



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 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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International news

ISCO AWARDED OBSERVER STATUS AT IOPC FUNDS

The International Spill Control Organization (ISCO) was granted observer status with the 1992 and Supplementary Funds at last month's meeting of the governing bodies of the International Oil Pollution Compensation Funds (IOPC Funds) held at the Headquarters of the International Maritime Organization (IMO) in London.

The International Oil Pollution Compensation Funds (IOPC Funds) provide financial compensation for oil pollution damage that occurs in Member States, resulting from spills of persistent oil from tankers.

The history of the IOPC Funds began with the oil spill from the Torrey Canyon, which ran aground near the Scilly Isles in 1967, fouling UK and French coastlines. This incident exposed a number of serious shortcomings, in particular the absence of an international agreement on liability and compensation in the event of such a spill. It led the international community to establish, under the auspices of the International Maritime Organization (IMO), a regime for compensation for victims of oil pollution.

The framework for the regime was the 1969 International Convention on Civil Liability for Oil Pollution Damage (1969 Civil Liability Convention) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution (1971 Fund Convention). Over time, it became clear that the amount of compensation available for major incidents needed to be increased and the scope of the regime widened. This resulted in two further instruments, known as the 1992 Civil Liability Convention and the 1992 Fund Convention. Following the Erika and Prestige incidents, a third instrument, the Protocol to the 1992 Fund Convention (Supplementary Fund Protocol), was adopted in 2003, providing additional compensation over and above that available under the 1992 Fund Convention for pollution damage in the States that become Parties to the Protocol.

NATIONS FAIL TO AGREE ON ANTARCTIC MARINE RESERVE

November 1 - The nations that make decisions about Antarctic fishing failed Friday for a third time to agree on a plan that would create the world's largest marine sanctuary.

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International news (continued)

The US and New Zealand had proposed creating a reserve in the pristine Ross Sea. At 1.34 million square kilometers (517,000 square miles), the sanctuary would have been twice the size of Texas.

The proposal, a decade in the making, had been scaled back from earlier plans. Many countries hoped that would be enough to entice previous objectors Russia and Ukraine to agree. Those countries are among several that have fishing interests in the region.

But the 24 nations and the European Union failed to reach a required consensus as time ran out Friday on a 10-day gathering of national delegations in Hobart, Australia.

The U.S. and New Zealand had proposed creating a reserve in the pristine Ross

The countries also failed to agree on a second proposal to create smaller reserves in East Antarctica. [ABC News](#) [Read more](#)

COAST GUARD TESTS OIL SPILL TECHNOLOGIES IN OPERATION ARCTIC SHIELD

October 28 - The Coast Guard Research and Development Center (RDC) led a team of engineers and scientists from multiple Coast Guard units, other federal agencies, and universities in evaluating methods to detect, track and respond to simulated oil spills off the North Slope of Alaska as part of Operation Arctic Shield 2013, Sept. 9-14, 2013.

Operating aboard Coast Guard Cutter Healy, the team deployed a variety of technologies that have been evaluated in temperate climates to assess their ability to perform operations under Arctic conditions.

The tests included operation of two small unmanned aircraft systems (UAS), an unmanned underwater vehicle (UUV), a vessel of opportunity skimmer system (VOSS) and a remotely operated vehicle (ROV).

Testing began Sept. 9, when Healy crewmembers and the research team deployed two hand-launched UAS. Both UAS demonstrated greater than expected endurance in the cold temperatures, staying aloft for nearly two hours, providing the research team an extended opportunity to evaluate operational capabilities.

Later the same day, the team deployed a UUV to map ice floes from below and an ROV to provide video imagery to monitor simulated oil recovery.

The team followed these initial test deployments with several days of simulated oil spill operations, using oranges and peat moss to imitate oil at the water-ice interface. During these trials, the UAS provided aerial surveillance and spill detection, the VOSS was employed to demonstrate skimming capabilities in cold, icy waters, and the ROV tracked the skimmer's progress in oil recovery.

During the evaluation period, the research team experienced freezing and challenging conditions, which caused several equipment problems and delays. However, the team was successful in deploying each of the five technologies to evaluate suitability for future use in the Arctic. RDC personnel are currently evaluating the data, and results will be released in a summary video this fall. *Government Security News* [Source document](#)

Incident reports

GERMANY: KIEL CANAL COLLISION

October 28 - Major Collision Causes Canal Shutdown in Germany

A collision early morning on October 28th left a cargo ship disabled and closed the Kiel Canal, one of the busiest waterways in the world. A cargo ship, M/V Siderfly and a LNG carrier, Coral Ivory, collided at approximately 3 am in the southern area of the canal near the Brunsbuttel Bridge.

The Coral Ivory sustained no structural damages, but the Siderfly received two large holes (approximately 3 meters by 5 meters) to its portside bow and, at last report was in danger of sinking. Two tugs were dispatched to assist in stabilizing the cargo ship while the LNG tanker was docked at Brunsbuttel bunkering station.

Incident reports (continued)

The Kiel Canal, which is near Hamburg, was shut down entirely and oil barriers have been deployed due to an unknown quantity of oil being released near the accident site. *The Maritime Executive* [Read more and see video](#)



October 29 - Kiel Canal Remains Closed following Ship Collision

An update Tuesday from Germany's Central Command for Maritime Emergencies said that as of this morning the Siderfly has been stabilized as plans for salvage get underway. The update says that the oil recovery vessel Servant Sand is on scene and will begin recovery operations. Meanwhile, authorities meeting in Brunsbüttel have determined that the first course of action will be for crews to pump the remaining diesel from the Siderfly before divers attempt to seal the leaks. *gCaptain* [Read more and view photos](#)

November 1 - Germany's Kiel Canal Reopens for Most Ships After Collision

Germany's Kiel canal linking the Baltic Sea with the North Sea reopened on Thursday for a majority of ships while emergency services sought to unload a [freighter which collided with another on Monday](#). *The Maritime Executive* [Read more and see more photos](#)

USA: CRUDE-FILLED BARGES FREED AFTER GROUNDING



October 30 - Two double-skinned barges, loaded with approximately two million gallons of crude oil, grounded near the Galveston Causeway Bridge Sunday and were freed Tuesday.

The barges were successfully ungrounded with no damage to the vessels and no pollution to the environment or waterways.

"Our pollution responders and marine inspectors worked very closely with the owner and operator throughout the entire evolution to ensure the safe refloating of both barges," said Cmdr. Ricardo Alonso, the commanding officer of Marine Safety Unit Texas City. "The proactive efforts of all parties resulted in the successful transfer of over 756,000 gallons of crude oil with no impact to the marine environment." *The Maritime Executive*

[Read more](#)

MEXICO EVACUATES 5,000 FOR GASOLINE PIPELINE LEAK

October 30 - A geyser of gasoline spewed into the sky from a state-owned pipeline in western Mexico, forcing officials to evacuate about 5,000 people Wednesday. Authorities blamed the accident on fuel thieves tapping into the pipe.

Gasoline plumed above a field close to a housing development in Tlajomulco, a town near Guadalajara, which is Mexico's second-largest city and the capital of Jalisco state.

The fuel did not catch fire, and crews were able to shut down the flow of gasoline in the pipeline, which was leaking about 150 yards (meters) from some homes. There were no reports of injuries. On its Twitter account, the state-owned Petroleos Mexicanos oil company, known as Pemex, wrote that the leak "was caused by a clandestine tap."

Emergency personnel erected a sand-bag barrier around the leak to contain the gasoline and prevent it from contaminating more soil or entering storm drains. In 1992, gasoline leaked into Guadalajara's drains and ignited, effectively creating a bomb 6 miles (10 kilometers) long that demolished 1,000 homes and killed at least 210 people. *ABC News* [Read more](#)

PHILIPPINES: SHIP CAUSES OIL SPILL IN BOHOL 20 YEARS AFTER IT SANK

October 24 - A ship which sank almost two decades ago has caused an oil spill off Panglao, Bohol, the Philippine Coast Guard (PCG) said. PCG spokesperson Lt. Cmdr. Armand Balilo said the spill originated from cargo ship M/V Wilcon, which sank off Barangay Tangnan in Panglao in 1994. *ABS CBN News* [Read more](#) [Thanks to DON Johnston of ISCO Industry Partner, DG & Hazmat Group]

Incident reports (continued)

USA: 17,000 GALLONS OF CRUDE OIL SPILL NEAR SMITHVILLE, TEXAS

October 29 - Crews have contained a giant oil spill in Fayette County.

Ramona Nye with the Railroad Commission of Texas told KVUE on Tuesday that about 400 barrels of crude oil (17,000 gallons) were spilled near Red Hollow Lane and Old Smithville Road in Smithville. The oil apparently came from an eight-inch diameter pipeline after it leaked.

Crews from SWS Environmental have contained the spill, which polluted a private stock pond and two overflow reservoirs. Those reservoirs are not used by the public. *KVUE abc* [Read more](#)

Other news

CANADA: BC “DRIFT CARD” STUDY, BITUMEN GROUNDWATER POLLUTION, MORE ON ZALINSKI SALVAGE

October 25 - Conservation groups launch 'drift card' study to measure oil spill impact

If a tanker runs aground in southern B.C.'s coastal waters, where will the oil end up? That's the question conservation groups are trying to answer with a research project launched yesterday. High school students from the Tsleil-Waututh First Nation, along with several reporters, were invited aboard the Raincoast Conservation Foundation's research boat Achiever in Vancouver's English Bay Thursday afternoon for the release of the first batch of 1,000 yellow plywood 'drift cards' that will be dropped along tankers' route to the open ocean. *The Tyee* [Read more](#)

October 22 - CNRL bitumen leak has likely contaminated groundwater, report says

Alberta Environment says bitumen leaking on CNRL's Cold Lake lease has entered aquifers and the company must take immediate steps to minimize its migration into subsurface water and soil.

Sticky bitumen, which has oozed to the surface for more than six months, "has entered local non-saline groundwater aquifers, likely contaminating the groundwater," says the 15-page enforcement order issued by Alberta Environment late Monday.

The enforcement order gives the company permission to drill more wells this winter to test groundwater at the four leak sites and attempt to stop the flow of bitumen moving up through fissures in the rock to the surface. *Edmonton Journal* [Read more](#)

October 26 - VIDEO: Canadian Coast Guard prepares for Zalinski oil recovery

Northern View [Watch the video](#) [Thanks to Gerald Graham of World Ocean Consulting]

November 2 - Comment: Is the M.G. Zalinski cleanup for oil or image?

Last winter, I found myself descending slowly down a black wall. My dive partner, Tavish Campbell, somewhere off to my left, was only recognizable by the narrow beam of his dive light.

The depth gauge registered 30 metres, so I figured I must have missed the shipwreck. I kicked off into the water column and suddenly found myself face to face with a towering wall of steel, long lines of rivets disappeared into the dark. I was staring at the shipwreck of the the 76-metre-long USAT Brigadier General M.G. Zalinski, a U.S. army transport ship that sank in the Grenville channel north of Hartley Bay in 1946.

Just on the other side of the steel hull, it is reported that 12 227-kilogram aerial bombs and countless smaller munitions lay undisturbed. Surprisingly, late on that wet and windy night so many years ago, the ship rolled down the steep wall and landed on a very narrow ledge. By all accounts it should have kept rolling to the bottom, another 76 metres.

Fast-forward to today, and the Zalinski is back in the news with the Canadian Coast Guard planning to remove the 600 or so tonnes of bunker oil (it's unclear if it plans to remove the bombs) entombed inside. The media are reporting this will help bolster the government's claim that the coast guard's oil-spill response capability is "world class" and can handily deal with ever-increasing liquefied natural gas and bitumen-tanker proposals facing the Great Bear Rainforest. But I don't follow.

First, the coast guard had 70 years to figure out how to clean up the Zalinski wreck, yet suddenly it is spending a reported \$50 million (and probably substantially more) during the winter storm season? The cleanup of the Zalinski is conveniently timed to coincide with the December decision by the National Energy Board on Enbridge's Northern Gateway pipeline and tanker proposal.

The other issue that raises eyebrows is Canada's choice of hiring the Dutch company Mammoet to do the cleanup. This seems to tell us more about Dutch capabilities than our own. *Times Colonist* [Read more](#) [Thanks to Gerald Graham of World Ocean Consulting]

Other news (continued)

USA & CANADA: PIPELINE SAFETY INCIDENT RATE DOUBLED IN PAST DECADE

October 28 - Database gives detailed picture of 1,047 reported problems. Pipelines regulated by the federal government — which include some of the longest lines in the country — have experienced a swell in the number of safety-related incidents over the past decade, documents obtained by CBC News suggest.

In recent months, a spate of oil and gas spills both from train derailments and pipelines have raised questions about what mode of transport is the safest.

The pipeline industry has touted its record as it seeks support for numerous controversial projects across the continent, including TransCanada's Keystone XL to the U.S. Gulf Coast and Enbridge's Northern Gateway to the B.C. coast. *CBC News* [Read more](#) [Thanks to David Cooper, Commercialization Associate at In-Viro-Drum]

USA: NORTH DAKOTA SPILLS WENT UNREPORTED; STATE TESTING WEBSITE

October 25 - North Dakota, the nation's No. 2 oil producer behind Texas, recorded nearly 300 oil pipeline spills in less than two years, state documents show. None was reported to the public, officials said.

According to records obtained by The Associated Press, the pipeline spills - many of them small - are among some 750 "oil field incidents" that have occurred since January 2012 without public notification.

"That's news to us," said Don Morrison, director of the Dakota Resource Council, an environmental-minded landowner group with more than 700 members in North Dakota.

Dennis Fewless, director of water quality for the state Health Department, said regulators are reviewing the state's policies for when to publicly report such incidents after a massive spill was discovered last month in northwestern North Dakota by a wheat farmer. State and company officials kept it quiet for 11 days - and only said something after the AP asked about it.

Soon after the AP published its report Friday, the Health Department announced it is testing a website to publish information on all spills reported to the department.

North Dakota regulators, like in many other oil-producing states, are not obliged to tell the public about oil spills under state law. But in a state that's producing a million barrels a day and saw nearly 2,500 miles of new pipelines last year, many believe the risk of spills will increase, posing a bigger threat to farmland and water. *KDFW / Fox 4* [Read more](#) Other related reports in [The Guardian](#) and [Bloomberg](#)

USA: MANDAN DIESEL SPILL'S END IN SIGHT

October 21 - Mandan might be ending a 30-year ordeal with a railroad diesel spill after the recovery of nearly 1 million gallons of fuel.

A state health official last week said the city can plan the shutdown of wells used to clean up the Burlington Northern (now BNSF Railway) spill. Since consultant Leggette, Brashears and Graham Inc. began handling the spill in 2006, nearly 1 million gallons of diesel fuel have been recovered, according to a state Health Department report. *Bismarck Tribune* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

USA: STUDENTS PROTECT INLETS FROM OIL CONTAMINATION

October 23 - A new Texas Tidal Inlet Protection Strategies (TIPS) program, being developed by researchers at Texas A&M University-Corpus Christi, will soon be in place to protect our state's sensitive bays and estuaries from the potential harm of offshore oil spills. *MarineLink.com* [Read more](#) [Thanks to Don Johnston of ISCO Industry Partner, DG & Hazmat Group]

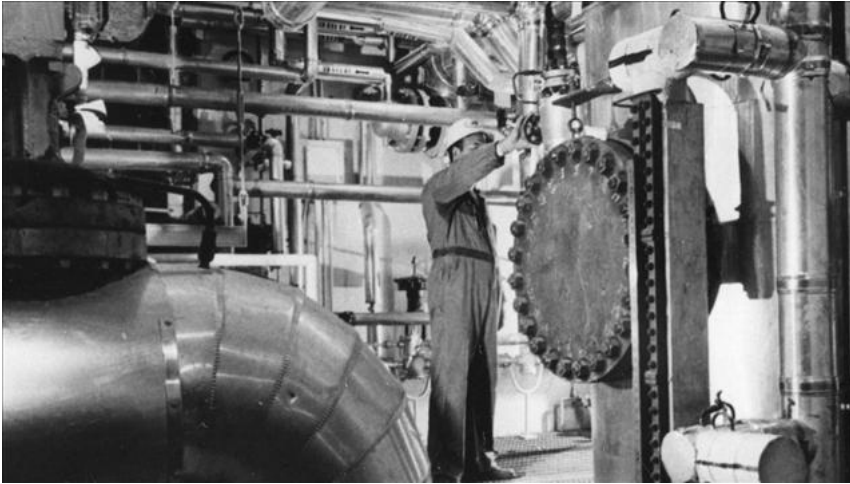
SINGAPORE, MALAYSIA CONDUCT EMERGENCY CHEMICAL SPILL DRILL

October 29 - A mock chemical spill was carried out on Tuesday to test the readiness of Singapore and Malaysia's emergency response plans. The exercise was organised by Singapore's National Environment Agency (NEA) and Johor's Department of Environment.

Twenty-four agencies and companies from both Singapore and Malaysia were involved in the emergency exercise which simulated the aftermath of a collision involving two cargo trucks carrying drums of hydrochloric acid.

Every year, about 110,000 tonnes of hazardous chemicals are transported between Malaysia and Singapore via the Second Link. *ChannelNewsAsia.com* [Read more](#)

USA: A NUCLEAR CLEANUP EFFORT LEAVES QUESTIONS LINGERING AT SCORES OF OLD SITES



WSJ's John Emshwiller and Jeremy Singer-Vine detail their yearlong investigation into the fate of hundreds of Cold War-era nuclear manufacturing and research sites.

October 30 - The contamination at Berkeley is part of the legacy of one of the most important scientific and industrial undertakings in U.S. history. During the buildup to the Cold War, the federal government turned to the private sector to help develop and produce nuclear weapons and other forms of atomic energy. Hundreds of companies and thousands of workers were pressed into service. But while it helped defend a country, this enormous endeavor has left an equally enormous—but rarely publicized—cleanup job of contamination that spans the country.

Residue, left by the routine processing as well as the occasional mishandling of nuclear material, exists in sites in almost three dozen states. Some remains in public parks, some near schools, and some in the walls, floors and ceilings of commercial buildings. Contamination has been detected on hiking trails in residential neighborhoods, in vacant city lots and in groundwater. [Note from editor: This is an interesting article] *The Wall Street Journal* [Read this article and watch the video](#)

USA: STATE, KIRTLAND BEGIN FUEL SPILL CLEANUP TEST

October 30 - State environment and Kirtland Air Force Base officials are pumping 70,000 gallons of contaminated water from the aquifer that feeds new Mexico's largest city, an attempt to clean up a huge, underground jet fuel spill.

The fuel came from what officials believe was a 40-year leak from underground pipes at a Kirtland aircraft fuel loading facility. It was discovered in 1999, and officials are still trying to figure out how to clean it up before it hits city water wells.

Officials began pumping water from the aquifer on Wednesday and filtering it in mobile tanks. The test will determine if this is a viable method for cleaning up the spill and see what happens to the aquifer when a large amount of water is removed.

The goal is to pump more than 1 million gallons before the end of November. *SFGate* [Read more](#)

USA: SHELL ANNOUNCES RETURN TO ARCTIC IN 2014 DESPITE MISHAPS

Waves crash over the drilling unit Kulluk where it sat aground on the southeast side of Sitkalidak Island, Alaska, Jan. 1, 2013. (U.S. Coast Guard photo by Petty Officer 3rd Class/Jonathan Klingenberg.)

October 31 - Shell officials on Thursday said the oil company plans to make another, dramatically scaled-back bid to find crude in Arctic waters, following a headline-grabbing 2012 season that left the firm with air pollution fines and embarrassing equipment failures.

But first, the company is preparing to scrap the floating Kulluk conical drilling unit, which ran aground near an Alaskan island on Dec. 31 after a five-day fight to tow the vessel through a fierce storm. Shell has contracted Transocean's semi-submersible drilling unit Polar Pioneer to replace the Kulluk as soon as early 2014, while final assessments are made on whether it is cost effective to repair the damaged drilling unit in an Asian shipyard. *FuelFix* [Read more](#)



IRAQ OIL PIPELINE BOMBED, PUMPING SHUT DOWN

November 2 - Militants bombed a major oil pipeline in northern Iraq early on Saturday, disabling it and forcing pumping to be suspended, security officials said.

Three blasts went off along the pipeline, in Nineveh province, which runs to the Turkish port of Ceyhan, according to two security officials. *Yahoo News* [Read more](#)

Other news (continued)

ECUADOR: WAS CHEVRON SCAMMED FOR \$ 19 BILLION ?

November 1 - Even by the standards of a legally battle-tested oil industry, the Chevron trial is ugly.

In the case before U.S. District Judge Lewis Kaplan, Chevron puts forth that Steven Donziger, a New York lawyer, masterminded an international conspiracy to obtain a \$19 billion judgment against the oil giant in Ecuador in 2011 for contaminating the Amazon. That award was one of the largest class-action payouts ever.

All this stems from a 2003 lawsuit filed in Ecuador by Donziger and an activist group, Amazon Defense Front, which sought damages for contamination it claimed Texaco left behind after drilling there for more than 25 years. (Chevron acquired Texaco, its former competitor, in 2001.) *Newsweek* [Read more](#)

Contributed article

An article contributed by Marc K. Shaye BA, JD, Hon.FISCO.



Marc Shaye, a member of the ISCO Executive Committee, is a graduate of the University of Michigan (BA) and Wayne State University of Law (JD). His practice is specialised in Environmental Law, Natural Resources, and Occupational Health and Safety. He is a qualified Environmental Assessor and has lectured at MSc level on Hazardous Waste Management. He has served with distinction on numerous committees and bar associations, addressing OPA regulations, ASTM standards, OSRO accreditation, Partnership Action Team development, Homeland Security and many other matters. He was the recipient of the 2000 Howard E. Stanfield Distinguished Service Award for outstanding service to the Spill Response Industry. Marc Shaye was Legal Counsel to ISCO from 1983 and continues to advise the organisation.
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This article will be of interest to U.S. employers facing safety compliance from the U.S. Department of Labor, Occupational Safety and Health Administration or those states which have their own plans for safety enforcement. The article stems from a recent ruling by the U.S. Court of Appeals, 11th Circuit and has value due to the analysis by the court relative to a line of earlier decisions.

THERE ARE LIMITS – EMPLOYER LIABILITY UNDER OSHA¹

It is well established that in prosecuting an employer, the government must make out a prima facie case for the violation of the safety standard that

1. the standard applied;
2. that the standard was violated;
3. that an employee was exposed to the hazard created; and importantly
4. that the employer knowingly disregarded the law.

This discussion focuses on the fourth element of the burden placed on the prosecution of a safety violation, without which the burden of proof fails.

On July 24, 2013 the United States Court of Appeals for the Eleventh Circuit (No. 12-10275) addressed the issue in the Petition for Review of a Decision of the Occupational Safety and Health Commission (OSHC –O:11-0646), ComTran Group, Inc. v. U.S. Department of Labor.

What if the malfeasant is the supervisor? Can knowledge be imputed to the employer?

To adequately carry the burden of proof regarding the employer's knowledge, the prosecution must show that the employer had either actual or constructive knowledge. If this is shown then knowledge is imputed to the employer. For example if the supervisor sees an employee's misconduct, his knowledge and tacit acceptance of the conduct will be imputed to the employer. This is viewed as actual knowledge. If the supervisor did not see the violation but was in the vicinity so he should have been aware of the circumstances, this is deemed constructive knowledge.

Moreover, if the prosecution can show failure to implement an adequate safety program, this inadequacy resulting in misconduct is construed as reasonably foreseeable. While one Administrative Law Judge's opinion did conclude that having a supervisory employee violate a safety standard equates to strong evidence that the safety program is lax, it was not sufficient to preclude a reversal imputing the employer's knowledge.

It is not cut and dried to say that if the supervisor had knowledge, it is therefore imputed to the employer. (Most jurisdictions draw a distinction between imputing a supervisor's knowledge of a subordinate's misconduct and the supervisor's misconduct.) Yet, the well-reasoned opinion in ComTran provides a compelling argument to support employers when supervisory misconduct is involved, so as to not impute knowledge. Keep in mind that the four elements, the burden of the prosecution, must still be satisfied. As to knowledge, the criteria earlier pointed out to establish knowledge are required.

Assume for this analysis, the supervisor does have full knowledge of his malfeasance. Is it appropriate to impute this knowledge to

Contributed article (continued)

the employer? It has been held that “an imputation of a supervisor’s acts to the company in each instance would frustrate the goals behind the Act”. If a violation by an employee is reasonably foreseeable, the employer may be held responsible. But, if the employee’s act is an isolated incident of unforeseeable or idiosyncratic behavior, then common sense and the purposes of the Act require that the citation be set aside. Again, the burden is on the prosecution to prove the violation should have been reasonably foreseeable by the employer.

With the obligation embodied in the prima facie burden placed on the prosecution, speculation and conjecture have no place. If there is an isolated violation of a standard that is unknown to the employer and contrary to its orders, a violation of OSHA’s general duty clause cannot be sustained.

Regarding the characterization of “supervisor”, an employee should be deemed a supervisor by virtue of experience and designation for a particular assignment or job. The supervisor status is reinforced if that individual is more qualified than others working with this individual at the time. Further, did the employer delegate responsibilities relative to safety for the work performed? Employer policy may include the obligation to look out for fellow workers and take action when warranted.

Keep in mind that it is not the obligation of the employer to prove that the violation of a safety standard was unpreventable. Nevertheless, once knowledge is established, the employer then has a burden to show the violation was unforeseeable. Yet, under the circumstances of a malleasant supervisor, it is not to be assumed that the employer had knowledge nor is it to be imputed. Nor is it sufficient to show that because the prosecution demonstrates misconduct by a supervisor that it has met its burden in establishing a prima facie case. If the prosecution is permitted to establish employer knowledge solely with proof of the supervisor’s misconduct, notwithstanding that the employer did not know, and could not have known of that misconduct, then the prosecution is relieved of having to establish knowledge. The requirements of the prima facie case are effectively gutted. This would improperly shift the burden and shift the obligation to the employer to show the conduct was unforeseeable.

It is emphasized that an employer seeking to raise an affirmative defense, its burden, occurs only if the prosecution has successfully established the prima facie case.

¹ The author has not included references beyond citing the ComTran opinion for the convenience of the reader. Legal citations are found in the ComTran decision for the points addressed.

Contributed article

A serialised article contributed by Carlos Sagrera M.Sc., MISCO.



Carlos Sagrera is an independent oil spill control and environmental advisor in onshore and offshore activities with 20 years of experience in Latin America. He has been an ISCO Member since 2012 and is the author of this paper, initially written in September 2012, and adapted for the ISCO Newsletter in October 2013. Views expressed are the author's own comments and opinions.

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PART 4 - CONTROL AND PREVENTION OF OIL SPILLS: SOME OUTLINES OF A REACTION IN LATIN AMERICA ON THE DWH INCIDENT

Recent spills in CHEVRON’s exploration platforms (November 2011), in the Frade Field well (Campos watershed), and PETROBRAS’s well (February 2012)²² in Carioca Nordeste (Santos watershed)²³, highlighted the response speed and effectiveness of the Brazilian Contingency Plan. Oil companies in Brazil have initial differences in notification processes; they lack a smooth environmental culture that would be subject to a supposed protection of their image; there is even some questioning to the response techniques they use. This issues should not hide the fact that once the assessment stage is initiated, the magnitude and derivation of the slick was effectively determined, which allowed for a correct dimensioning, monitoring and surveillance. However, the operational response was rather relative in its efficiency, despite the great display of resources, in the sense that the natural degradation processes accelerated its dispersion. The consequences for such a multinational oil company have been costly, as its exploitation license for Frade Field well has been temporarily removed after new minor spills on March 2012, which did not always have clear origins. Lastly, fines arrived in September 2013 and the company signed an accord that could lead to the end of civil lawsuits²⁴. These recent offshore spills in Brazil and their judicial consequences--even severe criminal claims for the main responsible parties of the operating companies found liable--, have marked a new stage in the way in which companies and authorities get involved in this type of incident, and are a direct consequence of the DWH events that accelerated awareness-building in relation with security and prevention issues in Latin America.²⁵

The above issue takes us to a recurrent situation with this type of incident, which DWH has brought up to almost paranoid levels, such as the issue of transparency towards public opinion and media management. There is an industrial maxim that says that when there is an oil spill, no direct or indirect actor comes out unscathed. The issue is not to worsen an already complicated situation by omitting or not sending the appropriate messages. The premise is that besides solving the problems, one must have the right skills to communicate them effectively and along with the current era. If these are times of instant information, then the information provided must be as well. DWH showed excellence and made history with the method of broadcasting used, whether the responsible parties liked it or not, as was the fact of their real-time broadcast of the oil spill. Some might think that this only occurs

Contributed article (continued)

in the US, but this is not the case. In the case of the Frade Field (Brazil) offshore spill, recordings and photos of the oil spill in deepwaters were also shown, which confirms the trend²⁶ This entailed and will henceforth entail an aggregated effort and it constituted enormous pressure for unified commands, which was exacerbated to unimaginable limits with the case of DWH. Managing these situations requires professional handling and adequate budgets. Why, then, are some people, both at the business

and government levels, so reluctant to presenting information on the evolution of the incident via the Internet in Latin America? The answer is of a cultural and even psychological nature, with a certain tendency to solve situations outside the procedures and response plan. The limitation of resources and the lack of qualification and leadership could be the causes. Latin America is not prepared for this type of openness and still maintains, in its state organizations and mainly in the upper ranks of the Navy and Coast Guard, a tendency to being reserved and dosing the information beyond the advisable, which may worsen already complicated situations. Please note that the ICS manual even adds and Intelligence Officer to the staff of the response organization. In this situation, involved companies can manage the dissemination of information with a secretive bias that sometimes tends to deform the information about the events. This can turn out to be a double-edged sword for the companies. Once the incident occurs, the image damage is already done. The capacity of controlling the situation and the expressed will of reinstating the scenarios by all possible means remain to be demonstrated. Together with those intentions, companies must be capable of knowing how to disseminate them in an effective and sustainable way. DWH was in this respect the best scenario to learn about the above and the authorities, together with oil industry companies have taken due note.

With the above premises, and even though the direct impact of the DWH spill on the coasts of neighbouring countries was not direct, the threat over the coast of the Gulf of Mexico, and even Cuba, was clear. The latter country, which is developing an intensive exploration programme in its Exclusive Economic Zone (EEZ) with contracts at risk with foreign companies (22 blocks of a total of 59 companies from Norway, Spain, India, Venezuela, Vietnam, Malaysia, Angola and Russia), has reinforced its interest on prevention and oil spill control, relying on regional and specialized organizations.²⁷ The embargo of the US prevents Cuba's direct access to necessary offshore technologies, which should be accessible for its privileged geographical location. However, attempts and efforts from control and response organizations from the US are beginning to be seen, with the purpose of reaching agreements on potential support in the case of offshore contingencies²⁸ The central topic of the 22nd Annual Clean Gulf Conference in New Orleans was a Mega Session about the issue: "Is There Really One Gulf of Mexico? Trans-boundary Challenges in Deepwater Safety". The case of Cuba was analysed in particular. The author of this paper was pleasantly surprised by the very open way in which the need for overcoming the obstacles of the American embargo was exposed, at least in the case of prevention and security before possible offshore contingencies in Cuban waters.²⁹

Footnotes

22 <http://www1.folha.uol.com.br/mercado/1041834-petrobras-detecta-vazamento-de-petroleo-em-poco-do-pre-sal.shtml>

23 <http://www1.folha.uol.com.br/mercado/1010221-mancha-de-oleo-de-vazamento-da-chevron-diminuiu-diz-anp.shtml>

24 <http://www.reuters.com/article/2013/09/13/brazil-chevron-transocean-idUSL2N0H915U20130913>

25 <http://www1.folha.uol.com.br/mercado/1148817-por-r-500-mil-justica-autoriza-presidente-da-chevron-no-brasil-a-sair-do-pais.shtml>

26 <http://q1.globo.com/rio-de-janeiro/noticia/2011/11/policia-federal-comecara-ouvir-funcionarios-da-chevron-nesta-quarta.html>

27 <http://mesaredonda.cubadebate.cu/noticias/2012/08/06/firmas-foraneas-adelantan-prospeccion-petrolera-en-aguas-cubanas/>

28 <http://fuelfix.com/blog/2012/05/10/experts-say-u-s-should-do-more-to-thwart-spill-from-cuban-drilling/>

29 <http://www.cleangulf.org/>

Cormack's Column



In this issue of the ISCO Newsletter we are printing No. 151 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](http://www.isco-international.org/)

CHAPTER 151: CAMPAIGN FOR KNOWLEDGE-ONLY ENVIRONMENTAL POLICY

Articles 145 & 146 showed that belief in species-extinction/ecological-disaster is refuted by our knowledge of the seawater concentrations of accidentally released or operationally discharged oil from ships being too low to cause such effects through toxicity; and that the deaths of individual organisms by physical coating are low enough for natural re-colonisation to replace them at sea and onshore however large or prolonged the marine oil release. Again, articles 147-150 showed that with the ballasting of bunker and cargo tanks having been eliminated, only bilge water can now operationally mix with oil; and that despite current levels of gravity separation and downstream coalescence-filtration of such mixtures, the demand for zero discharge remains unabated, such being the tenacity of belief in species-extinction/ecological-disaster. Yet again, articles 145 & 146 have shown that belief in power-station 'fossil' fuel combustion being the cause of lake and forest acidification by its sulphur dioxide emissions was overtaken

by belief in its carbon dioxide emissions causing anthropogenic global warming; and that both have now been combined in believing in global warming, excess deaths in port-side populations and in oceanic acidification being caused by ship-source emissions of carbon dioxide, sulphur dioxide and nitrogen oxides, despite our knowledge of these being recycled in photosynthetic/fertilised maintenance of land and marine biomasses.

Against this background and the recently announced resumption of interest by coastal states in the operational discharge and accidental release of so-called hazardous/noxious substances (HNS) many of which are components of crude oils, I now intend to replace current beliefs with already longstanding knowledge not only for HNS but also for oil and dispersants, this intention being the environmental aspect of my campaign for knowledge-only policy across the whole political-economic spectrum.

Thus, I start by noting that when coastal states first considered the bulk transportation of HNS under MARPOL Annex II, emphasis was placed on their comparative toxicity as measured at concentrations and exposure times adjusted to produce 50% death of arbitrarily chosen test organisms *i.e.* as expressed by their LC₅₀ values without regard to their toxicities/non-toxicities at the concentrations of exposure likely to result from operational discharges or accidental releases in reality. Of course, this disregard for reality had already caused oils and dispersants to be pronounced toxic to water column organisms on the basis of LC₅₀ values measured for the shrimp *Crangon crangon* at concentrations many orders of magnitude above actual exposure concentrations as noted in articles 145 & 146. Indeed, HNS had been arbitrarily categorised as groups A, B, C and D without regard to exposure-concentrations. Thus, discharge of category A was arbitrarily prohibited while those of categories B and C were arbitrarily dischargeable at concentrations $\leq 0.01\%$ or 0.1% respectively, at amounts per tank $\leq 1\text{m}^3$ and 3m^3 respectively and at ship's wake concentrations $\leq 1\text{ppm}$ and 10ppm respectively, while those of category D had no total limit provided the discharge arbitrarily contained $\leq 10\%$ of the substance; and while arbitrarily unregulated substances were listed in Appendix III to Annex II.

Furthermore, wash water containing thus regulated substances was to be discharged below the waterline in water depths of at least 25m, at least 12 nautical miles from land and with the ship *en route* at ≥ 7 knots. Again, discharge procedures and arrangements were standardised to include operational assessment of tank residues after cargo discharge, determination of discharge method, evaluation of means of residue reduction, specification of washing procedure and identification of requirements for slop tank use for retention onboard for discharge to shore. Again, equipment requirements included those for an underwater discharge outlet, emulsification of insoluble liquids, and flow metering, and time recording to monitor discharge rates and durations. Yet again, anticipated requirements were for pipeline purging, tank-stripping, slop tank pumping, and homogenisation of insoluble solids.

However, having appraised toxicities without reference to exposure concentrations in reality, the above requirements were agreed on this appraisal before post-discharge residues onboard (ROB) had been quantified. Thus, Warren Spring Laboratory (WSL) undertook this then belated quantification onboard an ocean-going parcel tanker. WSL noted that a tank ROB would be the sum of the residue quantities on the tank bottom, in its pipelines and on its internal tank surfaces; that the first two are a matter of tank-bottom geometry with respect to the discharge inlet and of tank-associated pipelines and as such are cargo-independent; that the third is cargo-specific in respect of viscosity and solidification- temperature; and that neither is related in any way to the toxicity categories. Thus, WSL concluded that the residue on internal tank surfaces would be a function of viscosity-dependent surface drainage rate; that for the then categories B and C, only 15 substances had viscosities > 5 cSt at 15°C ; that about 25 were solidifiers; and that volatiles could be completely removable by venting to an ROB of zero.

As to the tank bottom residue, the relevant design parameters are the length, breadth and position of the discharge entry-point, the last being defined by its distances a and b from the aft and inboard bulkheads respectively. Other parameters are the trim angle α which is deducible from the bow and stern draft marks h_1 and h_2 and the waterline length l such that $\alpha = \tan^{-1} (h_2 - h_1) / l$, the angle of list β which is read from the ship's inclinometer, and the post-discharge depth d of the substance at the discharge entry-point which is such that the tank bottom residue $Q_b = (d + a \tan \alpha + b \tan \beta)^3 / 6 \tan \alpha \tan \beta$. If there is an extraction well, the residue can be determined from the dimensions of the well itself while the residue which does not drain into the well is added to it as calculated from the foregoing equation with $d = 0$. Again, the quantity adhering to internal tank surfaces, Q_s was determined by physically cleaning measured areas of vertical and horizontal surfaces followed by quantitative analysis of the substance thus removed and deducing the total amount on the total areas. Yet again, the total on the tank bottom and internal tank surfaces $Q_b + Q_s$ was determined by measuring the total quantity of wash water used to clean the tank and the resulting concentration of residue in this water. The quantity retained in pipes Q_p was computed from pipe geometry, the pumping system and pipe clearing systems used; or by flushing pipelines back into the cleaned tank and measuring the amount of water used and the concentration of the residue in this water. Finally, $Q_b + Q_s + Q_p$ was determined by flushing pipes back into the un-cleaned tank and measuring the subsequent wash water amount and its substance concentration

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.

Publications

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

July-August 2013

October 28 issue

November 1 issue

May 2013 issue

Publications (continued)

[Technology Innovation News Survey](#)
[Intertanko Weekly News](#)
[CROIERG Enews](#)
[IMO Publishing News](#)
[IMO News Magazine](#)
[Pollution Online Newsletter](#)
[EMSA Newsletter](#)
[JOIFF "The Catalyst"](#)
[Environmental Technology Online](#)
[HELCOM Newsletter](#)
[OCIMF Newsletter](#)

From US EPA - Contaminated site decontamination
International news for the oil tanker community
Canberra & Regions Oil Industry Emergency Response Group
New and forthcoming IMO publications
News from the International Maritime Organization
News for prevention & control professionals
News from the European Maritime Safety Agency
Int'l Organisation for Industrial Hazard Management
Environmental Monitoring, Testing & Analysis
Baltic Marine Environment Protection Commission
News from the Oil Companies International Marine Forum

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No. 44 2013
October 2013 issue
October 2013
No 3, 2013
October 23 issue
October 2013 issue
October 2013 issue
October 2013 issue
May 2013 issue
September 2013 issue

OIL SPILL RESPONSE GLOBAL INITIATIVE - SOUTH EAST ASIA UPDATE

October 28 - The second volume of *Changing Tides* – the newsletter of the GI SEA Programme, has been published. This quarterly publication provides updates on recent GI SEA activities, plans for the future, and progress towards expanding the programme's membership. Highlights for this issue include regional preparedness and GI SEA, the Association of Southeast Asian Nations - Oil Spill response Action Plan (ASEAN OSRAP), and the GI SEA Executive Steering Committee. Download [Changing Tides Vol. 2](#)



EMSA: ADDRESSING ILLEGAL DISCHARGES IN THE MARINE ENVIRONMENT

Since Directive 2005/35/EC on ship-source pollution and on the introduction of penalties, including criminal penalties, for pollution offences was adopted, progress has been made by Member States in addressing illegal discharges in the marine environment.

This publication is intended to support authorities involved in the enforcement chain addressing illegal pollution (e.g. surveillance operators, inspectors and investigators, Port State Control Officers, law enforcement officials). [Access this publication](#)

EMSA: SECOND REVIEW AND EVALUATION OF THE MAR-ICE NETWORK COVERING ITS OPERATION FROM JANUARY 2011 TO JUNE 2013

The MAR-ICE Network was created in 2008 through a 3-Party Memorandum of Understanding (MoU) between the European Chemical Industry Council (Cefic), the Centre of Documentation, Research and Experimentation on Accidental Water Pollution (Cedre) and the European Maritime Safety Agency (EMSA) and became operational in January 2009. The MAR-ICE MoU has been extended in 2011 until October 2014.

A first report evaluating the service provided by the Network during its first two years of operation (January 2009 to December 2010) was published on EMSA's website in 2011. This is the second report evaluating the Network's operations from January 2011 to June 2013. [Access this publication](#)

UK SPILL ASSOCIATION: NEW ISSUE OF *SPILLALERT* [Access SpillAlert Issue 12](#)

Training

USA: FEMA COFFEE BREAK TRAINING – CHARACTERISTICS OF THE INCIDENT COMMAND SYSTEM PART 3 [Download](#) [Thanks to Hazmat 101 Group]

ROMANIA: TRAINING COURSE ON "OIL POLLUTION MONITORING AND CLEANING TECHNIQUES IN PORTS AREA"

Within the scope of the activities of the European project TEN ECOPORT, namely WP 3 - act 3.2. PEER EDUCATION – "Ports help ports", Romanian Naval Authority will organize a 2-day Training Course in Constanta, Romania, on 13th and 14th of November 2013.

The Training Course has established as main theme "Oil pollution monitoring and cleaning techniques in ports area" and has as objectives the development through a peer consultation approach, the understanding of pre-spill planning, the deployment and use of equipment for oil-spill clean-up operations, selecting appropriate equipment and managing spill response teams on-site and raising the awareness on the importance of Health and Safety. [More info](#)

Training (continued)

NEW OSRL TRAINING COURSES

OSRL has issued its [2014 Training Course Directory](#).

New courses include:- [Cold Weather Response](#); [Oiled Wildlife Response Planning](#); [ICS 402](#) - an overview of ICS for Executives; and [UKCS Initial Response for Onshore Emergency Team Members](#).

OSRL is currently redesigning our training website and it is likely that the links given here may only be active until the site is upgraded early in November. The site address is not changing, OSRL is just improving its design oilspillresponsetraining.com

If you need any help downloading the directory or course pages, or simply want to discuss your spill response training options, please contact:- stevewoods@oilspillresponse.com (Europe, Americas, Middle East) or vincentgoh@oilspillresponse.com (Asia Pacific and Oceania)

Events

CLEAN GULF 2013 – JUST OVER A WEEK AWAY !

It's now only just over a week until Clean Gulf begins in Tampa, Florida. Over 2,600 emergency responders are set to converge from November 12-14, 2013 in Tampa, Florida, for the CLEAN GULF Conference & Exhibition.

Key professionals and decision makers from throughout the Gulf Coast and beyond will come together to discuss the latest trends and best practices in response operations. Attendees will walk away with viable solutions they can incorporate to safely produce and transport petroleum products and effectively respond when a spill occurs.

In addition to the conference sessions, the exhibit floor features more than 200 companies ready to assist you with finding new solutions and technologies that will work best for your organization.

ISCO is a supporter of this event and we commend it to you. There's still time to register but you need to do this by 14 November. [Register online now](#)

- The Conference content has been programmed specifically for the response community
- Access to new technologies and services on display in the exhibit hall
- Opportunities to engage and collaborate on best practices and lessons learned with major operators, responders and regulators
- Pre-conference workshops that provide you with hands-on training in emergency response
- Networking with industry leaders at the Jim Weber Sr. Memorial Golf Tournament

You can download the Programme by clicking [HERE](#)

Please be sure to visit ISCO at Booth 136 in the exhibition area. ISCO President, David Usher and Membership Director, Mary Ann Dalgleish will be in attendance, also Bill Hazel and Walt Putman.

They are looking forward to seeing you !

IOSC 2014: KEYNOTE SPEAKER ANNOUNCED

Daniel Yergin, Pulitzer Prize-winning Author and Energy Expert, a highly respected authority on energy, international politics, and economics, will delve into the world of energy and its implications for the future.

Dr. Yergin is Vice Chairman of IHS and founder of IHS Cambridge Energy Research Associates, as well as a Pulitzer Prize winner and recipient of the United States Energy Award. His new book - *The Quest: Energy, Security, and the Remaking of the Modern World* - has been hailed by *The Economist* as "a masterly piece of work" and "a comprehensive guide to the world's great energy needs and dilemmas."

To learn more about Dr. Yergin, or for information on the conference program, special events, and sponsorship opportunities, visit www.iosc.org.

The International Oil Spill Conference (IOSC) takes place in Savannah, Georgia, on May 5-8, 2014.

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