

## ISCO & THE ISCO NEWSLETTER

The ISCO Newsletter is published weekly by the International Spill Control Organisation, a not-for-profit organisation supported by members in 45 countries. ISCO has Consultative Status at IMO, Observer Status at IOPC Funds and is 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 IMO, UNEP, EC and other organisation.

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## UK TO DOUBLE MARINE PROTECTION AREAS AROUND OVERSEAS TERRITORIES



A commitment was made to designate marine protection zones around the south Atlantic islands of Ascension by 2019 and Tristan da Cunha by 2020

September 15 - Speaking ahead of the Our Ocean conference in Washington D.C hosted by US Secretary of State John Kerry, the UK's Foreign Office Minister Sir Alan Duncan said that four million sq.km of ocean will be protected under the new plans.

"Protecting four million square kilometres of ocean is a fantastic achievement, converting our historic legacy into modern environmental success," Duncan said.

Moreover, an additional one million square kilometres of ocean will be closed to commercial fishing, in an attempt to preserve important marine life.

The announcements include the designation of protected areas around the Pitcairn Islands, which host a marine environment covering around 840,000 sq.km. Additionally, the 444,916 sq.km marine environment around St Helena - home to more than forty endemic species and sea

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## International news (continued)

life such as whale sharks and turtles - is now also designated as a protection area.

A commitment was also made to designate marine protection zones around the south Atlantic islands of Ascension by 2019 and Tristan da Cunha by 2020.

RSPB's Head of UK overseas territories Jonathan Hall welcomed the announcement. "This is simply enormous and shows world-leading vision," Hall said. "The Government and those of our overseas territories have now shown fantastic ambition in recognising that we need to protect our rich oceans and the amazing wildlife they hold.

"Today's announcements by the UK overseas territory and UK Governments give a long-term future to these amazing places, and to the ocean upon which we all depend." *Edie.net* [Read more](#)

## THE GROWING PROBLEM OF SLOPS DISPOSAL

September 11 - Not all oil spills are widely publicized. In fact, only the larger spills make the headlines in the mainstream press. However, many smaller - yet significant - spills happen regularly, but manage to slip under the media radar. And although less dramatic, the environmental impact of these incidents is considerable.

With 90 percent of the world's goods transported by ships, using a combined 350 million tons of fuel oil every year, the waste material produced from the release of ballast water and tank residues, slops and sludges and soiled bilge water, is considerable.

All of it needs to be disposed of without impacting the environment. Legislation dictating how shipowners must dispose of waste is stringent

and disposal must be conducted in line with the IMO's MARPOL Convention 73/78, and the E.U.'s European Directive 59/2000 regulations.

However, it would seem that there is a trend for some owners and operators to dump their slops illegally. The United Nations Environment Programme (UNEP) estimates that at least 3,000 incidents occur each year in which oily waters are deliberately dumped in European waters alone. For shipowners and operators, disposing of slops represents just one sustainability challenge they have to act upon under IMO and E.U. regulations.

At the height of the market, the waste product could be sold by slops collectors into cement industries. However, with the current crash in crude prices, these markets are taking the opportunity to purchase purer, virgin products, removing the natural market for slops disposal. *The Maritime Executive* [Read more](#)

## MARINE ENVIRONMENTAL PROTECTION IN ASIA

September 13 – Report received from IOPC Funds

On 30 August 2016, the Legal Counsel, Mr Kensuke Kobayashi, participated in a conference on Marine Environmental Protection in Asia, Regional Implementation of IMO Conventions at the Grand Copthorne Hotel, Singapore.

The event was hosted by the Law of the Sea Institute (LOSI) of the University of California, Berkeley, the Korea Institute of Ocean Science and Technology, and the Centre for International Law of the National University of Singapore.

At the conference, Mr Kobayashi joined a panel to discuss liability and compensation for pollution by oil and hazardous and noxious substances.

The panel also discussed the oil pollution compensation system in the United States of America. [Source document](#)

## Incident reports from around the world

### USA: LOUISIANA SPILL: PIPELINE REPAIRS UNDERWAY

September 11 - The U.S. Coast Guard, Louisiana Oil Spill Coordinator's Office and ECM Maritime Services continued to respond to an oil discharge near Bay Long, Louisiana, on Sunday, with more than 6,000 gallons of oily-water mixture recovered so far.

Operations to safely repair the damaged section of pipeline are underway.

To date, 155 personnel, 25 boats, seven skimmers, and more than 12,000 feet of hard-boom have been deployed to contain and recover the product.

Approximately 200 birds have been observed as oiled to varying degrees in the Cheniere Ronquille Barrier Island and East Grand Terre Island areas. Response crews are working to safely capture the oiled wildlife for rehabilitation. To date, 11 birds and 1 Kemp's Ridley sea turtle have been collected. *The Maritime Executive* [Read more](#)

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### MALAYSIA: MAJOR OIL SPILL IN PORT TANJUNG PELEPAS

September 12 - The bunker tanker Trident Star spilled about 70 tons of fuel in Tanjung Pelepas, Malaysia. The vessel was docked at the ATB Vitol oil terminal and taking fuel on board, but one of the hose was leaking.

Neither crew nor terminal staff took some adequate actions against the leak and into the water spilled sufficient quantity of fuel. Later the oil spot into the water enlarged and was spotted by the nearby dockworkers, who reported the environmental pollution to the local authorities.

The authorities at Port of Tanjung Pelepas immediately dispatched Oil Spill Response Team and the situation was put relatively under control. The vessel was detained until further investigation for the accident, but the water and shore in the port of Tanjung Pelepas was seriously polluted. *Maritime Herald* [Read more](#)

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### UK: TESCO ADMITS RESPONSIBILITY FOR FUEL LEAK THAT POLLUTED RIVER

September 12 - Tesco faces being fined after admitting responsibility for a fuel leak at one of its petrol stations that polluted a 10-mile stretch of river.

Thousands of litres of diesel leaked underground for up to two days from a pump at one of the supermarket's petrol stations, seeping into a tributary that feeds into the river Irwell in east Lancashire, in an area popular with anglers.

By the time engineers at the firm's Haslingden branch managed to shut off the leak, the spilled fuel is thought to have contaminated a stretch of the river as far as the town of Radcliffe near Manchester. At the time of the incident on 2 July 2014, anglers reported dead trout being found along various parts of the river. *The Guardian* [Read more](#)  
[Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

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### TRINIDAD & TOBAGO: NEW OIL SPILL TRIGGERS FEAR FOR LA BREA RESIDENTS

September 13 - Hours after Prime Minister Dr Keith Rowley expressed concern over T&T's declining oil production and the \$20 billion unserviceable debt to Petrotrin, barrels of the precious commodity have once again leaked into the Gulf of Paria.

La Brea Fisherfolk Association president Alvin La Borde said since Sunday, oil was seen emanating from Well ABM 37 located in the Brighton Marine field. *Trinidad & Tobago Guardian* [Read more](#)

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### USA: ALABAMA - GASOLINE PIPELINE SPILL: 519 WORKERS CLEANING UP 250,000 GALLONS SOUTH OF BIRMINGHAM

September 15 - A leak in a major gasoline pipeline running from Houston to New York was discovered late last week in rural Shelby County, about 30 miles south of Birmingham. The operator, Colonial Pipeline, announced yesterday that the total volume spilled was approximately 250,000 gallons.

There is still gas in the pipeline, possibly still leaking: The leaking pipeline was shut down on Friday after the leak was discovered, but Berry said there may be additional gas still inside the pipeline. The leaking section of pipeline hasn't been excavated yet due to safety precautions, so Berry said the condition of the pipeline and cause of the leak is still unknown.

Crews have installed temporary plugs in the pipeline on either side of the spill location, and gasoline is being extracted from the affected section of pipeline at those blockage sites. *Al.com* [Read more](#)

## Incident reports from around the world (continued)

### September 16 - Workers Repairing Pipeline That Spilled Gas in Alabama

Work crews are trying to repair a pipeline that has spilled more than 250,000 gallons of gasoline in a rural area near Birmingham.

Colonial Pipeline says most of the gas is contained in a retention pond near the city of Helena, and there's no public safety concern.

But while workers have sealed the leaking part of the pipeline, a spokesman says there's a possibility some fuel could still be released. Crews are both removing spilled gas and working to fix the pipeline. *Epoch Times* [Read more](#)  
[Thanks to ADR Training UK]

### September 16 - Crews begin to dig out leaking gasoline pipeline, spill could be 336,000 gallons

Colonial Pipeline employees and contractors started Friday afternoon digging out a leaking underground pipeline that spilled hundreds of thousands of gallons of gasoline south of Birmingham and shut down a major cog of the country's fuel distribution network, sparking fears of a gas shortage.

The latest update from Colonial Pipeline states that federal, state and company officials have cleared crews to begin the excavation process, which they had not previously been able to do because of the dangerous conditions created by pooled gasoline and fumes.

Colonial Pipeline also raised its estimate of the size of the spill. The company announced last week that the spill leaked around 6,000 barrels of gasoline, which is 252,000 gallons. They now say the leak is likely between 6,000 and 8,000 barrels, which is 336,000 gallons.

The governors of Alabama, Georgia, North Carolina and South Carolina have each declared a state of emergency this week allowing truckers to work longer hours to avoid fuel shortages. Some suppliers have begun shipping gasoline by boat from Houston to New York. *Al.com* [Read more and watch video](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

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## USA: CALIFORNIA - LUBE OIL SPILLED FROM SPIRIT OF SACRAMENTO PADDLEWHEELER



*Photo: The capsized Spirit of Sacramento still sits in False River north of Bethel Island. - Bruce Kitchens*

September 15 - An unknown amount of lube oil spilled from the capsized Spirit of Sacramento on Wednesday after the boat shifted onto its starboard side amid recovery efforts.

Coast Guard officials reported that the lube oil was spilled in the immediate vicinity of the boat, which foundered in False River near Bethel Island Sept. 4. The lubricant was spilled within the containment area and was recovered with absorbent pads.

A spokesperson for the Coast Guard said that divers were conducting assessments at the site on Thursday and will be working on operations throughout the

weekend. Several recovery scenarios are being considered.

The owner, Samuel Rowles, refused a federal order to issue a fuel removal plan after the 85-foot paddlewheeler dumped 600 gallons of diesel in the water.

The Federal Oil Spill Liability Trust Fund, which is financed through taxes on oil, will cover the costs for the immediate response and the Coast Guard will attempt to recoup further costs for environmental cleanup and remediation from Rowles, a Coast Guard spokesman said.

The Coast Guard has established a safety zone surrounding the Spirit of Sacramento, which will be in effect until midnight Oct. 7, or until environmental cleanup operations have been completed. The safety zone restricts any traffic within a 75-foot radius from the site of the Spirit of Sacramento, which is at the southwestern tip of Webb Tract. *The Mercury News* [Read more and watch video](#)

## AUSTRALIA: NSW - NEW SPILLS AND LEAKS GUIDE FOR UNDERGROUND FUEL TANKS

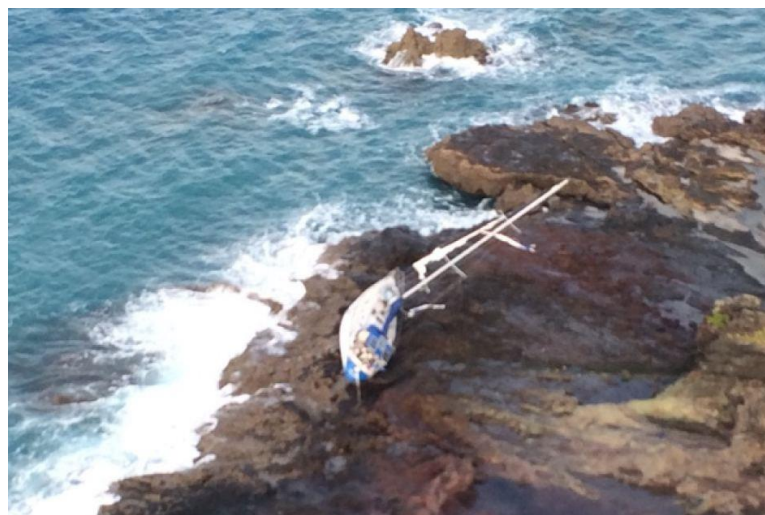
September 2 - The NSW Environment Protection Authority (EPA) has published an environmental incident prevention and management guide to help service station owners and operators check for leaks and clean up fuel spills.

Independent service stations in the Tweed region have been among the first in NSW to receive the guides this week, with more to be distributed in the coming months.

If not checked regularly underground fuel tanks have the potential to leak, which can impact on the environment and lead to expensive clean-up bills for business owners. Persistent leaks need to be managed promptly to avoid significant environmental damage, including impacts to underground water sources.

Service station owners are required to cover the cost of the clean-up from leaking fuel tanks, which can often run into the millions of dollars. This not only impacts on the bottom line of many small businesses but it can also lead to a reduction in land value and limit future development opportunities in a local government area. *NSW EPA*

[Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]



## AUSTRALIA: SHIPWRECKS, ABANDONED BOATS CLEAN-UP COULD COST QUEENSLAND \$6M

Taxpayers could be left with a \$6 million bill to clean up hundreds of abandoned, derelict and shipwrecked boats all along Queensland's coastline.

Maritime Safety Queensland said hundreds of boat owners were abandoning their vessels and leaving them for the state to deal with.

It has estimated the cost of removing the currently around 200 vessels classed as derelict on the state's coast would be \$6 million.

Under state and federal legislations, boat-owners are responsible for the salvage of their shipwrecked or neglected vessels.

Marine Safety general manager Patrick Quirk said abandoned boats were causing issues from Normanton in the Gulf of Carpentaria, to the state border at the Gold Coast. The derelicts could cause danger to navigation and potential environmental risks. *Abc.net.au* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

## AUSTRALIA: OIL DISASTER INVESTIGATOR ALARMED BY BP GREAT AUSTRALIAN BIGHT RESPONSE

September 15 - A leading global expert on oil disasters has said the response to concerns about potentially faulty equipment in offshore drilling planned for the Great Australian Bight by BP is an early warning sign of problems that could potentially lead to disasters.

Bob Bea, an emeritus professor and founder of the center for catastrophic risk management at Berkeley, said what BP, its subcontractor Diamond Offshore Drilling and the Australian regulator had said in response to concerns about faulty bolts was "very alarming".

Bea has investigated major oil disasters around the world including the Exxon Valdez oil spill and BP's Deepwater Horizon explosion and oil spill in the Gulf of Mexico. He helped establish the field of "forensic engineering" and has worked in dozens of countries, including Australia.

He told the Guardian the process surrounding BP's "high risk" application to drill for oil in the Great Australian Bight lacked adequate transparency, proper regulatory processes had not been followed and that responses from the companies involved were "inadequate" and "very alarming".

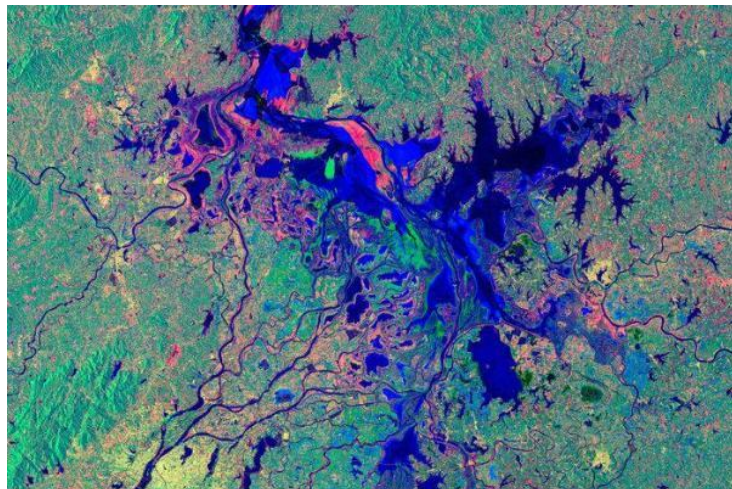
On Monday, the Guardian revealed BP could conduct its drilling operations in the Great Australian Bight using critical items of equipment – huge "connector bolts" – that have been failing since 2003. The US regulator said the fault appeared to be "systemic" and something that has been "plaguing subsea equipment"

## News reports from around the world (continued)

Brian Salerno, the head of US Regulator the Bureau of Safety and Environmental Enforcement (BSEE) said it was just down to luck that the faulty bolts had not caused a major oil spill yet, and that it was just a matter of time until they did.

In response to Guardian queries, BP said: "BP has verified with its contractor, Diamond Offshore Drilling, that the bolts have been changed out in accordance with the product information. *The Guardian* [Read more](#)

### CHINA: POYANG LAKE LOOKS LIKE GIANT OIL SPILL IN LATEST ESA IMAGE



*Poyang Lake is the largest freshwater lake in China. Photo by ESA/Copernicus Sentinel*

September 16 - The largest freshwater lake in China looks like a giant oil spill through the eyes of the European Space Agency's Copernicus Sentinel satellite.

ESA released new radar imagery of Poyang Lake on Friday -- imagery recently captured by Copernicus Sentinel-1 as it passed over Southern China at an altitude of 431 miles.

Poyang Lake is a vital ecological resource. It serves as the wintering grounds for Siberian cranes, or snow cranes, which migrate thousands of miles across Asia.

The Indo-Pacific finless porpoise, *Neophocaena phocaenoides*, a freshwater mammal noted for its intelligence, also calls Poyang home. The porpoise is highly endangered. At its current rate of population decline, scientists predict the species will be extinct in less than a decade. The Chinese government recently relocated several specimens from the lake for a breeding program. *UPI.com* [Read more](#)

### CHINA: TYPHOON MERANTI DAMAGES SHIPS AND TERMINALS

September 16 - Typhoon Meranti – the most powerful storm to hit southern China since the Communist Party took power – drove multiple vessels aground, into piers or loose from their moorings as it passed, with multiple marine casualties reported in Xiamen and Taiwan.

- The container ship Gan Tai Tai Zhou dragged anchor off Xiamen and went onto the beach at Kinmen Island on Thursday. Local media reported some amount of oil leakage visible on the sand.

- The 14,000 TEU newbuild YM Wind, not yet completed and due for delivery next year, was torn from its mooring and sent smashing into four shoreside gantry cranes at Yang Ming's terminal in Kaohsiung City, taking the pier out of service.

Nine other vessels also lost their mooring cables and were blown into other vessels and port equipment. The full extent of the damage is still being calculated. *The Maritime Executive* [Read more](#)

### JORDAN RATIFIES WRECK REMOVAL TREATY

September 16 - IMO's work to provide uniform international rules for the prompt and effective removal of wrecks received a boost with Jordan becoming the 30th State to ratify the Nairobi International Convention on the Removal of Wrecks.

The Convention provides the legal basis for States to remove, or have removed, shipwrecks that may threaten the safety of lives, goods and property at sea, as well as the marine environment

H.E Mr Mazen Homoud, Ambassador of Jordan to the United Kingdom, met IMO Secretary-General Kitack Lim and deposited the instrument of ratification. *IMO News*



## News reports from around the world (continued)

### TANZANIA: UNIDO LAUNCHES HYDROGEN SULPHIDE ONLINE TRAINING COURSE

September 15 - Within the framework of the Tanzania United Nations Development Assistance Programme, UNIDO has launched an online training course entitled 'How to deal with hydrogen sulphide'.

Hydrogen sulphide gas present in tanneries and effluent treatment plants has proven fatal to workers exposed to it.

Owners and managers of tanneries and effluent treatment plants must be fully aware of the dangers posed by this poisonous gas, take all preventive and precautionary measures to protect the workforce from exposure to this gas and know how to deal with the situation should exposure occur. *Leathermag.com* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

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### TRINIDAD & TOBAGO: ACCOUNTABILITY NEEDED FOR OIL SPILLS

September 14 - With yet another oil spill clogging the southwestern shoreline and affecting the lives and livelihood of communities in the area, it remains a scandal, going over two administrations and nearly three years, that the disastrous south-west coast oil spill of December 2013 is still to be brought to some definitive conclusion.

As the worst oil spill in the country's history of oil spills, one would have expected an independent investigation to have been conducted by now. Instead, from a public information perspective, the issue remains as murky as the oil-laden waters in the affected area.

The little we know about that devastating Tier 3 level oil spill is that it was caused by a leak on the No. 10 Sea Line at the Petrotrin's Pointe-a-Pierre port which developed during the loading of fuel for the barge Marabella. Amidst the public furore that followed, the Environmental Management Authority (EMA) announced that it had levied a fine of \$20 million on Petrotrin. To this day, no one knows the basis on which that figure was calculated, whether Petrotrin had got off lightly or not, and whether the money was actually paid and to whom or what. If it was, one would assume it would have been paid into an Oil Contingency Fund but assumption here would be pure speculation. *Trinidad Express*

[Read more](#)

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### USA: CALIFORNIA - FEDS STILL RESTORING SANTA CLARA RIVER AFTER '90S PIPELINE BREAKS

September 15 - The communities surrounding the Santa Clara River in southern California are all too familiar with the difficulty of cleaning up an oil spill. Two major oil spills, the ExxonMobil pipeline break of 1991 and the ARCO pipeline break of 1994, impacted the same 15-mile stretch of the Santa Clara River.

Following the spills, the U.S. Fish and Wildlife Service (Service) partnered with the California Department of Fish and Wildlife (CDFW) to conduct a Natural Resource Damage Assessment (NRDA) for each spill. The watershed is home to 16 federally protected species, and is an Audubon Global Important Bird Area. The NRDA's documented impacts to hundreds of acres of riparian habitat as well as numerous birds, mammals, fish, and other wildlife that live, feed, and shelter in the river corridor.

To counter the environmental injury caused by these spills, the Service and CDFW created the Santa Clara River Trustee Council (SCRTC). The SCRTC works on restoration projects for the injured habitat and wildlife of the Santa Clara River, using \$9.8 million (\$2.7 million from Exxon Mobil and \$7.1 million from ARCO) to protect land and rebuild native habitats for wildlife.

Unlike many other major rivers in the Country, the Santa Clara River is not in the public domain, and is divided into numerous parcels that are privately owned. To protect as much of the river as possible, the SCRTC has partnered with The Nature Conservancy, California Coastal Conservancy, and California Wildlife Conservation Board to acquire 1,011 acres of land within the river corridor. *SCV News* [Read more](#)

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## ISCO News

### ISCO REPRESENTATION AT OCTOBER 2016 IOPC FUNDS MEETINGS

ISCO will be represented by Dr Douglas Cormack Hon.FISCO and Mr Matthew Sommerville.

Two papers have been submitted and have been published on the IOPC Funds website,

The IOPC Funds are two intergovernmental organisations (the 1992 Fund and the Supplementary Fund) which provide compensation for oil pollution damage resulting from spills of persistent oil from tankers.

<http://www.iopcfunds.org/>

### THE CASE FOR LLOYDS OPEN FORM SALVAGE CONTRACT

**ISCO Member, Dr Douglas Cormack Hon.FISCO has written to comment on the Article by Mark Hoddinott. The referenced article appeared in Issue 549 of the ISCO Newsletter (29<sup>th</sup> August 2016).**

Being aware of benefits of the LOF from my claim-adjudication activities respecting cargo/bunker transfer at the Aegean Sea, Carina, Nikitas Roussos, Patraikos II and Sea Empress incidents, I was pleased at the prospect of its revival as reported in Mark Hoddinott's recent article.

My approach had been to compute the stranded quantities for each incident by subtracting from the respective impact-released quantities, those evaporated consistent with the known distillation profiles of the releases and those naturally dispersed consistent with their known viscosity/half-life relationships in the time taken for these residuals to reach shore over the distance travelled at 100% and 3% of the known tide and wind vectors; to note the consistency of these computed quantities with those reported as having actually stranded; and to use this thus validated mass-balance approach to predict the residual quantities which would have stranded had the salvor not prevented its release by his cargo/bunker transfer. Thus, with this quantified justification of the salvor's contribution being in no way an opinion or counter-opinion, and with its implied comparison of the costs of the actual release-response at sea and onshore with those likely to have arisen from release of that which was cargo/bunker transferred, it was always accepted without debate and thus with minimal court-costs.

To those who discontinued the LOF on the opinion that it favoured the salvor financially, and who will no doubt attempt to prevent its revival, my response is that my approach favoured the salvor only in emphasising the cost-effectiveness of his prevention of further release while those who express concern over the negative effects and consequences of releases, nonetheless prevent safe haven use for the cargo/bunker transfer which terminates release; the dispersant use which increases dispersion/ biodegradation rates; and the in situ discharge of process water which frustrates removal from water and shore surfaces: none of which helps prevention or clearance.

So, in contrast, let us help the cargo/bunker salvor and the release-clearance contractor to be as cost-effective as possible by relieving them of the belief-driven preventions and obstructions which currently render them cost-ineffective at no help to the environment (c.f. my Deepwater Horizon comments in last week's issue of this Newsletter). Were the LOF to have been in any way integral to the help which my mass-balance approach gave through salvors to commercial activities otherwise interrupted by releases, reference to this help may assist in achieving a revival to the benefit of both.

For more on what is already known, and on what is otherwise believed despite having been refuted by this knowledge, readers are referred to my website <http://knowledgeonly-marinepolicy.weebly.com>

## Contributed article

### SPILL RESPONSE & ALTERNATIVE RESPONSE TECHNOLOGIES BY JOHN BRINKMAN



John Brinkman is the President and CEO of Imbibitive Technologies Corporation (IMBTEC), a Delaware, USA Corporation since 1994.

IMBTEC and Imbibitive Beads® have been honoured by The White House "Closing the Circle Award" and by the Technology Museum of Innovation in San Jose, California.

John Brinkman is a graduate of the University of Western Ontario, located in London, Ontario, Canada.

*Note from Editor: The editorial policy of the ISCO Newsletter does not normally allow the use of trade names in contributed articles and such articles should be free of product promotional content. However, in this case, an exception has been made. Because the product described is a single-source one-of-a-kind it was not practical to avoid use of the brand name*

The article is a follow-up to the discussion on defining sorbents and adsorbents arising from Mark Francis' article on Shoreline Clean-up in issue 538 of the ISCO Newsletter and the ensuing correspondence in issues 539 and 540.

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## Part 2 – Alternative Spill Response Technology

In his response to my comments concerning Mark Francis' reference to sorbent products within his series of articles, Dr. Merv Fingas took it upon himself to make the following comment:



**“The only absorbent product out there is the Imbiber Beads® - but no one should use them externally - that is uncontained such as on a beach - how would you ever pick them up which one should do - further when used on anything heavier than Naphtha the process is again adsorption - heavy oil does not enter into the imbiber bead”**

I did not raise the issue of where Imbiber Beads® are best used or the types of spilled products they work best on nor did I reference any particular application, but feel it necessary to correct several of the assumptions associated with Dr. Fingas' comment.

Imbiber Beads® work very well on “fuels and solvents” and the capture and containment of the spilled liquid is absolute; meaning that once imbibed/absorbed they cannot be re-released back into the environment or onto response personnel; thereby eliminating secondary contamination (a problem inherent with adsorbents).

US EPA references this in their Code of Federal Regulations that **“liquids imbibed are no longer available for release as liquids”**. (40 CFR pts 260, 261 et al)

Further to this, Imbiber Beads® work very well on a range of crude oils, including but not limited to Alyeska North Slope (Exxon Valdez – March 1989), Sweet Louisiana (Macondo/DWH – April 2010), most Arabian crude oil, Sweet Alberta, Bakken, Diluted Bitumen, to name a few. Imbiber Beads® work best when the “lights fraction” is still available, which typically is in the early stages of a spill event, and will transform crude oil into a non-sticky, semi-solid mass that can be recovered off of water using existing skimmer technologies.

The topic of how best to deal with released Bakken crude oil and/or Diluted Bitumen due to its' higher aromatic content is front and center due to several recent train derailments and pipeline expansions.

Tests have demonstrated the ability of Imbiber Beads® to reduce (not eliminate) the “rate” at which hazardous vapours are released by eliminating the liquid phase and transforming the spilled liquid into a semi-solid. This reduction in the rate of off-gassing lowers the concentration-in-air to below LEL in many instances; thereby making the spill site safer for response personnel.

Note: Conversely, commonly used adsorbent products such as those referenced above rely upon increased exposed “surface area” and actually enhance the rate of vapour release, which increases the concentration-in-air and dramatically increases the risk to response personnel by lowering the flashpoint and increasing the explosion and fire hazard. Why would anyone knowingly put their response personnel at risk by using these sorts of materials?

As has been demonstrated by the contents of this dialogue most people, even those who have spent the better part of their career in spill response are not aware of the fundamental difference in performance between “adsorbents” and “absorbents” and what that performance implies.

Similarly, using vapour-suppressing foams addresses the explosive vapour issue as long as the foam layer remains undisturbed but the spilled liquid still needs to be picked-up. (Imbiber Beads® facilitates both.)

For the past forty years or more the global oil spill response industry has relied upon the same oil spill recovery technology and not surprisingly has recorded the same oil spill recovery statistics of 10 – 15%, in spite of what may be the best intentions, and having spent billions of dollars on equipment, training exercises, sensing devices, modelling software, surveillance equipment, etc.

That so much attention is dedicated to shore-line clean-up is testimony of just how ineffective the current range of technologies is during response operations.

Invariably response operations become shore-line clean-up operations because the release quickly reaches “unmanageable proportions” within hours of the incident occurring; an issue raised by the US Office of Technology Assessment (US OTA) in their report to the US Congress (“Coping with an Oiled Sea”) in March 1990, one-year after the Exxon Valdez.

OTA referenced that an oil spill will spread six (6) square miles within the first twelve hours with little wind or current assistance.

Meanwhile as the slick continues to spread and head off in a myriad of rivulets it also continues to “thin”; thereby rendering most skimmer equipment unable to meet its rated skimming capacity, which further compounds the logistical problems.

## Contributed article (continued)

On the issue of oil spill cleanup effectiveness a paper entitled “**Factors that Determine the Costs of Oil Spills**” presented at the 2003 edition of the International Oil Spill Conference by representatives of the International Tanker Owners Pollution Federation (ITOPF - London, UK) states:

**“An active response is therefore often adopted even when technical opinion is agreed that it is unlikely to have a significant benefit. This is usually due to the fact that oil spilled on the surface of the sea spreads rapidly, thereby extending over an area that is too great to be countered effectively by available techniques. Added to this are the limitations on containment and collection systems imposed by winds, waves and currents and the severely reduced effectiveness of chemical dispersants on high viscosity oils and water-in-oil emulsions (mousse). Responding in such circumstances can lead to high cleanup costs for little or no benefit in terms of mitigating the oil’s impact on coastlines and sensitive resources”.**

The ITOPF reference from 2003 has even more relevance when considering the US Oil Spill Commission’s report to the President in January 2011, one-year after the Macondo/DWH catastrophe when it states that of the 44,000 personnel and 6,000 skimmers involved in the operation only 3% of the 200-million gallons of released oil was recovered at an operational cost of US \$7.5 Billion to BP. (This does not take into account the fines and lawsuits BP has faced since the incident). Even if BP actually recovered 10% of the oil it still reflects the lack of improvement of oil spill recovery technologies over the past fifty years, no matter what the circumstances are and how extenuating.

To address the issue of being able to respond to an oil slick in the shortest possible time the oil industry is promoting the concept of ever-increasing acceptance of disposal technologies such as dispersants and in-situ burning.

In the case of dispersant use it allows for the dispersant to be aerially applied within hours of notification instead of the days it currently takes to mobilize and transport significant amounts of mechanical recovery equipment and personnel to the spill site. In many instances however, dispersant use and in-situ burning will not be an acceptable alternative, which means that a heavy reliance will remain upon mechanical recovery and the meager recovery results of the past fifty years, unless new ideas and concepts are adopted.

**To be continued**

## Publications

### UK SPILL HAS JUST RELEASED THE SEPTEMBER 2016 ISSUE OF THE SPILL ALERT MAGAZINE

Click [HERE](#) to download your FREE copy now

## Links for recent issues of other publications (in alphabetical order)

<a href="#">AMSA Aboard</a>	News from the Australian Maritime Safety Authority	June 2016
<a href="#">AMSA On Scene</a>	Australia: National Plan for Marine Environmental Emergencies	March 2016
<a href="#">ASME EED EHS Newsletter</a>	News and commentary on HSE issues from George Holliday	Most recent issue
<a href="#">Bow Wave</a>	Sam Ignarski’s Ezine on Marine & Transport Matters	Current issue
<a href="#">Cedre Newsletter</a>	News from Cedre in Brittany, France	July 2016
<a href="#">Celtic and Biogenie enGlobe Newsletter</a>	Technical Information on Polluted Site Remediation	Spring 2016
<a href="#">CROIERG Enews</a>	Canberra & Regions Oil Industry Emergency Response Group	Current issue
<a href="#">EMSA Newsletter</a>	News from the European Maritime Safety Agency	September 2016 issue
<a href="#">Environmental Technology Online</a>	Environmental Monitoring, Testing & Analysis	September 2016 issue
<a href="#">IMO News Magazine</a>	News from the International Maritime Organization	No 2, 2016
<a href="#">IMO Publishing News</a>	New and forthcoming IMO publications	August 2016
<a href="#">Intertanko Weekly News</a>	International news for the oil tanker community	September 16, 2016
<a href="#">IPIECA eNews</a>	Int’l Petroleum Industry Environmental Conservation Assoc’n	February 12 issue
<a href="#">JOIFF “The Catalyst”</a>	Int’l Organisation for Industrial Hazard Management	July 2016 issue
<a href="#">MOIG Newsletter</a>	News from the Mediterranean Oil Industry Group	Quarter 1, 2016 issue
<a href="#">NOWPAP Quarterly</a>	News from the North West Pacific Action Plan	Quarter 1, 2016 issue
<a href="#">Ocean Orbit</a>	Newsletter from the International Tanker Owners Pollution Federation	May 2016
<a href="#">OCIMF Newsletter</a>	News from the Oil Companies International Marine Forum	August 2016 issue
<a href="#">Pollution Online Newsletter</a>	News for prevention & control professionals	September 14 2016
<a href="#">Sea Alarm Foundation Newsletter</a>	Oiled wildlife Preparedness and Response news from Sea Alarm	Autumn 2015 issue
<a href="#">Technology Innovation News Survey</a>	News from US EPA – Contaminated site decontamination	July 16-31, 2016
<a href="#">The Essential Hazmat News</a>	Alliance of Hazardous Materials Professionals	Feb 29, 2016 issue
<a href="#">Transport Canada Newsletter</a>	News and articles re transport of dangerous goods in Canada	Winter 2014 issue
<a href="#">USA EPA Tech Direct</a>	Remediation of contaminated soil and groundwater	September 1, 2016
<a href="#">USA EPA Tech News &amp; Trends</a>	Contaminated site clean-up information	Spring 2016 issue
<a href="#">WMU Newsletter</a>	News from the World Maritime University	July 2016 issue

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

### CONTAMINATION EXPO 2016 – LONDON, 12-13 OCTOBER 2016

The Spill Response Expo is the UK's only show highlighting concepts, strategies, innovation, and services in the response and intervention of chemical spills. The event will attract environmental scientists, consultants, pollution response specialists, technicians, and engineers.

In addition to the Spill Response Expo, the event will feature the Land Remediation Expo, the Clean Air Technology Expo, the Hazardous Materials Expo, the Nuclear Decommissioning Expo, the Flood Expo, the Marine & Coastal Civil Engineering Expo (M&CCE Expo), and the Geotechnical Engineering.

Spill response companies have the ethos and culture that is relevant to the wider range of environmental activities being featured at Contamination Expo – because of this, the event will be of particular interest to members who are considering diversification into related fields or seeking to develop technical link-ups with others in the environmental services field.

The Spill Response Expo is the UK's only show highlighting concepts, strategies, innovation, and services in the response and intervention of oil and chemical spills.

ISCO is supporting this event and will have a stand at the exhibition. We recommend your attendance at Contamination Expo and will hope to see you there. For more information or to book your free ticket, visit [www.spillresponseexpo.com/isco/](http://www.spillresponseexpo.com/isco/).

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### CLEAN GULF CONFERENCE & EXHIBITION – TAMPA, FLORIDA – 1-3 NOVEMBER 2016

CLEAN GULF offers solutions in spill prevention, preparedness, and response and brings together all parties responsible for response operations from the U.S. and beyond. Here is a summary of the programme. Click on the Track Headings for details of speakers, presentation topics, and times.

#### **Track 1: Planning and Preparedness**

- Prevention Strategies
- Response Communications
- Training and Exercises
- Plans and Preplans

#### **Track 2: Response**

- Focusing on a Safety Culture
- Joint Coast Guard - Marine Industry Salvage and Marine Firefighting
- Case Studies that Offer a Unique Storyline
- Integrating Natural Resource Damage Assessment (NRDA) into a Response
- Understanding Incident Complexity: Right Sizing the Response Organization
- Understanding the Role of the Responsible Party: From a State and Federal Regulatory Perspective
- Wildlife Issues

#### **Track 3: Inland Preparedness and Response**

- Inland Case Studies
- Inland Waterway Spill Response Capabilities
- Emerging Inland Technologies (Dogs & Drones...but don't call them drones!)
- Regulatory Impacts on Rail and Pipeline
- Public/Private Collaboration to Enhance Emergency Preparedness
- Common Operating Picture in the Inland Zone
- Terminals/Tank Farms - Challenges, Security, and Government Initiated Unannounced Exercises (GIUEs)

#### **Track 4: Subsea**

- Dispersants - Recent Scientific Findings
- Seeking Authorization of Subsea Dispersants
- Underwater Oil Spill Detection and Recovery
- Subsea Dispersants – Monitoring

## Events

### Track 5: Emerging Trends

- Emerging International Guidance
- Emerging Policy and Regulatory Trends
- Mexico Oil Spill Response Preparedness
- Response & Recovery: International Challenges within the Gulf of Mexico (GOM) & Caribbean Ocean

### Track 6: Information/Response Technologies and Research

- Surveillance - Unmanned Aerial Vehicles
- Surveillance - Manned Airborne, Satellite, and Fixed Detection
- Emerging Response Technologies
- Response Research – General & Geospatial

As in previous years, ISCO supports this event. You are invited to visit the ISCO booth 226 in the Exhibition Area where ISCO President, David Usher, and Membership Director, Mary Ann Dalglish, will be there to welcome you. If you have not yet registered to attend or need more information visit the Clean Gulf website <http://www.cleangulf.org/>

### UPCOMING EVENTS SUMMARY

COUNTRY	2016	TITLE OF EVENT	LOCATION
For more information click on Title of Event			
NAMIBIA	Sept. 26-29	<a href="#">GIWACAF Workshop on IMS and NEBA</a>	Walvis Bay
FRANCE	October 10-14	<a href="#">Sea Tech Event 2016</a>	Brest
KOREA	October 11-13	<a href="#">World Ocean Forum 2016</a>	Busan
UK	October 12-13	<a href="#">The Contamination Expo Series 2016</a>	London
FRANCE	October 13	<a href="#">Info Day - Remote detection and maritime pollution</a>	Brest
UAE	October 17-19	<a href="#">EI Middle East HSE Technical Forum</a>	Abu Dhabi
UK	October 17-20	<a href="#">October 2016 IOPC Funds meetings</a>	London
UK	October 18	<a href="#">UK Spill – Spill Science Seminar</a>	Southampton
UK	October 24-28	<a href="#">IMO Marine Environment Protection Committee Mtg.</a>	London
NIGERIA	October 26-26	<a href="#">GIWACAF Workshop on Oil Spill Modelling</a>	Abuja
USA	November 1-3	<a href="#">Clean Gulf 2016</a>	Tampa FL
USA	November 1-4	<a href="#">Emergency Preparedness, Hazmat Response Conf.</a>	Pittsburgh
MALTA	November 2-3	<a href="#">JOIFF Fire &amp; Explosion Hazard Mgmt. Conference</a>	St. Julians
UAE	November 7-10	<a href="#">Abu Dhabi Int'l Petroleum Exhibition &amp; Conference</a>	Abu Dhabi
CHINA	November 8-9	<a href="#">5<sup>th</sup> Oil Spill Response Workshop Conf. &amp; Exhibition</a>	Beijing
AZERBAIJAN	Nov. 21-22	<a href="#">4<sup>th</sup> Conf. &amp; Exhib'n Offshore and Onshore Oil Spills</a>	Baku
COTE D'IVOIRE	Nov. 21-24	<a href="#">GIWACF W'shop on Cont'y Planning &amp; Compensat'n</a>	Abidjan
KENYA	December 4	<a href="#">3rd Session of UN Environment Assembly (UNEA-3)</a>	Nairobi
SENEGAL	December 5-7	<a href="#">GIWACAF Workshop on Dispersants and NEBA</a>	Dakar
UK	December 7-8	<a href="#">19<sup>th</sup> Annual Salvage &amp; Wreck Removal Conference</a>	London
<b>2017</b>			
USA	January 4-6	<a href="#">27th Annual, No-Spills Conference</a>	Acme, Michigan
KUWAIT	January 10-12	<a href="#">Kuwait 2nd Oil Spill Conference</a>	Kuwait
USA	March 28-30	<a href="#">2017 SCAA Annual Meeting &amp; Conference</a>	Washington DC
SINGAPORE	April 25-28	<a href="#">10th Intl Chemical and Oil Pollution (ICOPCE)</a>	Singapore
USA	May 15-18	<a href="#">International Oil Spill Conference</a>	Long Beach CA
<b>2018</b>			
UK	March 13-15	<a href="#">2018 INTERSPILL Conference and Exhibition</a>	London
To request posting of an event of interest to the Spill Response Community please send details to the Editor			

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