



ISCO NEWSLETTER

The Newsletter of the International Spill Response Community
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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 organisations.

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Forum on Group V (Non-buoyant) Oils
9-10 September 2014
Detroit, USA

International news

SHIP READY TO DESTROY SYRIA'S CHEMICAL ARMS



April 10 - Experts on board a cargo ship transformed into a multi-million dollar chemical weapons destroyer said on Thursday they were ready to start working on Syria's stock of toxic arms in the middle of the Mediterranean as early as May.

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International news (continued)

Now they just have to hope the weather holds and Damascus delivers on time.

Former container vessel Cape Ray, docked in southern Spain, has been fitted out with at least \$10 million of gear to let it take on about 560 metric tonnes of Syria's most dangerous chemical agents and sail them out to sea, said officials.

The Damascus government, fighting rebels for three years, agreed to hand over its stockpile, which include precursors for deadly nerve agents sulfur, mustard and sarin gas, under an international deal backed by Washington and Moscow,

On the Cape Ray, the specialized crew will transform much of it into a much less poisonous soup of chemicals, ready for disposal back on land. *The Maritime Executive* [Read more](#)

SAFEGUARDING OIL POLLUTION RESPONSE IN THE AEGEAN SEA



The Aktea tanker has been recontracted by EMSA as an oil spill response vessel for the Aegean Sea, following a tender held in 2013.

The vessel is now back in operation since 1 April. The vessel is based in Piraeus and provides a contracted storage capacity of 3,000m³ which is distributed over ten cargo tanks.

The oil spill response equipment assigned for this contract covers a full set of sweeping arms and booms, as well as a high capacity skimmer and oil slick detection system. *EMSA Newsletter* [Read more](#)

ISCO INDUSTRY PARTNER, CEDRE, IN CO-OPERATION WITH CANADIAN EXPERT PANEL

On Monday 24th March, Cedre received a group of experts tasked by Transport Canada with reviewing the Canadian regime in terms of preparedness, response and compensation in the event of a ship-source spill. Their first report on oil spills was submitted in December 2013. The expert panel is now focusing on LNG and other HNS. It began its investigations in Europe with a visit to Cedre. This visit was an opportunity for the panel to understand Cedre's missions as well as to see around our facilities and experimental equipment. Their report is due to be completed by September 2014. *CEDRE Newsletter* [Read more](#)

EUROPE: SAFEMED III PROJECT ENTERS SECOND QUARTER AFTER A PROMISING START

The first nine-month quarter of the 36-month-long [SAFEMED III project](#) to protect Mediterranean waters against the risk of accidents at sea and marine pollution is now over. Many events have been held to promote the uniform implementation of the relevant international conventions and rules among nine countries from the Eastern and Southern Mediterranean region.

Various workshops and seminars have been held, covering MARPOL annexes, ISPS Code, ship source pollution, MLC 2006, Flag State implementation and CleanSeaNet. As the project enters its second quarter, many more meetings will be held adapted to the specific needs of the various beneficiary countries. *EMSA Newsletter* [Read more](#)

Incident reports

USA: ANOTHER OIL LEAK REPORTED IN SOUTHERN UTAH

April 2 - Days after an unreported Citation Oil and Gas Corp. spill within the Grand Staircase came to light, the U.S. Forest Service announced Wednesday a second leak from the same company.

The size of the spill in Dixie National Forest remains uncertain, according to Forest Service spokesman Joe Harris. He said the agency is unsure whether the leak exceeds 10 barrels, the prerequisite for a "reportable incident" under federal guidelines. *The Salt Lake Tribune* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

Incident reports (continued)

SOUTH KOREA: OIL SPILL CONTAINED AT S-OIL ULSAN REFINERY

April 7 - An oil spill from a storage tank last week has been contained, officials at S-Oil Corp., the country's third-largest oil refinery, said Monday, three days after the leak was discovered at its plant in a southeastern city.

"The oil leakage has completely stopped at 9:05 p.m. Sunday after we transferred most of the remaining crude in the damaged storage tank to a nearby tank," an official said, declining to speak his name. About 140,000 barrels of crude had leaked from the storage tank, with about 380,000 barrels of crude moved, the official said. *Yonhap News Agency* [Read more](#)

USA: OIL SPILL CLEAN-UP: TEN TONS REMOVED FROM MATAGORDA ISLAND

April 8 - Amid one of the most important wildlife sanctuaries in America, a place where birds almost always outnumber the few humans venturing to a remote island, workmen are now hauling away tons of beach sand contaminated by oil.

Men wearing protective suits scratch at the sand on Matagorda Island, using shovels to unearth the layer of oil lingering beneath a thin film of freshly deposited sand. *KHOU.com* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group] Related report in [Korea JoongAng Daily](#)

NEW ZEALAND: OIL SPILL IN LAKE TAUPO AFTER CRASH

April 8 - Efforts are underway to contain an oil spill in Lake Taupo following a crash. The spill happened after a truck and trailer loaded with timber crashed down a bank and onto the lake shore between Taupo and Turangi around 7am. *TVNZ* [Read more](#)

THAILAND: CREWS SALVAGE OIL SPILL TANKER



Picture: Workers try to remove oil from the Tha Chin River after a tanker sank near the river's mouth in Samut Sakhon's Muang district. Authorities were able to salvage the sunken vessel as efforts are under way...

April 10 - The Marine Department and local authorities have successfully salvaged a medium-sized tanker that capsized off the Maha Chai coast in Samut Sakhon and spilled oil which damaged a number of seafood farms...

The department cooperated with local authorities and the owner of the capsized ship to salvage the tanker after it sank three days ago. The Nopasin, 16m long and 4.5m wide, owned by Manas Nakwiset, ... *Bangkok Post* [Read more](#)

SOUTH AFRICA: FUEL OIL SPILL IN RICHARDS BAY

April 10 - Crews are working to clean up South Africa's Richards Bay port after about 1,000 litres of fuel oil spilled into the waters, South African news site Independent Online reports.

The oil leaked from an Engen Petroleum Ltd. pipeline, which had not been used for two years, and the spill was detected Sunday. *Ship & Bunker* [Read more](#)

Other news reports from around the world

NEWS REPORTS FROM USA

April 3 - Petroleum firm agrees to pay \$5.15 billion to clean up waste

The U.S. Justice Department on Thursday announced that Anadarko Petroleum Corp. had agreed to pay \$5.15 billion to clean up hazardous substances dumped nationwide — including radioactive uranium waste across the Navajo Nation — in the largest settlement ever for environmental contamination.

NEWS REPORTS FROM USA (Continued)

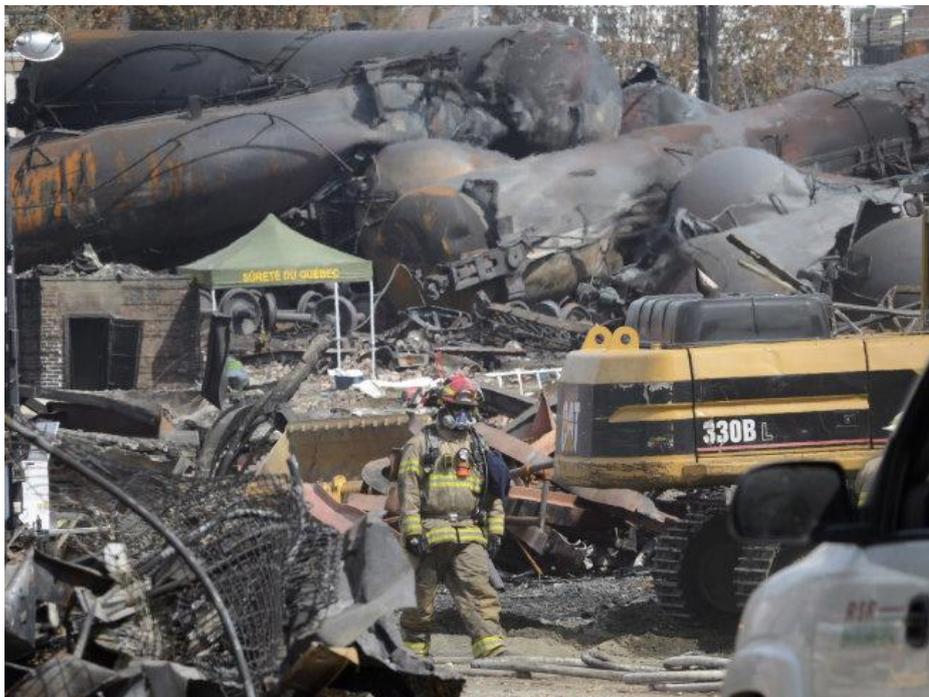
The operations of Kerr-McGee Corp. — which was acquired by Anadarko in 2006 — also left behind radioactive thorium in Chicago and West Chicago, Ill.; creosote waste in the Northeast, the Midwest and the South; and perchlorate waste in Nevada, according to U.S. Deputy Atty. Gen. James Cole. *Los Angeles Times* [Read more](#) [Thanks to ISCO Committee Member, Marc K. Shaye, Hon.FISCO]

April 4 - Did oil spill cause dolphin deaths?

It has been two weeks since an oil barge and cargo ship collided in the Houston Ship Channel and now researchers are looking into the possibility that the oil spill may be causing more dolphin deaths than normal.

Since the spill, at least 29 dolphins have been found in the Galveston area. That brings the March total to 47, which is more than the usual 34. *Click2Houston.com* [Read more](#)

April 6 - Trains transporting crude oil should have at least 2-man crews, federal regulators say



This July 6, 2013 file photo shows a worker, wearing protective gear moving through the wreckage of the oil train derailment and explosion in Lac-Mégantic, Quebec. Responding to a series of fiery train derailments, federal regulators said Wednesday they will propose that trains transporting crude oil have at least two-man crews and requirements aimed at preventing parked train cars from coming loose and causing an accident like one in July that killed 47 people. The Federal Railroad Administration had asked a freight rail industry advisory committee to make recommendations on whether two-man crews should be required, but the industry officials were unable to reach a consensus after working on the issue for months. Federal officials said they decided to move ahead with the two-crew member requirement anyway. (AP Photo/Ryan Remiorz, File, Pool)

US News [Read more](#)

April 8 - Gulf Oil Spill "Not Over": Dolphins, Turtles Dying in Record Numbers

[Four years after the biggest oil spill in U.S. history](#), several species of wildlife in the Gulf of Mexico are still struggling to recover, according to a new report released today.

In particular, [bottlenose dolphins](#) and sea turtles are dying in record numbers, and the evidence is stronger than ever that their demise is connected to the spill, according to [Doug Inkley](#), senior scientist for the National Wildlife Federation, which issued the report. (See "[Gulf Oil Spill: One Year Later.](#)") *National Geographic* [Read more](#)

April 9 - Crude oil spill planners meet in Albany

Every day, millions of gallons of crude oil move through New York state, on massive tanker trains or on the Hudson River on barges or tankers. And it might be time for officials to get a real-time picture of where all that crude is.

The flood of oil from the Bakken fields of North Dakota has been building for two years now, and on Wednesday, several dozen state and federal officials met in Albany to discuss how to be better prepared in the event some crude is accidentally spilled, or worse, catches fire and explodes. *TimesUnion.com* [Read more](#)

April 11 - BP oil spill choked off important pelican nesting sites on Louisiana coast

On a bright spring morning, P.J. Hahn is walking through a graveyard in the middle of Barataria Bay. It's a 30-yard patch of mud and sand bristling with bare, dead mangrove brush surrounded by miles of open water. Each mangrove is a tombstone marking the death of a nesting site used for decades by brown pelicans and roseate spoonbills on what was once the string of wetland pearls that made up the Cat Islands chain.

NEWS REPORTS FROM USA (Continued)

But in 2010 the oil spewing from BP's Deepwater Horizon would send them all to an early grave.

"Four years ago we had more than five acres of habitat and there were tens of thousands of birds nesting on these islands," said Hahn, director of coastal zone management for Plaquemines Parish. "Then the oil came in and coated the mangrove roots, and two years later the islands started going. *The Lens* [Read more](#)

IRELAND: SIMULATED CHEMICAL BLAST TO TEST EMERGENCY RESPONSE PLAN



Photo: Peter Daly, Chief Emergency Planning Officer, HSE South, Karen Neville, S-HELP Co-ordinator and Andrew Pope, Development Co-Leader, UCC Picture: Tomas Tyner

March 31 - Plans for emergency readiness and response to a biological incident in Israel or a chemical explosion near the Northern Ireland border are being forensically prepared by Irish researchers.

The results of their efforts should be seen in the next two years as the team from University College Cork put their plans into action with major practice runs to see if the software system can be expanded elsewhere.

The project recently secured €3.5m in EU funding and comes on foot of the initial design by the group, led by business information systems lecturer and researcher Karen Neville. *Irish Examiner* [Read more](#) [Thanks to Janet Welch, Hazmat 101 Group]

RUSSIA: GAPS IN THE OIL SPILL PREVENTION AND RESPONSE PLAN FOR THE OPERATIONAL AREA OF THE PRIRAZLOMNAYA OFFSHORE ICE-RESISTANT STATIONARY PLATFORM OF GAZPROM NEFT SHELF

April 4 - Greenpeace Russia has analyzed a Summary of the oil spill response plan (OSRP) published on the company's official website and found numerous gaps that challenge its effectiveness and reliability.

Gazprom Neft Shelf refuses to report publicly the full text of the Plan, ignoring the recommendations of the Arctic Council. That means substantial parts of the information is unavailable, including the amount of financial security a company is obligated to prepare for dealing with oil spills and how it will be provided.

It means that number of gaps and failures could be bigger. *Greenpeace Russia* [Read more](#)

NEW ZEALAND: ODDS OF NZ OIL SPILL 'VERY LOW'

April 6 - The chance of an oil spill in New Zealand waters is "very low", and the Government is "confident" a natural disaster will not occur as a result of deep sea oil and gas exploration, Energy Minister Simon Bridges says.

He defended the opening up of eight new areas to exploratory drilling last week, which put a further of 405,000 square kilometres on offer for the controversial practice. *Otago Daily Times* [Read more](#)

NIGERIA: BONGA OIL SPILL: RIGHTS ACTIVIST WANTS SHELL TO COMPENSATE FISHERMEN

April 6 - A human rights activist, Mrs Elizabeth Egbe, has appealed to the Federal Government to prevail on Shell Petroleum Development Company (SPDC) to compensate fishermen affected by the Bonga oil spill.

Egbe, who made the call in an interview in Abuja on Sunday said that the company, being an international oil exploration giant, should comply with international best practice and do the right thing. *Daily Times NG* [Read more](#)

FRANCE: ISCO INDUSTRY PARTNER, CEDRE, RESPONDS TO SPILLS

April 8 - In March, Cedre's response centre was involved in two incidents which required two engineers to be sent on-site, one to Brennilis (Finistère) concerning a diesel leak and the other to Combrit (Finistère) relating to a spill of heating oil. In both cases, the natural aquatic environment (freshwater in the first case and freshwater/seawater in the second) was at risk but ultimately suffered little impact thanks to the use of sorbent booms and loose sorbents.

"Custom-made" barriers were also built on-site using wire mesh and loose sorbents, based on techniques developed by teams from Cedre *CEDRE Newsletter* [Read more](#)

Other news reports from around the world (continued)

SINGAPORE, MALAYSIA HOLD FIRST JOINT CHEMICAL SPILL EXERCISE AT SEA

April 9 - Singapore and Malaysia on Wednesday held the first-ever joint chemical spill exercise at sea, along the Straits of Johor.

Conducted by the Maritime and Port Authority of Singapore (MPA) and the Malaysia Marine Department (MMD), it was held to test the agencies' readiness, a statement from the MPA and Singapore's National Environment Agency (NEA) said. It added that as part of the bilateral cooperation programme under the Malaysia-Singapore Joint Committee on the Environment (MSJCE), the Emergency Response Plan seeks to enhance the preparedness of emergency response agencies from both countries in tackling potential chemical accidents involving the seaborne transportation of hazardous chemicals in the Straits of Johor. *Channel News Asia* [Read more](#)

People in the news

BERNIE BENNETT TO ACT AS FISHERIES CLAIMS CO-ORDINATOR (PART TIME) AT OIL&GAS UK



Bernie Bennett, with over 33 years involvement in the oil spill response industry, is well known in our community. After 16 years with OSRL, latterly as Training and Consultancy Manager, he acted for nearly 5 years as BP's North Sea Crisis Manager. From 2007-2009 he was Chairman of IPIECA's Oil Spill Working Group and is now running his own company (Morlich Services Ltd.) providing oil spill preparedness and crisis management consulting services to oil and gas companies.

Other current activities include acting as part time Oil Spill Response Lead Accreditor (part time) for the Nautical Institute. You can find out more about Bernie, his company and its services at his website at <https://sites.google.com/site/morlichservices/bernardbennettprofile>

ISCO news

ISCO 2014 AGM – TIME AND PLACE CONFIRMED

It can now be confirmed that the Annual General Meeting will be held at the International Oil Spill Conference on Tuesday May 6 in Show Office A at the Convention Center from 4:30pm to 6:00pm.

Advance notice of the AGM was sent out last week via email to all members. If not received it could be that your address held on file is no longer up-to-date, so please let us know if you did not receive the notice.

The Agenda and other meeting papers will be sent out soon, also, in case you can't attend, a proxy voting form.

MORE RESPONSES TO REQUEST FOR FEEDBACK ON ISCO NEWSLETTER

Your editor is pleased to have received some additional responses to the recent request for feedback from Members and other readers of the ISCO Newsletter.

Dan Sheehan, Hon.FISCO, Member of the ISCO Committee wrote - "I have been remiss in not commenting. I believe it is one of the best, if not the best, both in style and content. I get multiple newsletters on a variety of topics, but yours is the one I look forward to each week and read without fail. And without fail I always learn something.

There are times when I send it on to key folks that I know and in thinking about it there are probably some folks we should send it to directly. I can actually take that on because many government types in senior leadership positions cannot access the internet and download things due to security issues. I on the other hand can send them the pdf version.

I also am appreciative of the technical papers presented, first rate, and well thought out".

Neal Smith, Sales Director, Prencos Environmental Spill Control of Somerton Park, South Australia wrote "We make it a weekly task to read the ISCO Newsletter in the office here at Prencos Environmental Spill Control. We like to way it is laid out and the interesting and varied articles.

It would be a loss not to have the newsletter come in over the emails and hope it continues. Thank you and your team for the effort they put in and maybe one day we will have some news from Adelaide to include".

Brian O'Connor, ISCO Member and Secretary of the Canberra and Regions Oil Industry Emergency Response Group, NSW, Australia wrote "I find the ISCO Newsletter very informative and it provides an excellent news update source for members of our group in Australia.

Finding interesting material for our CROIERG monthly web news is a task and a half. How you manage it on a weekly basis I simply do not know? We certainly would not mind paying a fee for such information"

CAPTAIN D. C. SEKHAR, MEMBER OF ISCO COUNCIL FOR INDIA, REPORTS ON THE RECENT OIL SPILL RESONSE WORKSHOPS HELD IN KAKINADA, DELHI, MUMBAI AND JAMNAGAR, INDIA.



SWIRE-ERS is a Singapore registered company and part of a large group - SWIRE Pacific offshore. This Swire group has interests in such diverse fields like oilfield logistics, Marine Salvage, Airlines and Logistical Specialists. It operates approximately 80 vessels at the moment with orders for new vessels totaling USD 1 billion.

AlphaMERS on the other hand is a small Bangalore based company active in diverse fields such as Oil Spill Response, Marine EIA, offshore renewable energy and design innovation. The company has innovated and applied for design patents in areas such as oil spill response and offshore renewable energy. This company owns over a kilometer of boom and currently operates two oil spill response bases – at Kakinada for M/s GSPC activities in KG Basin and an onshore base for M/s Cairn Energy Ltd at MPT, Barmer.

In the picture (above) - From L to R – Dr. Vandana Srivastava (Disaster management specialist), Admiral Jacob, Dr.P.B.Rastogi, Director at Ministry of Environment and Forest (Delhi).

.These two companies have come together to meet a long pending demand of oil and port sector in India. This team intends to put up spill response equipment stockpile in India to quickly respond to any major or Tier- II spills.

The team has conducted four workshops i.e Kakinada, Delhi, Mumbai and Jamnagar to interact with the oil industry, port sector and regulatory bodies. The industry participated wholeheartedly in the events. Important attendees were Admiral Jacob (Earlier Vice Chief of Naval Staff and DG of coast Guard, now retired), senior officials from OISD, Ministry of Environment and Forest, Disaster Management specialist, Officials from Coast Guard, Indian Oil Corporation, Oil India Ltd, HPCL, Reliance, Essar, ONGC, ILFS, Kandla Port, GPCB and other officials from private sector and regulatory bodies.



In the picture (above right) - From L to R – Captain D. C. Sekhar, Admiral Jacob (retd), IOC GM Mr.Bansal and IOC Executive director Mr.J.P.Ojha



Above – Delegates at Delhi Workshop



Above – Delegates at Mumbai Worksho

Admiral Jacob delivered the keynote address at the Delhi event. Two of the points he highlighted were – ‘The industry can afford the enhanced spill response capability’ and ‘The coastal community definitely deserves such protection.’

Capt.Sekhar, Director of AlphaMERS and Simon Valentine, General Manager of SWIRE ERS shared that there was a natural synergy in their association and an ability to scale up. While AlphaMERS is a fast growing Indian company with very efficient operational capabilities, SWIRE-ERS brings abundant resources and their worldwide experience to the table. Both the companies were very happy at the response and interactions at the workshops.



In this issue of the ISCO Newsletter we are printing No. 171 in a series of articles contributed by Dr Douglas Cormack.

Dr Douglas Cormack is an Honorary Fellow of ISCO. As the former Chief Scientist at the British Government's Marine Pollution Control Unit and head of the UK's first government agency, the Warren Spring Laboratory, Douglas is a well known and highly respected figure in the spill response community. He is the Chairman and a founder member of the [International Spill Accreditation Association](#)

CHAPTER 171: THE NEW RESPONSE PLANS AND THEIR USES

Having presented the new knowledge-only contingency/incident-specific response plan in articles 163-170, this article exemplifies its implementation by the following scenarios. Thus, were a casualty to release 5000 tonnes of crude oil as on initial damage to a single tank, the first step would be to identify the physicochemical properties of the named oil as from Groups I - IV of articles 31-46 and thus to note whether it is solid or liquid at the sea temperature of the incident, the weight percentage of evaporative loss to be expected from its distillation profile, and its emulsion dispersion half-life as 4 or 12 hours or as interpolated within the ranges 24-48 or > 48 hours.

The second step is to calculate the evaporative loss which at 25% in our example would leave 3,750 tonnes, which at a layer thickness of 0.1mm would cover 37.5km². The third step is to tabulate the quantities remaining after successive half-lives by halving the previous amount. Thus, for a half-life of 12 hours in our example, the successive amounts in tonnes at 12 hour intervals are 1,375, 688, 344, 172, 86, 43, 22. . . After 7 half-lives the residue is always < 1% of the original. Again, for any 5000 tonne release with a 25% evaporative loss, the above quantity sequence would result at intervals of the appropriate half-life. Similarly, for bunker releases, the first step is to use the incident-specific viscosity to interpolate the half-life from the ranges of 2-4, 4-6 and 6-8 days, while the second is to tabulate the residual quantities after sequential lapses of the appropriate half-life. Thus for a 50 tonne fuel oil release with no evaporative loss, the residue sequence for any half-life interval is 25, 12, 6 . . . tonnes.

However, in order to know the actual pollutant tonnage after any number of half-lives, the fourth step is to include the emulsified water which at 80% would increase the above half-life tonnages by a factor of four for crude oils and by two for heavy fuel oils, in the absence of analytically determined water-contents. Again, to emphasise the need for cargo/bunker transfer, we see that the sequence in tonnes of crude oil residuals from a total loss of 100,000 tonnes less 25% evaporative loss, are 37,500, 18,750, 9,875, 4,987, 2,495, 1247, 628 . . . , while the sequence for release of 500 tonnes of heavy fuel oil is 250, 125. . . tonnes, before multiplying by up to four and two respectively for the emulsified tonnages.

As to predicting the quantities likely to reach shore, the fifth step is to use the local tidal stream atlas and actual wind direction and speed towards shore as locally measured to calculate the time interval from release to arrival onshore, while the sixth is to compare this time interval with those of the half-life/residual-quantity tabulation specific to the incident, which by direct or interpolated read-off, gives the residual quantity which will reach shore unless the wind changes. Clearly, it is necessary to monitor wind direction and speed and accordingly to update the vector sum of 100% of the tide vector and 3% of the wind vector until the slick strands. Meanwhile, the seventh step is to decide on the basis of pollutant viscosity whether the response is to be dispersant-application, mechanical-recovery, or both.

However, we know that encounter-rate for both is 0.18 tonnes per hour per metre swath per knot of advance at the layer thickness of 0.1mm which corresponds to a surface coverage of 100 tonnes per km²; that it is thus realistic to scale seagoing response capacity to about 3,750 tonnes per day i.e. to a treatment area of 37.5 km²; that it is thus best to treat the edge of the slick closest to shore in successive paths, to treat it other than locally being impossible in any case; and that treatment should not start or should cease when natural half-life dispersion is seen to be sufficient to prevent any stranding. Again, we see that it is futile to attempt to deal with a total cargo release, spraying- or recovery-units being limited to operational speeds and swath widths completely out of scale with surface areas of 1000km² per 100,000 tonnes of oil, and that the imperative need is thus for cargo/bunker transfer.

Further to treating the edge of the slick closest to shore, we know that to treat it anywhere else is to permit the untreated slick already closer to shore to strand untreated if it fails to disperse naturally; that treatment of the shore-proximate edge as the slick moves ever closer to shore can *mutatis mutandis* be continued onshore when natural dispersion coupled with both forms of treatment has failed to prevent stranding. As to the quantity stranded, we know that this can be estimated from the length, width and thickness of shoreline coverage and from the quantities recovered or dispersed from the shores; and that the quantity stranded equates to the quantity released less the sum of the quantities evaporated, dispersed naturally, actively dispersed (estimated from the dispersant used) and recovered prior to stranding. Again, we may expect such mass balancing over successive incidents to make half-life/ viscosity relationships and dispersant-effectiveness/pollutant-viscosity ratios, increasingly precise.

In adjudication of salvage claims arising under Lloyds Chapter XIV for the Aegean Sea, Carina, Nikitas Roussos, Patraikos II and Sea Empress Incidents, I had already used the above procedure to compare the quantity actually stranded from initial damage-release with that which would have stranded had the salvor not removed the remaining cargo and bunkers. Indeed, for the Sea Empress, I had compared the quantity which would have stranded from the initial release of 3000-5000 tonnes with that of the actual release of 72,000 tonnes and with that which would have stranded from the total release of 130,000 tonnes had 58,000 tonnes not been removed by belated decision to allow salvors to move the casualty to its discharge berth (c.f. articles 107-115). Again, I had subsequently brought this analysis together with the relevant chapters of my 1983 book to the attention of the Donaldson Enquiry in presenting my general case for cargo/bunker transfer in safe havens before a unique post was created and filled by an individual uniquely designated to assume personal responsibility for future safe haven use.

Cormack's Column (continued)

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- 1 The *Rational Trinity: Imagination, Belief and Knowledge*, D.Cormack, Bright Pen 2010 available at www.authorsonline.co.uk
- 2 *Response to Oil and Chemical Marine Pollution*, D. Cormack, Applied Science Publishers, 1983.
- 3 *Response to Marine Oil Pollution - Review and Assessment*, Douglas Cormack, Kluwer Academic Publishers, 1999.

Events

UK: SETN'S 8th ENVIRONMENTAL AND CLEAN TECHNOLOGY CONFERENCE



Glasgow, Thursday 26th June 2014 - Whether you're a SME in the environmental sector or a business in need of environmental solutions, the 8th Annual ECT Conference brings together the cream of Scottish innovators and facilitators, creating market, collaboration and investment opportunities.

[Download](#) the Conference Programme and Registration Information

UK: 5th MARITIME SALVAGE & CASUALTY RESPONSE – LONDON, 3-4 SEPTEMBER 2014

Addressing Critical Wreck Removal & Salvage Challenges – Speakers include



John Noble
MD (UK Office)
Donjon Marine



George Tsavlis
CEO
Tsavlis Salvage



Nick Kulukundis
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Geoff Hunt
HSSE Manager, DPA
K-Line LNG Shipping

[Download](#) the Conference Programme and Registration Information

Publications

NEW EDITIONS OF ITOPF'S HANDBOOK & OCEAN ORBIT PUBLISHED



The 2014/15 ITOPF Handbook contains a wealth of valuable information and guidance for those likely to be involved in spills of oil and chemicals from ships. It features information on ITOPF's technical and information services, oil spill statistics, the fate and effects of marine oil spills, clean-up techniques, the organisation of spill response, contingency planning and compensation.

The latest edition of Ocean Orbit contains news of ITOPF's activities over the past year. Features include:

- [Incidents in the spotlight](#)
- [Cargo liquefaction](#)
- [Responding to Arctic spills](#)
- [Update on China and India](#)
- [ITOPF R&D Award](#)
- [Launch of ITOPF Films](#)



The Handbook and Ocean Orbit are freely available to download from [ITOPF's website](#). Hard copies are currently being mailed to ITOPF Members and closely related groups and individual copies are also available to others on request, contact [Terry Goodchild](#).

FOR YOUR INTEREST – LINKS FOR RECENT ISSUES OF PERIODICALS

[ASME EED EHS Newsletter](#)
[Bow Wave](#)
[Cedre Newsletter](#)
[The Essential Hazmat News](#)
[USA EPA Tech Direct](#)
[USA EPA Tech News & Trends](#)

News and commentary on HSE issues from George Holliday
Sam Ignarski's Ezine on Marine & Transport Matters
News from Cedre in Brittany, France
Alliance of Hazardous Materials Professionals
Remediation of contaminated soil and groundwater
Contaminated site clean-up information

Most recent issue
Current issue
March 2014
March 18 issue
April 1 issue
May 2013 issue

Publications (continued)

FOR YOUR INTEREST – LINKS FOR RECENT ISSUES OF PERIODICALS (continued)

Technology Innovation News Survey	From US EPA - Contaminated site decontamination	Feb 16-28 2014 issue
Intertanko Weekly News	International news for the oil tanker community	No 14 2014
CROIERG Enews	Canberra & Regions Oil Industry Emergency Response Group	April 2014 issue
IMO Publishing News	New and forthcoming IMO publications	March 2014
IMO News Magazine	News from the International Maritime Organization	No 4, 2013
Pollution Online Newsletter	News for prevention & control professionals	April 2 issue
EMSA Newsletter	News from the European Maritime Safety Agency	April 2014 issue
JOIFF "The Catalyst"	Int'l Organisation for Industrial Hazard Management	January 2014 issue
Environmental Technology Online	Environmental Monitoring, Testing & Analysis	April 2014 issue
OCIMF Newsletter	News from the Oil Companies International Marine Forum	January 2014 issue
IPIECA eNews	Int'l Petroleum Industry Environmental Conservation Assoc'n	February 2014 issue
WMU Newsletter	From the World Maritime University in Malmo, Sweden	February 2014 issue

Training

UK & IRELAND: REMINDER – ONLY TWO WEEKS UNTIL CASTLE ARCHDALE TRAINING DAYS

If you are planning to attend, you should not delay in booking your places !



This event is being held in Spring 2014 (April 28-29) in the beautiful environment of Lough Erne at Castle Archdale Country Park near Enniskillen in Northern Ireland. It will be an enjoyable and sociable occasion combining training with an opportunity to network with others who share your interest in protecting our environment.



Course options include an Accredited MCA Level 2 Oil Spill Response Training Course, a Practical Oil Spill Response Exercise, and an Introductory Course on Contaminated Soil and Groundwater Remediation including a demonstration of exploratory well drilling.. Click [EVENT PROGRAMME](#) to view the full details and make your booking online at http://isaa.org.uk/form/castle_archdale_booking_form_2014.html
Course fees are not expensive.



USA: OIL SPILL RESPONSE STRATEGIES & TACTICS TRAINING

JUNE 10-13, 2014 OHMSETT Leonardo, NJ - A Few Spaces Are Remaining, Reserve Yours Today!

[More info and Registration](#)

Course Topics:

Ø Fates & Effects of Spilled Oil
Ø Oil Skimmer & Containment Boom Selection & Use
Ø Booming & Recovery Strategies
Ø Shoreline Characterization

Ø Shoreline Protection & Cleanup Methods
Ø Factors Affecting Oil Spill Movement
Ø Alternative Response Techniques
Ø Incident Command System (ICS)

Ø National Incident Management System (NIMS)
Ø Contingency Planning
Ø And More!

Registration deadline is May 10.

Company news

ALFA LAVAL ACQUIRES FRANK MOHN AS

April 7 - Alfa Laval – a world leader in heat transfer, centrifugal separation and fluid handling –has signed an agreement to acquire Frank Mohn AS, a leading manufacturer of submerged pumping systems to the marine and offshore markets. The acquisition, which strengthens Alfa Laval's fluid handling portfolio by adding a unique pumping technology, will further reinforce Alfa Laval's position as a leading supplier to the marine and offshore oil & gas markets.

Frank Mohn's main product in the marine segment is its unique submerged cargo pumping system, which plays a vital part in maximizing the utilization of product and chemical tankers. The system enables safe and flexible cargo handling performance for quicker turnaround time and fewer voyages in ballast.

Company news (continued)

In the oil & gas segment, Frank Mohn offers packaged pumping systems for offshore installations including seawater lift, water injection and fire water pumping systems contributing to safe and efficient operations. *The Maritime Executive* [Read more](#)

USA: NEW RESPONSE PARTNERSHIP IN PORT OF LONG BEACH

T&T Salvage, LLC (T&T) is pleased to announce the signing of a consent agreement with the Long Beach Fire Department (LBFD). This agreement permits T&T to include the LBFD's extensive marine firefighting resources in its emergency response network.

T&T's network, established to meet United States Coast Guard, Oil Pollution Act of 1990 (OPA 90) requirements, is available to owners and operators of vessels subject to the salvage and marine firefighting regulations contained in OPA 90. The consent agreement, which is the first of its kind to be signed in California, will ensure a coordinated response and minimize the impact of a major marine fire event in the Los Angeles/Long Beach Port Complex. *The Maritime Executive* [Read more](#)

UK: MARINE ECOLOGY ARM OF THOMSON ECOLOGY WINS PRESTIGIOUS GOVERNMENT CONTRACTS

Thomson Unicomarine, the marine arm of leading UK ecology consultancy Thomson Ecology, has won a three year contract with the Agri-Food and Biosciences Institute (Afbi), advisor to the government of Northern Ireland on fisheries and the environment.

The three year contract will see Thomson Unicomarine undertaking benthic invertebrate identification in support of Afbi's work as part of the National Marine Monitoring Programme, which underpins the UK's requirements from the Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR Convention) and EC Directives such as the Water Framework Directive.

This announcement comes hot on the heels of Thomson Unicomarine being awarded a contract to support Cefas (Centre for Environment, Fisheries and Aquaculture Science) through their framework for benthic sample analysis services. This award was judged on quality and builds on the strong reputation Thomson Unicomarine has acquired over the past 30 years of benthic analysis. *Thomson Ecology* [Read more](#)

MEET SCATMAN AT IOSC 2014

Kenneth Kumenius from the SCATMAN Team has been in touch to advise that he is visiting International Oil Spill Conference (IOSC 2014) at Savannah, Georgia, USA, May 5 - 8. You can contact Kenneth to set up a meeting (email: kenneth@scatman.fi or phone: +358 40 579 9996).

Readers of the ISCO Newsletter may recall that Kenneth Kumenius and Markku Ojala worked for a long time on the development of an electronic system for recording all of the information required in completing a comprehensive shoreline clean-up assessment survey. Not only is it so much easier to record data on a hand-held device but the collected information can be directly transmitted back to an operations planning centre.

SCAT team members who have struggled with pen and paper survey forms, often in adverse weather conditions, will welcome this paperless way to conduct shoreline clean-up assessment. The article about SCATMAN appeared on pages 6-7 of Issue 374 (4 March 2013) of the ISCO Newsletter. Go to www.spillcontrol.org Click on News, then Newsletter. In the archive list at the foot of the page, select page 12 of 66, click on this and open ISCO 374 Newsletter.

ISCO CORPORATE MEMBER, CHUKAR WATERJET HOSTING SPECIAL MALAYSIA-SE ASIA DAY MAY 7 AT OTC 2013

Chukar Waterjet offers underwater waterjet cutting and blasting equipment capable of operating at depths in excess of 3000 meters. Effective at cutting steel up to 250 mm thick or waterjet blasting at pressures up to 3800 bar, Chukar's subsea waterjet equipment has numerous applications for [deepwater emergency response](#) operations, salvage operations, and rapid demobilization operations. The OTC Website is at <http://www.otcnet.org/2014/>

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