



# 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 organisation.

## ISCO COMMITTEE & COUNCIL

ISCO is managed by an elected executive committee members of which are **Mr David Usher** (President, USA), **Mr John McMurtrie** (Secretary, UK), **Mr Marc Shaye** (USA), **Mr Dan Sheehan** (USA), **M. Jean Claude Sainlos** (France), **Mr Kerem Kemerli** (Turkey), **Mr Simon Rickaby** (UK), **Mr Li Guobin** (China), **Captain Bill Boyle** (UK) and **Mr Dennis van der Veem** (The Netherlands).

The Register of ISCO Members is maintained by **Ms Mary Ann Dagleish** (Membership Director) and the list of members is on the website at <http://www.spillcontrol.org>

The Executive Committee is assisted by the non-executive ISCO Council composed of the following national representatives – **Mr John Wardrop** (Australia), **Mr Namig Gandilov** (Azerbaijan), **Mr John Cantlie** (Brazil), **Dr Merv Fingas** (Canada), **Captain Davy T. S. Lau** (China, Hong Kong), **Mr Li Guobin** (China, Mainland), **Mr Darko Domovic** (Croatia), **Eng. Ashraf Sabet** (Egypt), **Mr Torbjorn Hedrenius** (Estonia), **Mr Pauli Einarsson** (Faroe Islands), **Prof. Harilaous Psaraftis** (Greece), **Captain D. C. Sekhar** (India), **Mr Dan Arbel** (Israel), **Mr Sanjay Gandhi** (Kenya), **Mr Joe Braun** (Luxembourg), **Chief Kola Agboke** (Nigeria), **Mr Jan Allers** (Norway), **Capt. Chris Richards** (Singapore), **Mr Anton Moldan** (South Africa), **Dr Ali Saeed Al Ameri** (UAE), **Mr Kevin Miller** (UK) and **Dr Manik Sardessai** (USA).

For more info on Executive Committee and Council Members go to [www.spillcontrol.org](http://www.spillcontrol.org)

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## International news

### WILL CHEAP OIL LEAD TO BIG MERGERS?

When oil prices hit a trough, history points to a likely energy industry response: mergers and acquisitions.

Price crashes in the early 1980s and late 1990s sparked a rash of deal-making that reshaped the industry. A decline in the mid-2000s led the giant firms to pick up smaller companies. Now, with oil's price down 40% since June, bankers and investors are hoping for a repeat.

Traders are betting on it: BP PLC shares jumped by close to 5% Tuesday after an anonymous Twitter user claimed rival Royal Dutch Shell PLC was going to make a bid. Spokesmen for BP and Shell declined to comment. *Wall Street Journal* [Read more](#)

*Comment from your editor – I will be very sorry if BP does not continue as an independent company. Many in the oil spill response community are not aware or may have forgotten the very important role that BP played in laying the foundations of our industry.*

*BP established the oil spill equipment manufacturer, Vikoma, back in 1967, and played a key role in pioneering the early development of oil spill combat resources, few of which were available at that time. Under different ownership, Vikoma continues today as one of the world's most respected manufacturers.*

*In 1981 BP again demonstrated its commitment to oil pollution response preparedness by commissioning the dedicated oil spill response vessel Fasgadair. Operating in the UK North Sea, she provided a 24/7/365 stand-by response capability for offshore E&P, at the same time providing a training platform for many that went on to make lifetime careers in the spill response industry.*

*BP was the first oil company to invest in establishing a major oil spill response base. Back in 1982 the BP Oil Spill Response Base was created in Southampton, UK. Originally set up in support BP's international tanker fleet operations. Now, as OSRL, it is an oil-industry-owned co-operative with a much broader remit and strategically-located bases all over the world. Since it first began more than 30 years ago the organisation has provided the opportunity for hundreds of individuals to become proficient in responding to oil spills.*

*While many other companies did little, adopting an attitude that if they had a spill they would "throw money at it" BP made substantial investment, demonstrating a serious commitment to effective pollution control. It was very bad that the Gulf of Mexico spill happened to BP – it could very easily have been another company – but BP has paid a heavy price and its crucifixion has already gone too far.*

## BECOME A MEMBER OF ISCO

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## PROFESSIONAL MEMBERSHIP

Advance your career by gaining Professional Recognition

Professional recognition is a visible mark of quality, competence and commitment, and can give you a significant advantage in today's competitive environment.

All who have the relevant qualifications and the required level of experience can apply for Professional Membership of ISCO.

The organization offers independent validation and integrity. Each grade of membership reflects an individual's professional training, experience and qualifications.

You can apply for Student Membership, Associate Membership (AMISCO), MEMBERSHIP (MISCO) OR FELLOWSHIP (FISCO).

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## Incident reports from around the world

### CANADA: ALBERTA PIPELINE SPILLS 60,000 LITRES OF CRUDE OIL INTO MUSKEG

November 29 - The Alberta Energy Regulator says close to 60,000 litres of crude oil have spilled into muskeg in the province's north.

An incident report by the regulator states that a mechanical failure was reported Thursday at a Canadian Natural Resources Limited pipeline approximately 27 kilometres north of Red Earth Creek.

The report says there are no reports of impact to wildlife and that a cleanup has begun. Carrie Rosa, a spokeswoman for the regulator, says officials have been delayed reaching the scene due to poor weather in the last few days. *The Canadian Press* [Read more](#)

### SOUTH AFRICA: DURBAN HARBOUR OIL SPILL PROBE

December 1 - The search will be on on Monday for the culprits responsible for causing "disgusting" pollution at the Bluff Silt Canal this weekend.

The pollution left a 10m-wide slick in the canal, home to the Bluff Yacht Club and the KZN Light Tackle Boat Angling Association, staining boats and ropes, leaving black scum on the surface and on the beach and damaging mangroves. *IOL News* [Read more](#)

### INDIA: MORE THAN 360 TAKE ILL AFTER TANKER DUMPS UNTREATED CHEMICALS IN RIVER

December 1 - Around 370 people living near the Waldhuni river in Ulhasnagar and Ambarnath complained of breathing problems after a tanker surreptitiously dumped chemicals in the river.

Maharashtra Pollution Control Board officials rush to the spot and collected samples that have been sent for tests to ascertain the chemicals. A case against unidentified people has been registered at the Central police station in Ulhasnagar, but officials said they suspected the dumping was the organized handiwork of a gang. *Times of India* [Read more](#)

## Incident reports from around the world (continued)

### ISRAEL: OIL SPILL NEAR EILAT IS 'ONE OF THE WORST ENVIRONMENTAL ACCIDENTS IN ISRAEL'S HISTORY'



December 4 - Millions of liters of crude oil have gushed out of a pipeline to flood 200 acres of a desert nature reserve in southern Israel, officials said on Thursday.

Israel Radio reported that the breach happened by accident during maintenance work on Wednesday night on the Eilat-Ashkelon pipeline, some 18 km (12 miles) north of the Red Sea resort of Eilat near Kibbutz Ketura.

Doron Nissim of Israel's Nature and Parks Authority said the black slick had run and pooled in ravines, but appeared to have spared the 4,250-acre (1,720-hectare) Evrona reserve's rare deer and douma palms. *The Jerusalem Post* [Read More](#) [Thanks to Marc K. Shaye Hon.FISCO, Member of ISCO Executive Committee] Other reports in [BBC News](#) and [Haaretz](#)

December 5 update - Damage from oil spill could take Aravah desert years to overcome - Employees of the Trans-Israel Pipeline finished on Friday morning cleaning up most of the large deposits of crude oil that gushed out of a breached pipeline in southern Israel on Thursday, in an event one Environmental Protection Ministry official called "one of the gravest pollution events in the country's history." There remain many smaller pools of oil and waste in the nearby Evrona Nature Reserve in southern Israel, (some 20 kilometers north of Eilat). *Haaretz* [Read more](#)

## Incident reports from around the world (continued)

### AUSTRALIA: CHEMICAL SPILL ON MACADAMIA FARM

December 3 - On Monday afternoon a large quantity of pesticide mix spilled into a creek after a tractor accident on a private property at Federal.

The Environment Protection Authority said much of the 2000 litres of the pesticide mix, which was being sprayed on macadamias, gathered in a natural pool in the creek.

The affected water was later pumped out by the pesticides contractor. Fire and Rescue constructed a small weir further downstream to contain the spill. *ABC News* [Read more](#)

### AUSTRALIA: YARRA SMOTHERED BY MYSTERY OIL SLICK BETWEEN CROWN CASINO AND MELBOURNE AQUARIUM



December 3 - About 50 litres of an unknown substance covered the river in front of Crown Casino and Melbourne Aquarium at 11.30am.

An MFB spokesman said it was believed the oil was biodegradable and was not a fire risk.

"We don't believe it to be toxic," he said. On advice from the Environment Protection Authority, the spill was being dispersed by fire brigade boats along the river, between Spencer St and Kings Way.

*Herald Sun* [Read more](#)

### NIGERIA: SHELL PIPELINE LEAK SPILLS THOUSANDS OF BARRELS INTO NIGER DELTA

December 4 - Niger Delta fishermen are no strangers to seeing oil spill into their waters from leaky pipelines, but even they were shocked by the scale of the slick stretching for miles from a Shell facility across the swamps and into the ocean.

Some 3,800 barrels spilled, according to an investigation by Shell and government officials. It ranks as one of the worst in Nigeria for years, local environmental activists said. Shell said the spill was caused by a failed crude theft.

In a boat trip to the affected area, Reuters saw crude washing up in pools in front of beach shacks, coating the roots of palm trees and leaving a trail of dead sea life. In some areas, people scooped it up to fill drums and jerry cans.

"We saw dead fish, dead crabs ... This spill occurred 7-8 nautical miles from the shore ... (so) the volume runs into thousands of barrels," Alagoa Morris, head of the Niger Delta Resource Center for Environmental Rights Action, told Reuters. *Planet Ark* [Read more](#)

### IRELAND: TOXIC SLUDGE NEAR IRISH BORDER WAS 'LARGEST' FIND THIS YEAR

December 4 - Forty-five thousand litres of toxic sludge left on a trailer near the Irish border is "the single largest" incident of its kind this year. The sludge, which is highly hazardous, is the by-product of diesel laundering.

It was put in plastic containers on an abandoned trailer and left on a lay-by off the M1 motorway, near the junction for Jonesborough, County Armagh.

Louth County Council confirmed it was the largest single dumping of the sludge. Specialist contractors retained by the council are due to remove it to a safe storage facility in Dundalk, County Lough, on Thursday evening. *BBC News* [Read more](#)  
[Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

## Other news reports from around the world

### NEWS REPORTS FROM CANADA

#### December 1 - Legislation before Senate proposes compulsory pollution insurance for Canadian-flagged ships, foreign ships in Canadian waters

A bill before Canada's senate would, if passed into law, require all Canadian-flagged ships - as well as foreign ships operating in Canadian waters - to have insurance covering the liability for pollution damage caused spills of hazardous and noxious substances, a Transport Canada official said recently.

## Other news reports from around the world (continued)

### NEWS REPORTS FROM CANADA (continued)

Bill C-3, the Safeguarding Canada's Seas and Skies Act, proposes to implement, in Canada, the provisions of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, also known as the HNS Convention.

"What the convention does is it imposes a compulsory insurance requirement on all ships that are flagged in the states that are members of the convention, as well as all ships that are calling at ports in those same states," said Francois Marier, Transport Canada's manager for international marine policy and liability. "So if Canada were to become party to the convention, all Canadian-flagged ships would have a requirement to carry the adequate amount of insurance and all foreign ships that call at Canadian ports would have the same requirement to demonstrate evidence of insurance which is certified by a state party."

*Canadian Underwriter* [Read more](#)

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#### December 2 - Alberta oil spill: Examining CNRL's safety record

The [60,000 litres of crude spilled into northern Alberta muskeg](#) last week is only the latest of Canadian Natural Resources Ltd.'s operational accidents.

CNRL, one of Alberta's energy industry giants, has had more spills since January than any other operator in the province – by a wide margin

The company attributed last week's pipeline spill to "mechanical failure" — the same reason initially given for the quartet of leaks that have been oozing bitumen emulsion for 18 months — more than a million litres, and counting, [spilling from CNRL's Primrose operations in northern Alberta's Wolf Lake area](#). *Global News* [Read more](#)

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### NEWS REPORTS FROM CHINA

#### December 1 - Japan starts chemical weapon destruction in China



A Japanese-built facility in China on Monday began destroying the largest cache of World War II chemical weapons abandoned in the country, Tokyo officials said, in a rare case of co-operation between the two countries.

The facility has been built in Harbaling in the northeast, where some 300,000 to 400,000 chemical weapons are believed to have been left behind, a government official at Japan's Cabinet Office told AFP.

Both Japanese and Chinese staff work at the facility, the official said, adding: "As our responsibility, we will sincerely proceed with the disposal by paying great attention to the safety of local people and the environment."

*Terra Daily* [Read more](#)

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#### December 4 - Training and building links in China

Received from ITOPF - Tim Lunel and Rose Ying were welcomed to the offices of Shenzhen Maritime Safety Administration (MSA) by key oil pollution staff last week. Shenzhen MSA has a clear focus for continually developing the capabilities of their staff in oil spill response and it was a highly interactive morning training session where areas such as response to incidents involving container ships and potential benefits of dispersant use at sea were discussed. Both ITOPF and Shenzhen MSA see this as the first of series of training sessions which will not only result in valuable exchanges on technical topics but also develop the sort of working relationships essential for minimising the impact at any future incidents of oil or chemical pollution along the coast of China. *ITOPF* [Read more](#)

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### NEWS REPORTS FROM FRANCE

#### December 5 – CEDRE's 40th Strategic Committee meeting

The members of Cedre's Strategic Committee met in Brest (Finistère) on 14th November for the committee's 40th session. Following an opening discussion on the implementation of a strategic analysis of Cedre's medium-term objectives, the meeting was mainly devoted to the presentation of 45 proposals for the 2015 technical programme. Alongside the permanent activities and the continuation of projects in progress, a few new research projects and the production of a few new operational guides were put

## Other news reports from around the world (continued)

### NEWS REPORTS FROM FRANCE (Continued)

forward in concordance with the priorities previously defined by the committee members. A review of Cedre's activities over the past 6 months gave rise to exchanges on the observed and expected evolution of certain activities, including for instance the confirmed difficulty in developing actions in the field of HNS spills. *CEDRE Newsletter* [Read more](#)

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### NEWS REPORTS FROM ITALY

#### November 25 - The "Costa Effect"

It's called the "Costa Effect" – everything is possible in salvage operations. The success of the Costa Concordia wreck-removal by Titan Salvage has now proved this for many people, most particularly for politicians terrified of having to face the consequences of an environmental disaster.

Titan was the only salvor to propose removing the wreck in one piece. Everyone knew it would increase the cost of the project, but they also recognized it was the best way to protect the integrity of the environment.

Environmental experts from the University of Rome were engaged in the earliest part of Titan's bidding process. Nick Sloane was Titan's salvage master for the project, and through his leadership the island of Giglio has seen dolphin, snapper and tuna already returning to the wreck site. Sea grass meadows that had been damaged by the wreck and the shade it cast will soon be replanted. Giant mussel beds that were damaged will soon be restored, stocked with animals specifically farmed for the purpose. *The Maritime Executive* [Read more](#)

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### NEWS REPORTS FROM NEW ZEALAND

#### December 1 - Oil spill centre sought for port

A call to establish a dedicated, specialist oil spill response centre at Port Taranaki has been made by the Taranaki Regional Council.

A submission setting out the need for a response centre was made to Maritime New Zealand (MNZ) on its New Zealand Oil Spill Response Strategy, a report to the council's policy and planning committee said.

A centre was needed because of the region's high-risk rating for an oil spill, the offshore oil and gas industry in Taranaki was ramping up, specialist services and facilities were already based here, and the region was willing to accommodate such a centre, resource management director Fred McLay said in the report. *Taranaki Daily News* [Read more](#)

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### NEWS REPORTS FROM SPAIN

#### December 5 - SPRES project: final conference

The final conference of the European project [SPRES](#) (*Oil Spill Prevention and Response at Local Scales*) (Newsletters [205](#), [211](#), [216](#), [220](#)) was held in Santander (Spain) on 7th and 8th October. One of the days was devoted to the public presentation of the project results and in particular the web platform via which local partners in charge of spill response for the 4 study sites can use the oil drift forecast modelling tool coupled with the risk assessment results (pollution sources and site vulnerability). The head of [Sasemar](#)'s Santander Coordination Centre as well as representatives of the Santander and Tarragone (Catalonia) port authorities presented the spill response resources and organisation within their sites. *CEDRE Newsletter* [Read more](#)

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### NEWS REPORTS FROM USA

#### December 1 - Coast Guard, EPA agree to analyze how Oil Spill Cleanups may affect Endangered Species of Hudson River

In response to a lawsuit filed by the Center for Biological Diversity, the U.S. Coast Guard and Environmental Protection Agency have agreed to analyze how oil-spill response actions in the Hudson River and New York Bay may affect endangered wildlife like Atlantic sturgeon and green sea turtles.

"The dramatic rise of crude oil transport along the Hudson River makes a devastating oil spill almost inevitable," said Mollie Matteson, a senior scientist at the Center. "If a spill happens, we shouldn't add insult to injury by hurting fish, turtles and other endangered wildlife during the cleanup." In the past three years the Hudson River has become a major corridor for transporting crude oil by rail and ship. The rapid increase in oil train traffic poses new risks for the 17 endangered species that make their home in the river or bay. *Center for Biological Diversity* [Read more](#)

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NEWS REPORTS FROM USA (Continued)

December 2 - Senator calls on Jerry Brown to halt crude oil trains in 'treacherous' California mountain passes



Photo: A crude oil train operated by BNSF snakes its way west through James, Ca., just outside of the Feather River Canyon in the foothills into the Sacramento Valley on June 5, 2014. Jake Miille / Special to The Bee

Sen. Jerry Hill on Tuesday called on Gov. Jerry Brown to halt the transport of crude oil on trains and other hazardous materials "through our most treacherous passes."

The request by Hill, D-San Mateo, comes in reaction to a corn train derailment last week in the Feather River Canyon that sent train cars and corn spilling down an embankment into the river. The cause of the derailment is under investigation.

The Feather River route through Plumas and Butte counties is used by at least one train a week carrying up to 2.9 million gallons of highly flammable Bakken crude oil from North Dakota. More crude oil trains are expected to

be coming into the state in the next few years, most of them traversing mountain passes deemed "high-risk" for derailments by the state Public Utilities Commission. State officials have said they do not believe California is ready to deal with the consequences of a major oil spill and fire. *Capitol Alert* [Read More](#)

December 2 - Diluted Bitumen Study: Expert Committee Holds First Meeting

Photo: Crews recover oil submerged in Morrow Lake, Michigan, in June 2011. The oil spilled in July 2010 came from a pipeline carrying diluted bitumen, the subject of a new National Research Council study. Photo courtesy of the U.S. Environmental Protection Agency

A committee of nationally recognized experts from academia and the private sector will meet for the first time on Wednesday to begin a study that has broad implications for how the United States manages the growing volumes of Canadian tar sands oil that are being shipped southward through U.S. territory.

Appointed by the National Research Council, an advisory group comprised of scientific and technical experts, the 11-member committee will address an issue of rising concern. The panel will compare the environmental consequences of spills of diluted bitumen to spills of conventional crude oils.

*Circle of Blue* [Read more](#)



December 2 - Oil from Deepwater Horizon Spill is still trapped in Alabama Beaches, Study Finds

A new study says oil from the Deepwater Horizon disaster is still trapped in Alabama's beaches four years later. The report was released recently by Auburn University researchers who've been studying the BP oil spill since shortly after it occurred.

A team from Auburn collected oil on Alabama's coast as recently as August. The research found that oil is still trapped in the sand, mostly as tar balls. Test results also show the oil degrades much slower when it's submerged than when it's exposed to air or water. *Huffington Post* [Read more](#)

## Other news reports from around the world (continued)

### NEWS REPORTS FROM USA (Continued)

#### December 3 – West Virginia Emergency response plans due for aboveground storage tanks

The latest deadline in the Aboveground Storage Tank Act came Wednesday when tank owners in West Virginia were required to submit Spill Prevention Response Plans to the state Department of Environmental Protection.

Kelley Gillenwater, chief communications officer for the West Virginia DEP, told MetroNews those plans are for future emergencies similar to the Jan. 9 chemical spill at Freedom Industries in Kanawha County that contaminated tap water for an estimated 300,000 West Virginians. *W.V.Metro News* [Read more](#)

## People in the news

### OCIMF APPOINTS SHELL'S GRAHAEME HENDERSON AS NEW CHAIRMAN



The Executive Committee has selected Dr. Grahaeme Henderson, Vice President Shell Shipping & Maritime, as its next Chairman.

At the 74th meeting in Dubai the Committee agreed the Chairmanship would pass to Dr. Henderson from Mr. John Ridgway who is stepping down after three years, but will continue as a Vice Chairman of the organisation. Commenting Mr. Ridgway said, "I am extremely pleased that Grahaeme has agreed to undertake the role of Chairman of OCIMF. His broad energy industry experience, together with his strong focus on safe shipping and maritime operations will be a great asset to the organisation." *OCIMF* [Read more](#)

## ISCO News

### ISCO PRESIDENT, DAVID USHER, WELCOMES NEW MEMBERS AT CLEAN GULF 2015



*Picture: LeGrand Fitisemanu, Field Supervisor with ASRC Energy Services Response Operations LLC in Anchorage, Alaska won the traditional draw for the bottle of whisky on the ISCO booth. LeGrand, (on left) was delighted to be presented with a fine bottle of Glenlivet by ISCO President David Usher (on right).*

David Usher and the ISCO team at Clean Gulf in San Antonio, Texas last week welcomed ISCO members, many other friends and visitors at the ISCO booth.

There was strong interest in the work being done by ISCO for the international spill response community and Membership Director, Mary Ann Dagleish was pleased to welcome new members who joined the organization during the conference.

An informal get-together was held on the last evening. Mary Ann reported "A great group from wide-ranging areas of the world" This included members from USA, UK, Finland, and The Netherlands.

The next international event being attended by ISCO is expected to be the Interspill Conference and Exhibition to be held in Amsterdam in March 2015.

Plans are being made to hold ISCO's Annual General Meeting during this event and it is hoped that there will be a large turn-out of members.

It will be an important meeting because an ISCO ad-hoc working committee is currently working on a number of radical new developments to further enhance the operations of the organization and the levels of service and support provided for its members. The working group is expected to report to Members of ISCO Council and the Executive Committee early in the New Year.

## THE EDUCATIONAL ROLE OF THE ISCO NEWSLETTER

The ISCO Newsletter publishes excellent serialised articles on such matters as inland spill response, aerial observation of oil spills, in-situ burning, etc. by respected experts including Dr Merv Fingas, Mark Francis and others. Your editor is always looking for more interesting articles of this kind. If you think you can help, please get in touch. [john.mcmurtrie@spillcontrol.org](mailto:john.mcmurtrie@spillcontrol.org)

Disseminating news about new technical developments is of value to our community. Corporate Members and others are invited to contribute articles. Your editor is also interested to receive interesting case histories for publication. Dealing with spill events often requires an innovative approach and you are invited to share your experiences.

**BITUMENS AND DILUTED BITUMENS FROM WESTERN CANADIAN OIL SANDS: CHAPTER 5**



A short series of articles on Bitumens and Diluted Bitumens from Western Canadian Oil Sands contributed by Dr Merv Fingas of Spill Science, Edmonton, Alberta, Canada T6W 1J6 [fingasmerv@shaw.ca](mailto:fingasmerv@shaw.ca)

Merv Fingas MSc PhD worked for more than 35 years in the field of oil spill technology at Environment Canada's Environmental Technology Center in Ottawa, Ontario. As head of the Emergencies Science Division at the Centre, he conducted and managed research and development projects. He is currently working independently in Alberta. Dr Fingas is the Member of ISCO Council for Canada.

**Bitumens and Diluted Bitumens from Western Canadian Oil Sands**

This serial covers the topic of bitumen products such as from the Canadian Oil Sands and diluted bitumen products (Dilbit and others). This is the fifth of nine issues by Dr. Merv Fingas, Member of ISCO Council for Canada.

**2. Evaporation of Dilbits**

Evaporation is particularly important for Dilbits. The light ends of Dilbit evaporate leaving the denser and more viscous bitumen behind. There exists laboratory data and small test tank data on the weathering of Dilbits (ESTC, 2014; Fed Gov, 2013; Witt O'Briens, 2013). This data was compared and the equivalent viscosity and density were compared for % weathered and time and the scale then approximated over days rather than % weathered. This was done to provide a practical base for spill countermeasures. It must be noted that the data are for temperatures at 15°C. It would take approximately twice as long to weather at about 0 to 5°C and half as long at temperatures of about 30°C. The estimated viscosity and density changes with weathering are shown in Figures 4 to 9.

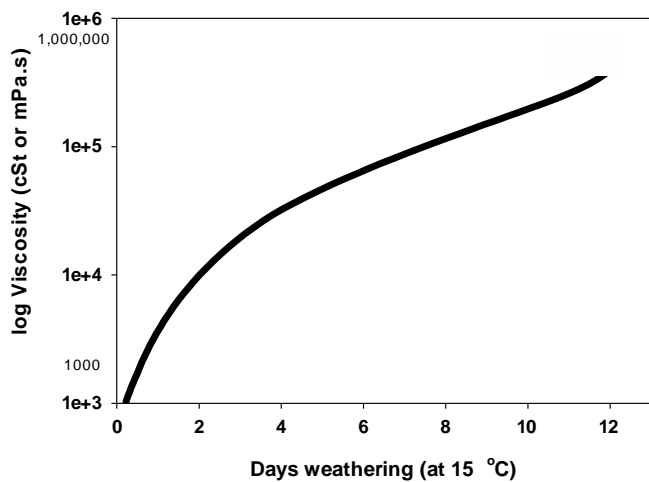


Figure 4 Viscosity of Access Western Blend with weathering time of the corresponding Dilbit

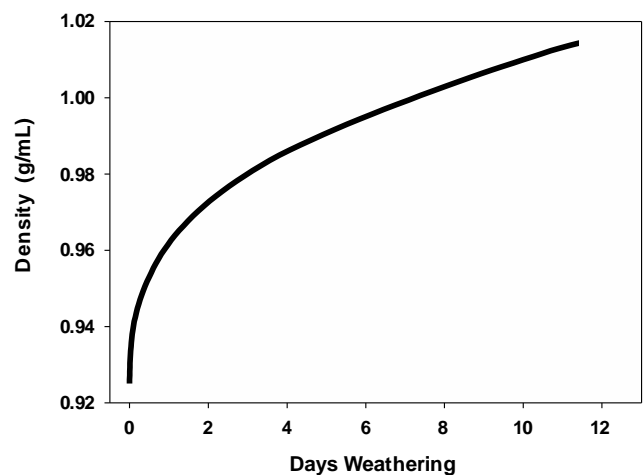


Figure 5 Density of Access Western Blend with weathering time of the corresponding Dilbit

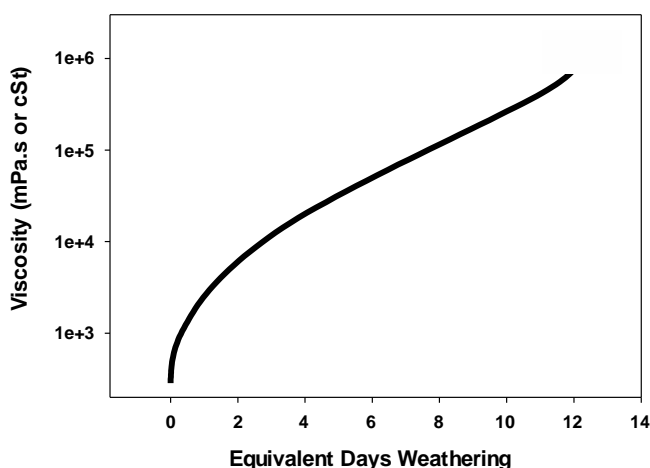


Figure 6 Viscosity of Cold Lake Dilbit with weathering time of the corresponding Dilbit

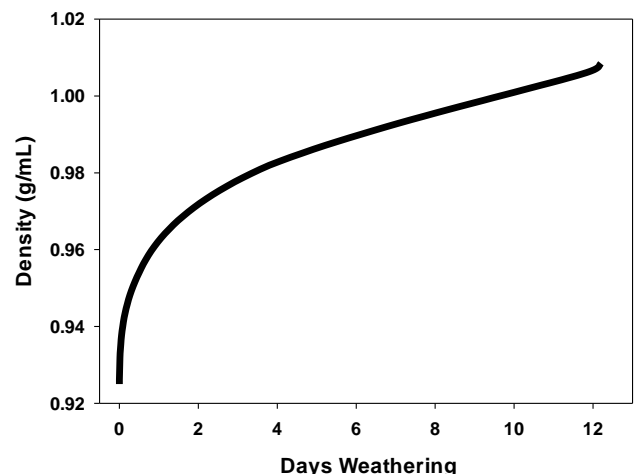


Figure 7 Density of Cold Lake Dilbit with weathering time of the corresponding Dilbit



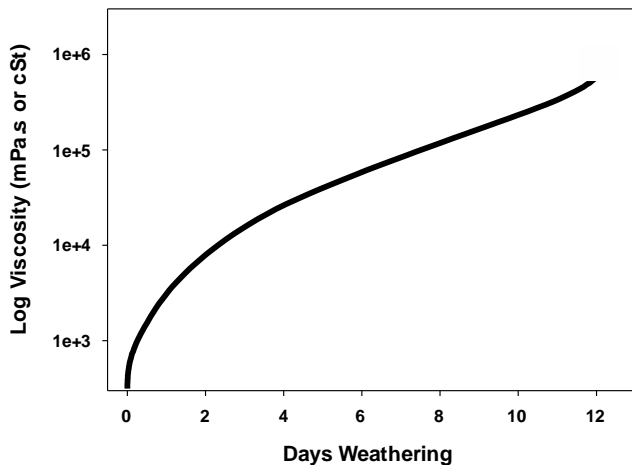


Figure 8 Viscosity of a typical Dilbit with weathering time

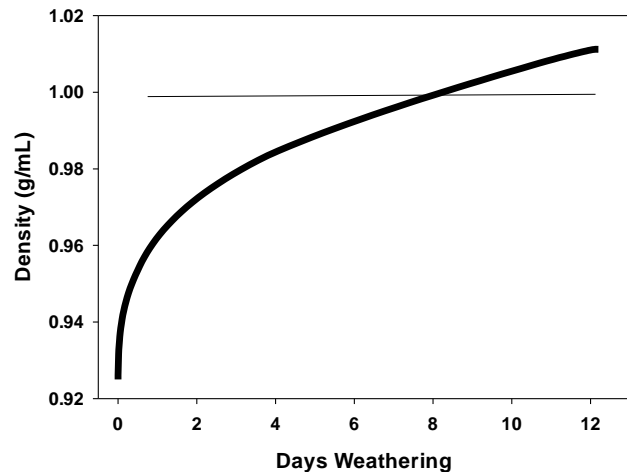


Figure 9 Density of a typical Dilbit with weathering time

Figures 4 to 9 were based on direct weathering in laboratories and in small tanks. For C4/C6 enhanced Dilbit and Synbit, data are more difficult to find and must be estimated from small experiments. Figures 4 to 9 are calculated using data obtained at 15°C. At double the temperature the changes would occur in about half of the time and at lower temperatures (0 to 5°C), these changes could take up to twice the time.

**References:**

ESTC (Environmental Technology Centre), *World Catalogue of Oil Properties*, WWW.ETC-CTE.ec.gc.ca, 2014.  
 Fed Gov, *Properties, Composition and Marine Spill Behavior, Fate and Transport of Two Diluted Bitumen Products from the Canadian Oil Sands*, Government of Canada, 2013  
 Witt O'Briens, *Dilbit Fate and Behavior, Report of the Gainford Trials*, 2013

**Science and technology**

**NUALGI SETS SIGHTS ON ELIMINATING WATER POLLUTION IN UNITED STATES WITH INNOVATIVE NANOTECHNOLOGY**

After a successful launch earlier this year of nanotech solutions to manage out of control algae in Aquariums and Ponds, Nualgi Nanobiotech founder Sampath Kumar has announced his intention to eliminate water pollution in America's lakes, rivers, bays, and oceans. Following a summer filled with toxic algae blooms across the country, Kumar is seeking approval to control large-scale toxic algae in the United States utilizing Nualgi's patented formula.

Toxic algae headlines Summer/Fall 2014:

- June 30, 2014: President Obama signed the Harmful Algal Bloom and Hypoxia Research and Control Act of 2014, approving 78 million for algae research.
- August 1-4, 2014: 500,000 residents of Toledo, Ohio experience a three-day tap water ban. Over 100 people hospitalized due to toxic algae in Lake Erie.
- September 30, 2014: An estimated 280,000 salmon died off the coast of British Columbia after toxic algae bloom.
- October 27, 2014: Algae bloom killed 95 percent of fish at Lake Van in New Mexico.

Nualgi's formula is certified non-toxic by the Indian Institute of Toxicology Research and has successfully been used in large lakes and rivers in India for over ten years. However, adoption in the United States has been limited to private buyers of their Nualgi Aquarium™ & Nualgi Ponds™ products due to regulatory approval procedures.

"When toxic algae in Lake Erie caused a ban on tap water this summer, I tried to donate the necessary Nualgi to treat the lake, but the lake managers weren't permitted to use our product, so the lake went untreated and 500,000 residents of Toledo, OH were unable to access tap water," said Kumar.

While Kumar states that their water treatment can "easily control large-scale algae blooms," in order to gain government approval Nualgi needs an independent University study based in the United States. Taking the first major step towards getting the United States to approve Nualgi's use in fighting the water pollution in our lakes, rivers, bays, and oceans, Nualgi has secured facilities and a team of research scientists from Mississippi State University to perform a yearlong study. This double-blind study will be led by the aquaculture and fisheries staff at MSU to review Nualgi's safety and effectiveness at reducing water pollution and improving water conditions in a commercial aquaculture setting. *Pollution Online Newsletter* [Read more](#)

## MILKWEED TOUTED AS OIL-SPILL SUPER-SUCKER — WITH BUTTERFLY BENEFITS



*Photo: The white fibres often seen floating in the fall breeze are able to absorb four times more oil than polypropylene, the artificial product now used to clean up spills. (M. Spencer Green/Associated Press)*

A Quebec company is taking a unique approach to cleaning up oil spills by producing the world's only industrial crop of milkweed, which will be used as new kind of absorbent.

François Simard, creator of Protec-Style, has a contract with Parks Canada to supply national parks with oil-spill kits. The kits come with various sizes of absorbent tubes filled with milkweed fibre.

Simard says milkweed has a unique ability to repel water, which makes it perfect for oil spills on land or water. "You can leave an absorbent [milkweed] sock in water and it will only absorb the oil. It's very unique in nature to have fibres like that," said Simard in an interview at his factory in Granby, Quebec.

Milkweed has long been considered a rural pest. But Simard, a former chemical engineer, says the plant's unusual qualities caught his interest.

The white fibres that you can often see floating in the fall breeze are light and hollow and able to absorb four times more oil than polypropylene, the artificial product now used to clean up spills.

Simard has set up a co-operative of 20 farmers in Quebec to grow 325 hectares of milkweed. He says there are another 35 growers on a waiting list.

Milkweed plants are the only place where the orange and black monarch butterfly lays its eggs. The monarchs, some of which migrate a gruelling 3,000 kilometres every year from Canada to Mexico, are in steep decline. It's partly because milkweed, which is both a habitat and food source for the monarch caterpillar, is being destroyed by pesticides. There's a growing movement in North America to plant milkweed along the migration route to help the disappearing butterfly. [CBC News](#) [Read the complete article](#)

## Publications

### NOAA RELEASES ALASKA OIL SPILL RISK ANALYSIS



NOAA has released an Alaska Oil Spill Risk Analysis — a first order screening tool for fuel spill response planning. It identifies locations and species at risk so that local, state, and federal planners can assess risks and consider restoration actions that may be required or in the event of a fuel spill.

In the Alaska Oil Spill Risk Analysis, NOAA developed a picture of fuel spill risk using past vessel and facility spill data, spill planning scenarios (Worst Case Discharge and Maximum Most Probable Discharge), and impacts to habitat and wildlife. The analysis examines the full spectrum of fuel spill scenarios from the high probability-low consequence incident involving less than one barrel of oil, to the low probability-high consequence incident that a major spill would present. [The Maritime Executive](#) [Read more](#) [More info on NOAA site](#)

### HAZARDOUS WASTE MANAGEMENT (UK) RESEARCH & MARKETS

Plimsoll Publishing's HAZARDOUS WASTE MANAGEMENT (UK) Analysis provides a detailed overview of the HAZARDOUS WASTE MANAGEMENT (UK) market and delivers a comprehensive individual analysis on the top 200 companies, including ALCHEM (MERSEYSIDE) LTD, BIFFA WASTE SERVICES LTD and CHEMWASTE LTD.

This report (compiled in English language) includes a wealth of information on the financial trends over the past four years.

Each of the largest 200 companies is meticulously scrutinised in a one-page individual assessment and is analysed using the most up-to-date and current financial data. [Read more](#)

## Links for recent issues of other publications

<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	November 2014
<a href="#">The Essential Hazmat News</a>	Alliance of Hazardous Materials Professionals	December 1 issue
<a href="#">USA EPA Tech Direct</a>	Remediation of contaminated soil and groundwater	December 1 issue
<a href="#">USA EPA Tech News &amp; Trends</a>	Contaminated site clean-up information	Fall 2014 issue
<a href="#">Technology Innovation News Survey</a>	From US EPA - Contaminated site decontamination	October 16-31 2014
<a href="#">Intertanko Weekly News</a>	International news for the oil tanker community	No 49 2014
<a href="#">CROIERG Enews</a>	Canberra & Regions Oil Industry Emergency Response Group	October 2014 issue
<a href="#">IMO Publishing News</a>	New and forthcoming IMO publications	November 2014
<a href="#">IMO News Magazine</a>	News from the International Maritime Organization	No 4, 2014
<a href="#">Pollution Online Newsletter</a>	News for prevention & control professionals	December 3 issue
<a href="#">EMSA Newsletter</a>	News from the European Maritime Safety Agency	December 2014 issue
<a href="#">JOIFF "The Catalyst"</a>	Int'l Organisation for Industrial Hazard Management	October 2014 issue
<a href="#">Environmental Technology Online</a>	Environmental Monitoring, Testing & Analysis	November 2014 issue
<a href="#">OCIMF Newsletter</a>	News from the Oil Companies International Marine Forum	November 2014 issue
<a href="#">IPIECA eNews</a>	Int'l Petroleum Industry Environmental Conservation Assoc'n	November 2014 issue
<a href="#">AMSA Aboard</a>	News from the Australian Maritime Safety Authority	December 2014 issue
<a href="#">Sea Alarm Foundation Newsletter</a>	News from the Sea Alarm Wildlife Protection Organisation	Summer 2014 issue

## Events

### UK: OCEAN BUSINESS 2015: 14-16 APRIL, NATIONAL OCEANOGRAPHY CENTRE, SOUTHAMPTON

Registration is now open - More than just a static exhibition - Ocean Business offers the visitor more than just an international exhibition. The show has an outstanding reputation for its training and demonstration programme, which runs alongside the exhibition. Visitors can actually test drive equipment at sea, in the dockside, in a test tank and in classrooms. Ocean Business also offers Offshore Survey, a technical conference and Ocean Careers, an interactive careers event – visitors are simply spoilt for choice. If that's not enough, Ocean Business is well known for organising some very special social events, and 2015 will be no exception. [More info](#)

### FRANCE: CEDRE INFORMATION DAYS: IN SITU BURNING AND OTHER ALTERNATIVE TECHNIQUES

10 March 2015, Sequoia Tour, Paris la Défense. - The pollution of the Gulf of Mexico following the tragic Deepwater Horizon disaster (2010) required the use of "classic" response techniques such as containment/recovery and dispersant use. The very specific characteristics of this spill, caused by a blowout, enabled the use of a technique known as in situ burning, as yet never used on such a scale. 411 burns were carried out, removing over 40,000 m<sup>3</sup> of oil. [More info](#)

### UK: ISAA MEETING OF "ALL-IRELAND" ACCREDITATION SCHEME STEERING GROUP

10.30 am Tuesday 16<sup>th</sup> December 2014 at NIEA, The Old Court House, Hillsborough, Co. Down, Northern Ireland. If you intend to come to the meeting, please contact the ISAA Administrator for registration and agenda – [john.mcmurtrie@spillcontrol.org](mailto:john.mcmurtrie@spillcontrol.org)

## Training

### DIPLOMA IN MARINE ACCIDENT INVESTIGATION – ONLINE TRAINING COURSE

This professional development course will provide you with up-to-date knowledge, presented in a format to facilitate maximum engagement and therefore retention of the content. Knowledge that will help prevent accidents in the future, and ultimately cut costs. The programme is made up of 10 modules, as below, culminating with a case study - this provides an excellent opportunity to apply the knowledge gained over the 12 months to a practical scenario.

Traditional classroom interaction is replicated in the form of an online tutorial forum, where you can network with fellow students from around the world as well as posting questions and discussions to the Course Director, John Astbury, CBE. To read more about our distance learning delivery, watch the Traditional classroom interaction is replicated in the form of an online tutorial forum, where you can network with fellow students from around the world as well as posting questions and discussions to the Course Director, [John Astbury, CBE](#). To read more about our distance learning delivery, watch the [video here](#). [More info](#)

### EMERGENCY FILM GROUP - ANHYDROUS AMMONIA DVD

Anhydrous Ammonia DVD is a safety training video about the hazards of Anhydrous Ammonia and safe response to incidents involving this dangerous gas. This exciting training video outlines an active program of safety and inspection to prevent accidents in the workplace and during emergency response. [More info](#)

## Training (continued)

### UK: IOPC FUNDS' SHORT COURSE: 2015 DATES ANNOUNCED

The Director is pleased to announce that the 2015 IOPC Funds' Short Course will take place from Monday 15 to Friday 19 June at the Funds' headquarters in London. The course programme will cover all aspects of the work of the IOPC Funds and the international liability and compensation regime in general and will include practical exercises which allow participants to study a theoretical incident and the subsequent claims submission process. The course is supported by IMO, INTERTANKO, ICS, the International Group of P&I Associations and ITOPF.

The Short Course is open to a maximum of ten self-funded participants from 1992 Fund Member States and the selection process is now open. The Director encourages all interested parties to submit official nominations as soon as possible to allow sufficient time for the selected candidates to their make travel and accommodation arrangements.

Further details can be found in Circular: [IOPC/2014/Circ.6](#)

## Safety briefing

### US CHEMICAL SAFETY BOARD HAS RELEASED VIDEO SAFETY MESSAGE

December 2, 2014 - The U.S. Chemical Safety Board (CSB) today released a short video safety message marking the 30th anniversary of history's worst industrial accident. The tragedy occurred at the Union Carbide pesticide plant in Bhopal, India and killed thousands of people. The CSB's safety message examines recent incidents in the U.S. three decades after this deadly event and discusses how more must be done to prevent similar accidents from occurring.

## Company news

### NRC ESTABLISHES NEW OIL SPILL SERVICE CENTRE IN ABERDEENSHIRE, SCOTLAND.



*Photo: NRC's New Oil Spill Service Centre in Oldmeldrum, Aberdeenshire.*

Global environmental, industrial and emergency response solutions provider NRC, announces the establishment of a new oil spill base in Aberdeenshire, Scotland. The new 4.9 acre (213,444 sq ft) site, located in Oldmeldrum, Aberdeenshire, will act as a key oil spill service, maintenance and training facility for NRC's international activities.

NRC is a major provider of oil spill response services to the oil & gas sector and the new facility will be the global centre for development of the company's bespoke oil spill rental packages and the maintenance and dispatch of this equipment around the globe. NRC will also be delivering a wide range of accredited emergency response and oil spill response training courses from the new centre.

The state of the art site has been developed by NRC's wholly-owned subsidiary, Sureclean Ltd and will be utilized for the provision of both Sureclean and wider NRC group services. The facility includes over 15,000 sq. ft of warehouse space including workshop, stores and wash bay areas, 3 training rooms and over 4,000 sq ft of offices space.

Neil Challis, Senior Vice President, NRC explains, "The new oil spill centre is destined to be an important addition to our international capability and will provide technical and emergency response support to our many regional oil spill centres around the world and will of course be available to support the needs of operators in the N. Sea".

Graham McLellan, Commercial Director, Sureclean, states, "This facility is a long-term investment for us and underlines NRC's commitment to the oil and gas industry in the North-East of Scotland. Oldmeldrum is the ideal location for Sureclean's Aberdeenshire base and NRC's International oil spill service centre".

Headquartered in Great River, New York, NRC has offices throughout the U.S., and internationally, operates oil spill response facilities in support of oil & gas exploration and production activities in regions such as the Mediterranean, Caspian & Black Sea, Middle East and Far East regions.

Established in 1985 and acquired by NRC in March, 2014, Sureclean is an international contractor providing a wide range of services including water jetting, tank cleaning, vacuum transfer, asbestos and waste management to the Oil & Gas, Petrochemical, Renewable, Utilities, Civil Engineering and Construction sectors.

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