

ISCO NEWSLETTER

The Newsletter of the International Spill Response Community Issue 365, 17 December 2012

info@spillcontrol.org

http://www.spillcontrol.org

QUICK FINDER

Click on these links

CONSULTANTS

EQUIPMENT & MATERIALS

RESPONSE ORGANISATIONS

TRAINING PROVIDERS

Clicking on a company name or banner advertisement will display the advertiser's website.

GET THE ISCO NEWSLETTER

Join the ISCO Newsletter Mailing List

BECOME A MEMBER OF ISCO

ISCO aims to raise worldwide preparedness and co-operation in response to oil and chemical spills, to promote technical development and professional competency, and to provide a focus for making the knowledge and experience of spill control professionals available to IMO, UNEP, EC and other organisations.

There are many benefits for you in becoming a member and joining ISCO is not expensive.

Application Form

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).

All about Professional Membership

Application Form



SEASON'S GREETINGS TO ALL OUR READERS



7th Annual HSE Excellence Europe 22 & 23 May 2013, Prague - Czech Republic

International news

POSOW PROJECT PRODUCES FOUR NEW MANUALS -

(1) Oiled Shoreline Assessment

(2) Oiled Shoreline Clean-up

COMPANY SEC

(3) Volunteer Management

(4) Oiled Wildlife Response

The project for **P**reparedness for **O**il-polluted **S**horeline clean-up and **O**iled **W**ildlife interventions – POSOW, coordinated by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), is a two year project co-funded by the European Commission under the Civil Protection Financial Instrument, to improve the preparedness and response in marine pollution in the Mediterranean region.

The project POSOW aims at establishing a regional co-operation synergy through the enhancement of knowledge and capacities of operators (professionals and volunteers) in the field of marine pollution, in European coastal countries of the Mediterranean Sea namely Croatia, Cyprus, France, Greece, Italy, Malta, Slovenia and Spain.

It is implemented by REMPEC and its partners, namely the Centre of Documentation, Research and Experimentation on Accidental Water Pollution (CEDRE), the Institute for Environmental Protection and Research (ISPRA), Sea Alarm Foundation, and the Conference of Peripheral Maritime Regions of Europe (CPMR).

Oiled Shoreline Assessment Manual

This document is designed to help teams of volunteers to understand and be able to undertake shoreline surveys to provide key information for authorities during the first or 'reactive' phase of the response.

The manual is divided into three parts:

Part 1: Assessment principles and methodology: objectives of oiled shoreline assessment, methodology and instructions for completing the assessment form Part 2: Forms and guidance datasheets: tools to carry out assessment Part 3: Further information



Oiled Shoreline Assessment Manual (download it now!) Download the Oiled Shoreline Assessment Form for reproduction or dissemination

International news (continued)

Oiled Shoreline Clean-up Manual

This document is designed to help team of volunteers to understand and implement on the field the tasks which have been assigned to them by authorities in charge of response.

The manual is divided into two parts:

Part 1: background, general principles of cleanup and presentation of cleanup techniques and logistical tasks which can be undertaken by volunteers Part 2: technical sheets to be used on the field

This manual is designed for volunteers and all responders working on shoreline cleanup sites who have little or no previous knowledge of pollution response and who are in charge of cleanup on land and on the shoreline and who may potentially be in contact with oil.

The Oiled Shoreline Clean-up Manual will be available from 18 January 2013.

Volunteer Management Manual

OIL SPILL VOLUNTEER MANAGEMENT MANUAI

2

This document is designed to assist competent authorities and NGOs to efficiently manage volunteer's contributions as well as to brief volunteers on tasks assigned to them.

The manual is divided into two parts:

Part 1: background and general principles of volunteer management, preparedness for oil spill response and possible tasks carried out by volunteers

Part 2: field technical sheets template for authorities and volunteers A number of oil spill response activities should not be carried out by volunteers as they require in-depth training and experience to ensure safety and efficiency of operations. Throughout this manual, volunteer and expert tasks are differentiated.

The Volunteer Management Manual will be available from 18 January 2013.

Oiled Wildlife Response Manual

B 2 · M

This manual is designed to help teams of volunteers to understand and implement field wildlife response operations which have been assigned to them by authorities in charge of the response.

The document is divided in two parts:

Part 1: provides backgrounds, general principles of oiled wildlife response and presentation of wildlife response actions and tasks which can be undertaken by volunteers. Part 2: provides technical sheets to be used in the field and on the work floor

The manual is designed for volunteers and all wildlife responders who:

Are working at onshore wildlife response operational sites

have little or no previous knowledge of wildlife response

• may undertake certain wildlife response activities on land and on the shoreline and

• may potentially be in contact with oil and wild animals.

The Oiled Wildlife Response Manual will be available as from 20 February 2013.

Incident reports

USA: COAST GUARD RESPONDS TO DIESEL SPILL IN SAN JUAN HARBOR

December 11 - The Coast Guard continues investigating Monday a diesel fuel spill of at least 600 gallons in the San Antonio Channel of San Juan Harbor, Puerto Rico.

The diesel spill reportedly occurred early Sunday during the fueling of the 176-foot Panamanian ro-ro container ship Midnight Chief at Pier 10. An oil field vacuum truck collected the recoverable fuel that had been spilled into the water from the containment area surrounding the vessel and enclosing the Pier 10 entrance.

Coast Guard pollution investigators confirmed, following aerial and surface assessments aboard a Coast Guard helicopter, Monday morning that most of the diesel in the San Antonio Channel had dissipated and the remaining discharged fuel was unrecoverable and would continue to naturally dissipate.

The diesel spill was initially reported to the National Response Center, who in turn reported the incident to Coast Guard Watchstanders in Sector San Juan as well as other commonwealth agencies Sunday morning. *Maritime Executive* Read more

2





CANADA: NORTHEAST EDMONTON ACID SPILL NEARLY CLEANED UP



Emergency crews blocked off a large area of northeast Edmonton Sunday morning after hydrochloric acid leaked from a containment tank in an industrial area north of Yellowhead Trail near 120th Avenue and 32nd Street NE. Photograph by: John Lucas, Edmonton Journal

December 11 - About 152,000 litres of hydrochloric acid that leaked from a large holding tank in northeast Edmonton is expected to be completely cleaned up by Thursday, and the potential environmental impact will be monitored.

Most of the acid was contained to the Panther Industries site at 2061 32nd Street N.E., but the company says about 5,000 litres entered a nearby creek through a City of Edmonton stormwater sewer drain. The leak into the creek was discovered at about 4 p.m. on Sunday, and was contained with a dam made of earth, the company says. *Edmonton Journal* <u>Read more</u>

NETHERLANDS: SVITZER HIRED TO REMOVE OIL FROM SUNKEN BALTIC ACE

December 10 - SVITZER, a member A.P. Møller – Mærsk Group specializing in marine salvage and response, has been hired to remove the fuel oil from the sunken car carrier Baltic Ace near Rotterdam, Dutch media reported Monday.

<u>Nrc.nl</u> reports that SVITZER hopes to do a first survey this week, if weather allows it. Press agency Novum writes that the Dutch Navy will first send divers to search the ship for bodies and after that SVITZER will start pumping out the oil. The operation is expected to take about 2 to 4 weeks. gCaptain has been told that the Baltic Ace was carrying about 466 tons of heavy fuel oil and about 55 tons of diesel oil at time of the collision.

The vessel, which sank last Wednesday evening after colliding with the Corvus J containership, lies in 36 meters of water just south of the beginning of the Eurogeul, a deep water channel that leads to the port of Rotterdam. *gCaptain* Read more



UK: RACE TO PROTECT SPAWNING SALMON AFTER FUEL TANKER CRASH

December 14 - An urgent race is on to protect spawning salmon after a fuel tanker crash near the River Tiddy in Cornwall.

The Environment Agency has deployed booms on the river to contain any leaked fuel following the spill, which has closed the A38 at Tideford. Mark Pilcher, from the agency, said: "It is a vulnerable time of year because fish will be coming into the river to spawn and lay eggs. [Thanks to David of DG & Hazmat Group] BBC News <u>Read more</u>

Other news

UK TO "GO FOR GAS"

David Cameron: 'Britain must be at the heart of shale gas revolution'

December 11 - Britain must be at the heart of a "shale gas revolution", David Cameron has said, which could bring down energy prices and help "re-industrialise" the economy.

Giving his public backing for plans to exploit the country's onshore gas reserves – which is expected to be given the go-ahead by the Government very shortly – Mr Cameron said the new technology could transform our energy supplies.

But his stance was attacked by climate change scientists and energy experts who warned his dash-to-gas policy was "misleading and dangerous". *The Independent* <u>Read more</u>

Gas fracking: Ministers approve shale gas extraction

December 13 - The government has given the go-ahead for a firm to resume the controversial technique known as fracking to exploit gas in Lancashire. The company, Cuadrilla, was stopped from fracking after two tremors near Blackpool.

Conditions have been imposed to minimise the risk of seismic activity.

BBC News Read more

KOREA: KOEM DESIGNATED A MARINE POLLUTION IMPACT ASSESSMENT ORGANISATION



After two years of expanding its inventory of state-of-the-art measuring equipment, lab facilities and professional workforce, the Korea Marine Environment Management Corporation (KOEM) was designated as a Marine Pollution Impact Assessment Organization by the Ministry of Land, Transport and Maritime Affairs (MLTM), November 14th.

The title 'Marine Pollution Impact Assessment Organization' is only granted to organizations that have professionals in the fields of oceanography, fishery science, environmental science and environmental engineering. Additionally equipment to analyze oils and polycyclic aromatic hydrocarbons(PAH) and equipment for eco-toxicity analysis and marine ecosystem impact assessment is required. According to the Marine Environment Management Act, institutions that are bestowed the title are authorized to conduct a Marine Pollution Impact. KOEM Read more

USA: PIPELINES - SCIENTISTS FIND CONVENTIONAL CRUDES SIMILARLY CORROSIVE TO OIL SANDS MIX

December 10 - Activists opposed to the Keystone XL pipeline believe the crude it would carry would make it more prone to leaks than the existing 52,475 miles of pipelines the United States has to transport conventional crude oil.

Their fears have been underscored by a statistic: Alberta has two pipeline failures per 1,000 miles of pipeline every year. In comparison, the United States has 1.7 failures for every 1,000-mile stretch, according to the Pipeline and Hazardous Materials Safety Administration. The difference, it is thought, is that Alberta's pipelines transport diluted bitumen, also called dilbit.

Dilbit refers to a heavy oil sands crude, called bitumen, mixed with a diluent to reduce the viscosity of the material and ease flow down a pipeline. It contains higher levels of some corrosive chemicals than some conventionally produced crudes, so there is worry that Keystone XL could be more vulnerable to internal corrosion than other pipelines.

But scientists are finding that some heavy conventional crudes are just as corrosive as dilbit or more corrosive. This implies that comparing dilbit to conventional crudes is an oversimplification, since "conventional" is an umbrella term for so many different hydrocarbons. Some of the research was presented at recent conferences and to a National Academy of Sciences (NAS) panel that will deliver a report on internal corrosion next year. *E & E Publishing* Read more

BRAZIL: CHEVRON NEARS SETTLEMENT IN BRAZIL OVER FRADE OIL SPILL

December 14 - Chevron Corp is willing to pay about 300 million reais (\$144 million) to settle lawsuits in Brazil over an oil spill last year, a senior executive and a federal prosecutor said on Friday.

The talks over a possible settlement reinforce expectations of a swift resolution for Chevron, the No. 2 U.S. oil company, and its drilling contractor Transocean Ltd. Related moves by Brazil's oil regulator, the ANP, could also lead to a quick restart of output at Chevron's Frade field, the location of the spill, which has been shut since March. *gCaptain* Read more

USA: STOP-START FOR WORK ON KEYSTONE XL PIPELINE

Texas judge halts TransCanada oil pipeline work

December 11 - A Texas judge has ordered TransCanada to temporarily halt work on a private property where it is building part of an oil pipeline designed to carry tar sands oil from Canada to the Gulf Coast, the latest legal battle to plague a project that has encountered numerous obstacles nationwide.

Texas landowner <u>Michael Bishop</u>, who is defending himself in his legal battle against the oil giant, filed his lawsuit in the Nacogdoches County courthouse, arguing that TransCanada lied to Texans when it said it would be using the Keystone XL pipeline to transport crude oil.

Tar sands oil — or diluted bitumen — does not meet the definition as outlined in Texas and federal statutory codes which define crude oil as "liquid hydrocarbons extracted from the earth at atmospheric temperatures," Bishop said. When tar sands are extracted in Alberta, Canada, the material is almost a solid and "has to be heated and diluted in order to even be transmitted," he told <u>The Associated Press</u> exclusively. San Francisco Chronicle <u>Read more</u>

Texas judge lifts order that halted work on Keystone XL pipeline

December 13 - A Texas judge has lifted a temporary restraining order that had stopped oil company TransCanada from building a portion of the controversial Keystone XL pipeline through the eastern part of the state.

The decision came after Michael Bishop, 64, a retired paramedic and chemist in East Texas, filed a lawsuit arguing that TransCanada defrauded him and other landowners in promising that the Keystone XL pipeline would transport crude oil, not tar sands.

Texas County Court at Law Judge Jack Sinz lifted the temporary restraining order Thursday morning after a hearing in Nacogdoches. Los Angeles Times Read more

USA: SHELL LOOKS TO RENEWABLE ENERGY TO GET TO FOSSIL FUEL



A rendering shows GlassPoint's solar enhanced oil recovery system in Kern County, Calif. (GlassPoint photo)

December 12 - One of the world's largest oil companies, Royal Dutch Shell, has invested in a Fremont, Calif. startup that uses solar power to squeeze petroleum from aging oil fields.

GlassPoint Solar's technology generates high-pressure steam to heat oil underground, helping it flow to the surface. The company announced Tuesday that it raised \$26 million in its latest financing round. GlassPoint has already branched out beyond California. In October, the company finished construction on one of its systems in Oman, working with a joint venture that includes Shell, French oil giant Total and the Oman government. *Fuel Fix* <u>Read more</u>

People in the news

INDIA: ALPHA MERS APPOINTS NEW TECHNICAL DIRECTOR AND BUSINESS ADVISOR



Mr.V.S.Ramesh Rao (picture on left) has been appointed as Technical Director of Alpha MERS Pvt. Ltd., based in Bangalore. Having served at sea as a Chief Engineer, he has over 15 years experience in shipping operations & services. He is one of very few persons in the country with experience in operations & maintenance, manufacturing, project management, Quality, Safety & Risk management and Productivity improvement with 25 years of work experience including work with some of the

largest and well known world leaders like India Cements, Det Norske Veritas, Caterpillar Asia-Pacific & Suzlon Energy.

Capt. D. C. Sekhar, MD of Alpha MERS and Member of ISCO Council for India, also advises that Vice Admiral P.J.Jacob (retired) is now associated with AlphaMERS and is advising the company on its growth plans. Admiral Jacob (picture on right) retired in 2001 as the Vice Chief of the Naval Staff, after a career spanning 40 years. He has held a variety of key Operational and Training assignments including command of the Eastern Fleet, and Director General of the Indian Coast Guard.



REAR ADMIRAL M. L. STACEY, C.B.

It is now five months since Michael Stacey, a member of the ISCO Executive Committee and one of our most stalwart supporters, suffered a serious stroke.

I'm sorry to report that, owing to set-backs due to infections, he is still in hospital. The good news is that he hopes to be discharged early in the New Year. He is continuing his physiotherapy to build up his strength and help to improve his speech. He is well in himself and remains as ever, alert to what is going on in the world and retains his sense of humour. When he leaves hospital he will go to the Pax Hill Nursing home at Bentley, Surrey, GU10 5NG for some respite after the long stay in hospital, and of course to be with his wife, Penelope. Michael is very keen to get out of hospital and is looking forward to mastering his I pad and getting back into the world of e-mail.

I am sure that members and readers will join in sending Michael our very best wishes.

HOLIDAY BREAK FOR YOUR EDITOR

The ISCO Newsletter will not be published on Monday 24th December and Monday 31st December 2012. The next planned issue will be on Monday 7th January 2013 but, if there is some momentous event to report, the option to produce a Newsletter during the intervening period will not be ruled out.

Your editor takes this opportunity to wish all our members, readers, colleagues and their families a very happy holiday and good health and prosperity in the coming year.

Cormack's Column



In this issue of the ISCO Newsletter we are printing No. 107 in a series of articles contributed by Dr Douglas Cormack.

With a change of subject, the title of the chapter headings changes to "Knowledge of the Sea Empress Incident"

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

CHAPTER 107: KNOWLEDGE OF THE SEA EMPRESS INCIDENT

The response to this incident is reviewed against the knowledge summarised in the previous 106 articles and against the extent to which it has been used, ignored or forgotten since its acquisition, no incidents large enough to have exercised the UK equipment capability of 1986, having arisen until 1996, the only such candidate being the *Braer Incident*. However, this involved Gullfacks crude oil, the physicochemical properties of which permitted the total cargo to disperse naturally without significant emulsion formation and without need for spillage response in the high wind and wave conditions prevailing at the time. Thus, when the *Sea Empress Incident* arose in 1996, nobody in the MPCU had had any direct contact with the WSL R&D programme or with use of its resulting equipment stockpiles.

The first report (July 1996) of the *Sea Empress Environmental Evaluation Committee* (SEEEC) gave an account of the early events. Thus, on the evening of 15 February 1996 the ship grounded in the entrance to Milford Haven with an initial cargo loss estimated at 6,000 tonnes; re-floated, anchored and grounded again on the night of the 16th with further release of oil; re-floated on the high tide of the 17th, grounded again with a further release of oil on the 17th; grounded again on the 18th with a subsequent release at low tide and on all subsequent low tides, the largest release probably occurring between midday and midnight on the 19th which was later estimated to have amounted to 30,000 tonnes, while some 360 tonnes of heavy fuel oil were estimated to have escaped in the period 15-21 February.

Thus had the knowledge-base been recalled, the physicochemical properties of Forties crude oil would have been used to predict the likely weight %age of evaporative loss; the water-content of the ensuing non-volatile emulsion; the persistence of this emulsion from its half-life as a floating slick; and the amounts likely to strand and their locations after known times of travel under the influence of known wind and tide. Thus, reference to the tabulated properties of Oil Groups I - IV (articles 39 et seq) would have shown that Forties crude oil is a member of Group III; that its low pour point of -3°C ensures it will remain liquid at any sea temperature; and that an evaporative weight loss of 32% was to be expected; that the water-content of its emulsion would be 70-

Cormack's Column (continued)

80%; that the associated volume increase would be by a factor of four; and that the expected half-life would be in the 24-48 hour range.

However, given that Forties crude is a blend of oils from a number of UK North Sea fields and that consequently its properties could vary from time to time, further information on any specific cargo can be sought when the range of possible variability is considered significant to justify the search. In this case we find that the published data for Forties oil taken from World Guide Analyses of the Institute of Petroleum is in good agreement with the earlier data from ITOPF (Oil Groups I-!V) and from the Marine Pollution Control Unit Report of December 1996 which is presumably for the loaded cargo, the main difference being in the evaporative loss to be expected. Data from these three sources are compared below as far as the respective data allow.

Property (units)		Inst. Pet.	ITOPF	MPCU
Density (kg/litre)				0.82
Gravity (°API)		36.6		
Viscosity (cSt) @ 10°C @ 15°C @ 21°C		6.8	8	3.88
Asphaltenes (wt%)		0.2		0.2
Pour Point (°C)		-3		-3
Yield (%) @ 175°C			30	36.65
@ 2	.00°C 32°C	34	52	43

It could have been concluded, therefore, that the crude oil carried by *Sea Empress* was of Oil Group III (articles 39 et seq) which could be expected to behave in compliance with the above physicochemical data subject to possible re-evaluation of evaporative loss and possible interpolation of half-life within the estimated range. However, with the viscosity for Forties oil at 8cSt being close to that of Ekofisk oil at 4cSt, and with the latter being a Group II oil of half-life 12 hours as confirmed by WSL observation at the Ekofisk blow-out in 1976, this 1996 incident provided the opportunity to observe the actual half-life of Forties oil. This opportunity was missed.

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.

News from the Oil Spill Research and Renewable Energy Test Facility [OHMSETT]

TRAINING FOR ARCTIC REGION RESPONDERS



During the Alaska Clean Seas hands-on training exercise, Beau Croisant of Pacific Environmental practices skimming oil which will provide him with the necessary skills for efficient spill response.

With the current expansion of oil exploration, drilling, and transportation activities in the arctic region, it is extremely important to have trained and highly skilled spill responders ready at a moment's notice to tackle any size spill that may occur. Alaska Clean Seas takes this responsibility seriously and offers several types of training for their members during the year. One such training is the hands-on oil spill response course they conduct at Ohmsett.

In October 2012, ACS brought spill responders to Ohmsett for two separate week-long oil spill response training sessions. The programs gave responders the opportunity to practice hands-on oil spill equipment set-up, recovery, maintenance and decontamination.

ACS is an oil spill response cooperative whose membership includes oil

and pipeline companies engaged in or intend to undertake oil and gas exploration, development, production and pipeline transport activities on the North Slope of Alaska. They provide personnel, training and equipment for support of its members in preparing for and cleaning up oil spills. Personnel from member companies including BP, Conoco Phillips, ENI, and their contractors, attended the October courses.

News from the Oil Spill Research and Renewable Energy Test Facility [OHMSETT] (continued)

In this custom-designed training, ACS instructors, Gary Stock and Pat Cosgrove, presented a course curriculum specific to their needs. Each week students participated in classroom time that covered all areas of spill response including fast-water inland spills, delta, offshore, river and land spills.

During three days of skimmer exercises with oil in the Ohmsett tank, emphasis was placed on reinforcing what the students learned in the classroom. In addition to the equipment they brought with them from the North Slope, ACS also used equipment from three vendors: Lamor, Elastec and Crucial, Inc. Each manufactures' equipment exists in the ACS inventories at the North Slope. Students had an opportunity to assemble and operate these skimmers. The tank exercises involved skimming in simulated open-water conditions including calm, harbor chop and regular waves. "The hands-on experience with real oil was invaluable," said Beau Croisant of Pacific Environmental. "We do a lot of training on the Slope, but to see the efficiency of the skimmer and tune it to maximize the oil to water ratio is a good experience."

The use of real oil during the training exercises was a valuable practice for the students. According to Jeff Peck, a contractor for Conoco and a volunteer member of the spill response team, the training they receive on the North Slope includes putting the equipment in the water, hooking up hoses and simulating oil with peat moss. "Up there, you put [the skimmer] in the water and see it turn and spin, but you never know how much oil it can pick up. When you come here to Ohmsett, you can see how much is picked up. It's really surprising. That is why it is so very important to get the visual. A picture is worth a thousand words."

After four days of Ohmsett training, the students traveled to MSRC in Perth Amboy, New Jersey to participate in an open water response equipment deployment exercise on board the New Jersey Responder. <u>http://www.ohmsett.com</u>

Special feature

RESPONSE TO INLAND OIL SPILLS – PART 2 A short series of articles contributed by Mark Francis of Oil Spill Solutions



Mark Francis has been involved with the oil industry since 1975. He attended his first oil spill in 1976, the Tanker Elaine V incident. He became head of response for inland spills within the UK for British Petroleum E & P in 1980 for 10 years responding to well, storage tank and pipeline spills throughout the UK. Over the next 20 years he continued to build his international operations experience and has also specialised in spill response training, delivering IMO and other courses in more than 20 countries. Mark's website is at http://oilspillsolutions.org

Communications

In the event of a large spill, the team will have to co-ordinate remedial measures and clean up activities. Investigations have to be made into oil movement including how far it has gone and whether it has reached or is likely to reach, one or more water courses.

It is important that the decision makers know all the geographical and physical features of the area and the leader must know at all times what personnel and equipment is available to counter the spill. Because rapid and coordinated actions give the best results and lowest costs, effective communications are essential.

The leader of operations should have a communications centre at his base. All reports from the field are received and analysed there, this enables the leader to ensure that up to the minute directives are given to the operators in every location where remedial action is taking place.

Points to remember

- The oil spill leader must have good communications.
- Fire departments, police, pipeline companies, etc. normally operate on different frequencies so it may be necessary to have a number of transmitters available at the control centre.
- When positioning mobile communications take into account the possibility of radio shadows cause by buildings, large trees, valleys etc, the associated aerial must be erected in an unshielded position.
- Spare batteries and chargers should be issued.
- In an emergency all messages should be relayed quickly and briefly so communication lines are not blocked.

Oil on the ground

People that work in refineries or terminals where oil is stored in tanks should make a point of marking the lowest area within the bund so that pumps or skimmers can be positioned in the best place at the beginning of the recovery operation. It is amazing that people walk these areas daily to check valves and verify quantities in tanks.

When the spill occurs nobody knows where the low spot is because now it is level with oil.

Special feature (continued)

Drains are another basic problem if oil enters which way does it go? With modifications and extensions to these places over the years this sort of important information tends to be forgotten. Dependent on the area and the oil type it could be many days or weeks before the oil is seen again.

Containment on impermeable surfaces



Surface containment: Purpose: to prevent the spread of oil on the surface and to prepare it for recovery.

Materials and equipment:

- Earth moving machinery
- Damming materials
- Pumps, vacuum trucks and storage systems
- Synthetic or natural absorbents

Method:

- Block drains, sewage systems, pipe and cable ducts to prevent risk of explosion or contamination of sewage plants or water courses.
- Concentrate the oil so that it can be transferred into a storage system
- Use absorbents to limit spreading
- Pay attention to fire hazards

Spills on permeable surfaces

In bunded areas:

- Introduce a water bottom to reduce oil penetration.
- Block all inlets except to oily water drains to prevent deep penetration of the oil on oversaturated areas.

Spills on permeable surfaces



Points to remember

- Always pay attention to fire and health hazards
- Start confinement operations immediately to prevent oil from reaching a watercourse or the groundwater
- As far as possible do not allow vehicles to run on oil saturated areas
- Do not flush oil down drains and other inlets
- Do not use excavators on areas with free oil on the surface
- Containment is easier on land than on water



- Block all drains
- Try to increase the spread of oil on the surface to prevent deep penetration in oversaturated areas
- Pump out puddles of free oil as quickly as possible
- Increase the sorption capacity of surface layers by spreading sorbents.
- Move any free oil and oil saturated soil to the nearest natural or artificial impermeable area.

Special feature (continued)

Advantages

Confinement and damming can be achieved using easily available materials and are important if the oil is to be pumped or skimmed

Disadvantage

For permeable soils, if oil is spread over a large area to prevent deep penetration, this will result in more oil contaminated material for disposal; however, it may be preferable to long term operation of subsoil and groundwater clean up.

To be continued

Publications

UK SPILL ALERT – ISSUE OF NOVEMBER 2012

This issue looks at Keeping Watch, vigilance and monitoring of spills, from satellite, aerial and surface, a new series reviewing developments.

It also introduces the UK Spill App – "The greatest thing to happen to spill response since the telephone" Download and read issue 10 of UK Spill Alert

US EPA: TECHNOLOGY INNOVATION NEWS SURVEY

The October 1-31, 2012 *Technology Innovation News Survey* has been posted to the CLU-IN web site. The *Survey* contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. The latest survey is available at: <u>http://www.clu-in.org/products/tins/</u>

Training

THE NETHERLANDS: OIL AND CHEMICAL SPILL RESPONSE COURSE

A 5 day course run by the Maritime Institute Willem Barentsz, part of the NHL University of Applied Sciences.

Target Group: The Oil and Chemical Course is "fine tuned" for people who professionally work in the field of emergency management of water and coastline, e.g. personnel of Public Authorities: Water Management Authorities (all levels), Port Authorities, Coastal Municipalities, Fire Brigades, etc; Industries; Refineries, Offshore, Terminals, Shipping Companies, etc; NGOs: Engineering Agencies, Research Institutes, Environmental Pressure Groups, Nature Management Organisations; Others: Salvage Companies, Recovery and Prevention Companies, P & I Clubs, Insurance Companies, etc.

Course Contents: Case histories oil and chemical spills; Transport by sea / type of incidents, Types and properties (oil and chemicals); Behaviour of oil and chemical spills; Hazards to the marine environment; Use of predictive models (Oilsheet and Chemsheet); Oil and chemical spill response options and techniques, international rules and regulations; Spill management roles and responsibilities.

More info: Email courses@miwb.nl Website www.nhl.nl/mmes

Stop press – breaking news

USA: USCG AND GOVERNMENT AUTHORITIES RESPOND TO FUEL OIL SPILL IN KILL VAN KULL



December 15 - The Coast Guard continues its response to a fuel spill which occurred at 11:22 p.m. last night at Mays Ship Repair near Mariner's Harbor, Staten Island, New York.

Boston Marine Transport Inc., the responsible party, reported #6 fuel oil was being transferred from Barge Boston No. 30 to Barge DBL 25, when personnel on scene noticed fuel oil was entering the water between the two barges. Personnel then applied containment boom around the two barges while authorities were notified of the incident.

Upon investigation, the source of the fuel spill was isolated to the #2 port tank of

Stop press – breaking news (continued)

Boston No. 30, which was carrying 112,000 gallons of fuel oil. Boston Marine Transport Inc. personnel are conducting soundings in the barge tanks to determine the actual amount of fuel spilled into the water. *gCaptain* <u>Read more</u>

BRAZIL: VIDEO - MASS EVACUATIONS IN BUENOS AIRES DUE TO TOXIC CLOUD

December 16 (Video just received today, forwarded by David of the DG and Hazmat Group, but the incident took place on 6 December)

Office buildings in the Buenos Aires were evacuated as toxic gas cloud covered the city's business district and port area.

The cause of the foul smelling smoke was thought to be the result of a shipping container fire at the city's central port.

An intense sulfur-like odour, combined with mild eye and respiratory irritation caused many people to flee offices and homes.

While the exact content of the container was still under investigation, officials claimed that it was only mildly toxic and did not pose any immediate health risks.

[See also report on page 4 of last week's ISCO Newsletter. This new report contains a video] The Telegraph Read more

Legal disclaimer: Whilst ISCO takes every care to ensure that information published in this Newsletter is accurate unintentional mistakes can occur. If an error is brought to our attention, a correction will be printed in the next issue of this Newsletter. Products and services featured in the ISCO Newsletter and/or the ISCO website, including the International Directory of Spill Response Supplies and Services, have not been tested, approved or endorsed by ISCO. Any claims made by suppliers of products or services are solely those of the suppliers and ISCO does not accept any liability for their accuracy.