our industry, given the current circumstances, we can console ourselves in the knowledge that we share a sense of common purpose: to play our respective roles in keeping maritime trade moving to and fro along global supply chains. Across the world, events including Greece's Posidonia have been postponed or cancelled with no certainty as to when they'll take place. Normal networking opportunities are on hold indefinitely cancelling out the benefits of face to face contact and the chance to form valuable business associations and friendships".

As far as I can ascertain there is no URL link for downloading "The Maritime Advocate" so unfortunately I can't include this (as I used to do) in "Links for other publications". However you can subscribe (free of charge) at contactus@themaritimeadvocate.com

INCIDENT REPORTS

Editor – Very few spill reports in the press recently – probably not because there's only a few spills – but because the news media are focused on the Coronavirus Pandemic. Currently I depend on readers who send me reports and on Mikhail Voytenko of the Maritime Bulletin. He 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, some of his reports cover incidents that are likely to result in pollution by oil or chemicals.

UK: FREIGHTER RAN ON ROCK, RUSSIAN CREW RESCUED, SCOTLAND

March 23 - General cargo ship KAAMI ran aground on the rock, known locally as Eugenie Rock which in about 6 nm North West off Duntulm, Isle of Skye, Scotland, at 0150 UTC Mar 23, reported RLNI UK. The Portree Lifeboat was launched at 2.24am., also were deployed the Emergency Towing Vessel IEVOLI BLACK (IMO 9439242) and the Pharos, a Northern Lighthouse Board buoy-laying vessel. 8 all Russian crew were airlifted to Stornoway by duty Stornoway Coastguard Rescue Helicopter, all are safe. Stornoway coastguard said weather conditions were "challenging" and stormy with high seas at the time of the rescue. Maritime Bulletin / Read more

MALTA: TANKER BROKE IN TWO, SANK OR SINKING, MEDITERRANEAN

March 26 - Product tanker LADY SANDRA was caught in rough seas and issued distress signal at around 2030 UTC Mar 25, reporting severe structural damages and hull about to break in two, E of Valetta Malta. Tanker broke in two, 3 crew found themselves in water after their life raft was ruptured. All 3 were rescued by Malta Armed Froces ship, and brought to Malta. Tanker or her aft half together with superstructure, was still afloat as of 0600 UTC Mar 26. Absolutely unclear how this inland tanker got to sail in Mediterranean, and who allowed this river ship to navigate high seas, even if she was deployed for bunkering only. Maritime Bulletin / Read more

GERMANY: COAL BARGE BROKE IN TWO, SANK AT DILLINGEN PORT

March 28 - Coal barge AQUA SPRINTER II broke in two and sank alongside berth during loading operation in Dillingen, Germany, in the morning Mar 28. Understood barge has some 1,200 tons of coal dust in hold. Maritime Bulletin / Read more

AND NOW FOR A DASH OF HUMOUR ...

The late Sam Ignarski, Editor of the Maritime Advocate, used to always conclude his newsletter with something to amuse his readers. His successor, Nick Elliot has continued this custom in his first production as the new Editor.

There is a story about a monastery in Greece perched high on a cliff several hundred feet in the air.

The only way to reach the monastery was to be suspended in a basket which was pulled to the top by several monks who pulled and tugged with all their strength.

The ride up the steep cliff in that basket was terrifying. One tourist got exceedingly nervous about half-way up as he noticed that the rope by which he was suspended was old and frayed.

With a trembling voice he asked the monk who was riding with him in the basket how often they changed the rope. The monk thought for a moment and answered brusquely, "Obviously, whenever it breaks!"

And a wee Scottish ode to cheer ye all up - "Tae a virus"

Twa months ago, we didna ken, yer name or ocht aboot ye
But lots of things have changed since then, I really must salute ye

Yer spreading rate is quite intense, yer feeding like a gannet Disruption caused, is so immense, ye've shaken oor wee planet.

Corona used tae be a beer, they garnished it wae limes But noo it's filled us awe wae fear These days, are scary times.

Nae shakin hawns, or peckin lips, it's whit they awe advise But scrub them weel, richt tae the tips, that's how we'll awe survive Just stay inside, the hoose, ye bide Nae sneakin oot for strolls Just check the lavvy every hoor And stock-take, your, loo rolls

Our holidays have been pit aff Noo that's the Jet2 patter Pit oan yer thermals, have a laugh And paddle 'doon the waater'

Canary Isles, no for a while Nae need for suntan cream And awe because o this wee bug We ken tae be...19

The boredom surely will set in, But have a read, or doodle Or plan yer menu for the month Wi 95 pot noodles.

When these run oot, just look aboot A change, it would be nice We've beans and pasta by the ton and twenty stane o rice.

So dinny think yell wipe us oot Aye true, a few have died Bubonic, bird flu, and TB They came, they left, they tried

Ye might be gallus noo ma freen As ye jump fae cup tae cup But when we get oor vaccine made Yer number will be up.

[With acknowledgement and thanks to Nick Elliot, Editor of the Maritime Advocate]

And a short video with some Glagow humour for you to watch -

https://www.youtube.comd/watch?v=Yt8WrYyrr1s

[With thanks for ISCO Newsletter reader Ian Ashworth, formerly of Skimmex Oil Boom]

Members and readers are invited to send contributions to the Editor. We could all be doing with something to cheer us up.

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