

OCEAN ORBIT

THE NEWSLETTER OF THE INTERNATIONAL TANKER OWNERS POLLUTION FEDERATION LIMITED



▲ Northern Rockhopper penguins tagged and awaiting release after the OLIVA spill, Tristan da Cunha

Managing Director's review

The start of the new decade has provided the ideal opportunity for ITOPF to refresh its Strategic Plan. During the course of 2010, the key principles that form the foundation of the Federation were

questioned and tested to ensure that they remained appropriate for the needs of our shipowners, their insurers and governments in today's world. In November 2010, ITOPF's Board of Directors unanimously endorsed the 5-year Strategic Plan (2011-2015) and our staff are already focused on playing their part to achieve the objectives that have been set.

I was especially encouraged by the clarity of direction and purpose for the Federation that was expressed by our staff and Directors. Being able to rely on ITOPF's 24/7 objective technical expertise and consistent approach to spill response and damage assessment was reinforced as one of the Federation's Key Customer Values, and many of the strategic objectives are geared towards maintaining ITOPF's position as the primary source of expertise in these areas. Establishing and maintaining a presence on advisory committees and expert panels worldwide is considered important, as is developing awareness in areas that have particular focus at present, such as those

related to response to spills from the offshore sector, response in ice-covered waters, and alternative fuels.

Some exciting opportunities have also been identified. The unobtrusive manner in which ITOPF promotes best practice in spill response and engenders trust among those with whom we work during incidents is recognised as being the most effective means of conveying our message. Nevertheless, opportunities exist to raise our profile within the wider maritime community and to share more of the work that ITOPF's shipowners and their insurers promote in areas such as teaching, technical publications and R&D. To this end, we were pleased to be the recipient of Sustainable Shipping's

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'Ocean Environmental Protection Award' last year, which recognises the company or organisation that has made the most significant contribution to the reduction and prevention of pollution of the oceans by ships, and covers areas such as oil pollution, ballast water treatment, and hull coatings.

We have also sought to expand the number of visits that we make to our shipowners and their insurers in order to highlight the services to which they are entitled, especially in view of the many changes in personnel that seem to have occurred within our industry in recent years. In addition, strengthening links with some of our key partners, such as the International Maritime Organization (IMO), has been important and we are pleased that the long history of supporting the IMO was recognised by the signing of a Letter of Agreement and the invitation to become a Visiting Professor of the World Maritime University (WMU), in Malmö, Sweden. We are very pleased to support both the IMO and the WMU in their teaching programmes by sharing ITOPF's extensive practical knowledge and experience with their students.

The application of good science during spill response and damage assessment is important and ITOPF has long supported

◀ Dr Karen Purnell receiving the Sustainable Shipping Ocean Environmental Protection Award

well-designed research and development (R&D) projects that contribute to knowledge in these areas. This is particularly important at a time when many R&D projects are being initiated in the aftermath of the DEEPWATER HORIZON incident. It is encouraging, therefore, that ITOPF's objectivity has been recognised and we are being invited to contribute to Federal and State-agency workshops, seminars and advisory panels in the USA in order to provide guidance in relation to some of these projects. The emphasis for ITOPF's strategy in the next five years remains on facilitating worthwhile R&D projects and, to achieve this, we are proud to announce that an ITOPF R&D Award has been established that will provide funding for worthwhile projects into the future.

This edition of *Ocean Orbit* highlights some of the challenges that have been faced by our technical advisers when responding to incidents in remote or ice-covered areas or those involving hazardous and noxious substances (HNS). Balancing the emotive and practical aspects of attempting to clean and rehabilitate oiled wildlife in remote areas was accentuated by the incident off the Tristan da Cunha group of islands and it is fitting that this edition also describes research that ITOPF is funding to evaluate the post-release survival of oiled birds.

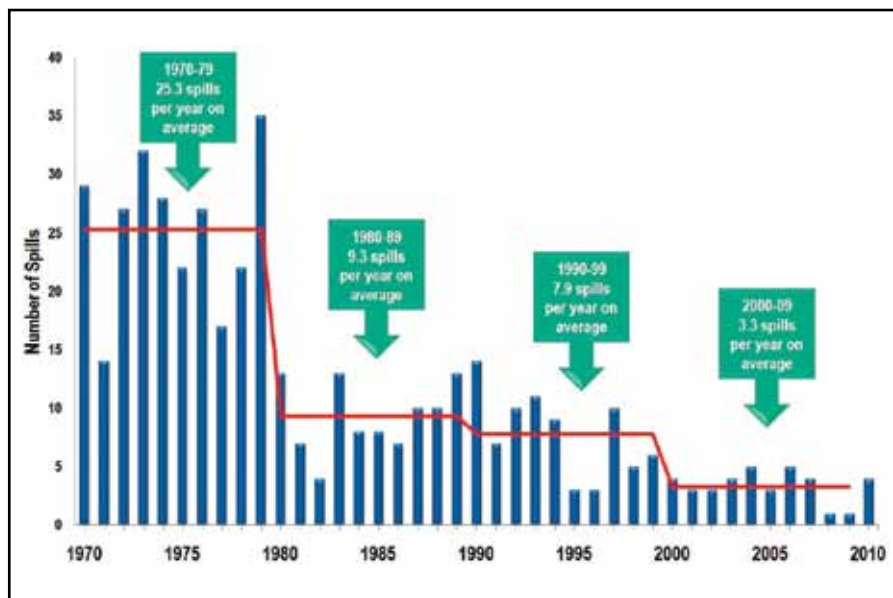
I hope that you will enjoy reading *Ocean Orbit* and observing how our Strategic Plan (2011-2015) is being implemented.

Oil spills from tankers remain low

In a year where oil spills featured heavily in the headlines due to the DEEPWATER HORIZON rig explosion, ITOPF's records show that spills from tankers remained low. Last year four large ship-source spills, in excess of 700 tonnes, were recorded. Although an increase on the figures for 2008 and 2009, which had one spill apiece, this is only slightly above the average of 3.3 spills per year in the decade 2000-2009 and still a dramatic decline from the average of 25 spills a year in the 1970s.

Similarly, the total amount of oil lost to the environment from tanker accidents in 2010 shows an increase against figures for 2008 and 2009 but it is significantly lower than the average amount of oil lost in previous decades. Furthermore, at 10,000 tonnes spilt, this is the fourth lowest annually recorded figure.

While tanker traffic continues to exhibit an overall increase in terms of tonne-miles, it is encouraging to observe that the overall downward trend in oil spills from tankers continues. This is most likely attributable to the on-going efforts of both the shipping industry and governments to improve standards.



▲ Number of large spills (over 700 tonnes) from 1970 to 2010

The figures above are derived from ITOPF's database of almost 10,000 accidental spills from tankers, combined carriers and barges (excluding those resulting from

acts of war) from 1970 onwards. Further information is available at <http://www.itopf.com/information-services/data-and-statistics/statistics/index.html>.



Challenges of spill response

▲ Part-submerged bow section of OLIVA close to the western shore of Nightingale Island, Tristan da Cunha Island Group

▼ Tristan da Cunha Island Group – the most remote inhabited islands in the world

ITOPF has attended on-site at 23 incidents since the beginning of 2010, five of which involved tankers. There were three crude oil spills and two HNS incidents. We have also provided remote advice or assessed claims on almost 30 other cases. Many incidents are complex and problematic, but undoubtedly some cases pose a bigger challenge than others. Here we highlight three incidents that, due to their location, environment or cargo, were particularly testing for our technical staff and the response effort as a whole.

Responding in a remote location

The most remote spill ITOPF has ever attended happened in the early hours of 16th March 2011 when the bulk carrier, OLIVA, grounded on Nightingale Island, part of the Tristan da Cunha Island Group, a British Overseas Territory in the South

Atlantic.

Tristan da Cunha is an isolated set of islands, lying approximately 1700 miles from South Africa and 2000 miles from the coast of South America. It has a permanent population of about 270 people. Lacking an airport, the islands can only be reached by sea. Depending on the weather, journey times from Cape Town can take from five days to anything up to ten days.

The archipelago is home to a





▲ The island's swimming pool was converted into a holding facility for the rehabilitation of penguins

large number of seabirds, including the endangered Northern Rockhopper penguin. Tristan da Cunha also supports a small but profitable lobster fishery, which accounts for more than 70% of the island's income and is managed by the islanders in co-operation with the sole fishery concession holder based in South Africa.

At the time of the incident, OLIVA was en route from Brazil to Singapore and laden with 65,000 MT of soya beans. Following the grounding, the vessel broke in two and became partially submerged, spilling most of her cargo and approximately 1,400 MT of IFO320 and 70 MT of Marine Diesel that was onboard. The released oil stranded along the western and northern shores of Nightingale Island and drifted with prevailing winds and currents to cause shoreline oiling on Middle Island, Inaccessible Island (designated as a UNESCO World Heritage site) and Tristan da Cunha. The soya beans, once partially decomposed, were observed to spread with the local currents as a mid-water plume.

Responding to an oil spill in such a remote location presented a number of logistical problems. Accessing the spill site, moving clean-up equipment over

great distances, finding accommodation to lodge the emergency response teams and ensuring good communication networks were all factors for consideration.

ITOPF arrived in Cape Town on 19th March and, together with the P&I Club's correspondent and members of the local shipping community and wildlife responders, co-ordinated the mobilisation of the incident response which included both shoreline clean-up and bird cleaning and rehabilitation. Two vessels were chartered to transport equipment and personnel to the islands and to act as a base for the clean-up activities. The first vessel, an ocean-going tug, transported the urgently required bird response equipment and personnel, and the second vessel, a polar supply icebreaker, followed a week later with the shoreline clean-up equipment and a helicopter.

The initial response to the oiled birds was undertaken by personnel onboard the salvage tug supported by the Tristan da Cunha islanders. Approximately 3,700 oiled penguins were collected and transported to Tristan da Cunha where a makeshift holding facility was constructed. This was expanded into a larger bird cleaning and rehabilitation facility manned

by SANCCOB (the Southern African Foundation for the Conservation of Coastal Birds), plus other specialists from South Africa and over 70 islanders. The penguin rehabilitation took several weeks but many birds were not strong enough to survive. Of those birds that were rehabilitated successfully, the last ones were released by the islanders on 23rd June.

Most of the shoreline of the islands is formed of steep cliffs exposed to considerable swell and wave action, which rapidly self-cleaned. The shoreline clean-up work therefore focused on a short section of the southern coastline of Middle Island where bulk oil had accumulated in a relatively sheltered cove. Under the supervision of ITOPF, clean-up work began on 13th April and involved personnel from Le Floch Depollution (France) and DRIZIT Environmental (South Africa), together with a workforce of salvors from South Africa and local islanders. A combination of manual bulk oil recovery, flushing and high pressure washing was used to clean the shore with the focus on removing oil that might provide a threat to the island's wildlife. The local conditions required that equipment and oily waste was airlifted from ship to shore by a helicopter brought

over with the response equipment, while personnel were transported by small craft when weather conditions allowed. The clean-up was completed a week later and the status of shorelines will be monitored by the islanders.

Following the oil and cargo spill the lobster fishery was closed on Nightingale and Inaccessible Islands as a precautionary measure while samples were sent for analysis in the UK. ITOPF is currently supporting the on-going work to determine the potential impacts of the oil, soya beans and wreck structure on the fishery.

The problems of oil in ice

The difficulties of locating and responding to oil spilt in ice-covered waters was highlighted by the grounding of the container ship GODAFOSS. The incident occurred in the Hvaler–Fredrikstad archipelago (Ytre Hvaler National Marine Park) in southern Norway, approximately 10 km from the Swedish border, in February 2011. At least two bunker tanks were breached and current estimates suggest approximately 120 MT of oil (IFO 380) was released into the sea. The vessel was also carrying a number of containerised



▲ High pressure hot water washing at a sheltered cove on Middle Island, Tristan da Cunha Island Group

dangerous goods, such as explosives, but no containers were lost overboard as a result of the grounding.

Immediately after the grounding, the Norwegian Coastal Administration (NCA) initiated and coordinated aerial surveillance operations in order to monitor the trajectory of the spilled oil and to direct the at-sea recovery operations, which were undertaken in cooperation with the Swedish Coastguard. The presence of

large quantities of sea ice, coupled with temperatures of around -20°C , posed a challenge to ordinary spill response strategies and techniques. In some areas oil was either stranded under ice and snow or incorporated within the ice as it formed, causing difficulties for both detection and recovery. Different recovery methods were employed which varied in their effectiveness in the ice conditions. Booms needed to be sufficiently durable

▼ Boom surrounding the casualty in the ice infested waters of the Ytre Hvaler National Marine Park, Norway



to withstand the extra force created by the contained ice which could cause them to tear or become temporarily submerged. Most skimmers operated at a significantly reduced efficiency, due to both the high viscosity of the oil and the presence of drifting sea ice within the slick. Some of the more effective techniques included a combination of brush belt skimmers assisted by steam heating jets, which enhanced the separation of oil from ice. Oil recovery was also achieved using response vessels equipped with sweeping arms to contain the oil, while mechanical grabs were used to transfer the viscous, weathered oil and ice into containers placed on the vessels' decks. The incident highlighted a number of areas that would benefit from improved technical solutions, such as minimising the quantity of ice recovered with the oil and increasing the effectiveness of pumping highly viscous oil at low temperatures.

Over 500 birds, mainly eider ducks, were estimated to have been oiled as a result of the incident. However, due to adverse weather creating both difficult and hazardous working conditions directly following the initial grounding, the capture of live birds for rehabilitation was not recommended by the authorities.

Oil stranded sporadically along sections of coastline up to 200 km southwest of the grounding location. Due to the viscous nature of the stranded oil, manual removal with hand tools proved an effective recovery option at most locations. Following a number of attempts at clean-up of areas of shoreline that remained covered in ice and snow, the authorities decided that the most rational strategy was to monitor these areas until conditions improved sufficiently to enable a more effective clean-up response to be carried out in safer conditions.

Due to the diverse and unique natural resources of the Ytre Hvaler National Marine Park, Norway's only marine park, the NCA commissioned an Environmental Impact Assessment (EIA) to address concerns about the potential impact of the oil on wildlife and food safety.

The GODAFOSS grounding was the most significant oil-in-ice incident response in recent years. It provided opportunities for gaining a greater understanding of the challenges that such conditions present, as well as the capability of current response techniques in ice covered waters. Furthermore, it provided an opportunity to observe the advantages of a well-established regional cooperation agreement in action, the Copenhagen Agreement, which facilitated the integration of the Swedish Coastguard into the response operation.

▶ A canister from MSC CHITRA amongst oiled debris

Dealing with Hazardous and Noxious Substances (HNS)

In August 2010 ITOFF was notified of a collision in India involving a containership, the MSC CHITRA, and a bulk carrier near Prong Reefs on the approaches to the port of Mumbai. The loss of canisters of aluminium phosphide and other dangerous goods from containers that fell from MSC CHITRA presented a number of health, safety and logistical challenges for ITOFF and others involved in the response.

The MSC CHITRA grounded on the seabed in around 10m of water. More than 300 containers were lost overboard due to damage sustained in the collision and the severe listing of the vessel as she settled. In addition, two of the port fuel tanks were damaged, resulting in a spill of approximately 600 MT of IFO 380.

High tides experienced during the monsoon, coupled with strong currents, resulted in both oil and containers being spread over a large distance. The shipping channel was temporarily closed, due to concerns that other vessels might strike the submerged or partly submerged containers. The oil and cargo subsequently stranded along shorelines to the south

and east of Mumbai. The shorelines affected included extensive mangrove and mudflat areas, as well as Elephanta Island, a popular tourist destination, which is home to a network of sculpted caves, and a designated UNESCO World Heritage Site.

ITOFF worked closely with the local authorities to establish a plan for the clean-up of the oiled shorelines and assisted in the mobilisation and supervision of Oil Spill Response (OSR) to help manage the local shoreline response effort. The spill occurred just before an important religious festival that involved immersion of idols in the waters off the contaminated coastline and these areas were prioritised for clean-up.

The loss of a container carrying canisters of aluminium phosphide was of particular concern during the response. Aluminium phosphide is used as a fumigant on bulk cargoes, and reacts with water to produce phosphine gas which is highly toxic.

A strategy was designed to safeguard the clean-up workers and local people from an uncontrolled release. This involved the



Aluminium Phosphide + Water → Aluminium Hydroxide + Phosphine Gas





▲ *Stranded containers from MSC CHITRA*

production of leaflets and notices in various local languages providing information about the dangers of these canisters. Air modelling was also undertaken in order to establish safety zones in the event that a canister was breached. Regular surveys of the shorelines were carried out by the manufacturer of the aluminium phosphide using suitable Personnel Protective Equipment (PPE) in order to remove any suspect canisters and to dispose of them safely. Air monitoring was undertaken at all shoreline sites prior to, and during, clean-up to ensure that they were free of phosphine gas. ITOPF had regular and open communication with the Indian authorities throughout the clean-up and advised them on the strategy for protecting personnel. Clean-up operations were completed five months after the spill. After an extensive salvage operation, which involved the removal of the remaining bunkers and the majority of the containers, the vessel was refloated in March 2011. However, due to the MSC CHITRA's poor physical condition, it was decided that the most suitable option was to scuttle the ship in international waters in April.

▶ *Measuring levels of phosphine gas*





Ship groundings on coral reefs

▲ *Ship groundings are one of a number of threats to the health and viability of coral reefs*

ITOPF's technical services are not restricted to the provision of advice on oil and chemical spills. Increasingly our assistance is being sought in relation to damage to coral reefs caused by ship groundings.

Coral reefs are rich and highly productive ecosystems, often described as the rainforests of the sea. They support a phenomenal diversity of organisms and provide habitat, spawning and nursery grounds for many commercial fish species. They protect coastlines from storms and erosion and are an important source of income for local communities through tourism.

Ship groundings can result in physical damage to these shallow water habitats, which can range from relatively small-scale crushing of individual coral heads to widespread levelling of a section of reef, along with associated smothering of coral reef organisms by dispersed rubble or sediment. Exposure to toxic anti-fouling paint may also result in impacts to corals and other reef biota.

The impact of ship groundings on coral reefs tends to be relatively localised compared with other anthropogenic influences that can potentially impact entire reef systems, such as nutrient pollution due to sewage or agricultural fertilisers, overfishing and increased sedimentation due to deforestation. The severity of the impact caused by the grounding to the reef is mainly determined by the size of the vessel, the nature of the grounding and any subsequent movement or damage by equipment (e.g. during surveys or salvage work), and the geographical location of

the reef.

Following the grounding of a ship on a coral reef, demands are sometimes made for restoration and compensation for any damage. However, it is important to consider that while in some instances restoration techniques may accelerate the rate of natural recovery, it is not feasible to recreate a fully functioning reef system through human intervention. Instead, restoration of coral reefs should focus on limiting further damage and, where possible, accelerating the natural rate of recovery of the reef in terms of its structure and function. Coral reef restoration can be viewed in a way that is similar to the restoration of tropical rainforests, whereby trees are replanted to restore the habitat and topographic complexity, and the associated flora and fauna re-establish in the habitat from surrounding areas once it becomes suitable for them. In the case of coral reefs, it is the coral colonies and other reef invertebrates that create the complex habitat in which the associated flora and fauna can thrive, much like the trees of a rainforest.

Coral reef restoration after ship groundings can take a number of different forms and depends on many factors, such as the location of the reef where the damage occurred, the stability of the substrate and the level of coral 'recruitment' (i.e. the rate at which coral larvae settle and form new colonies). The degree of restoration required should be assessed by carrying out detailed site surveys to gather information on the overall extent and severity of the damage and the likely rate of natural recovery. There are five restoration

techniques of increasing complexity that are commonly used, namely:

- **Emergency restoration:** i.e. to re-attach any coral colonies and sponges that have been detached from the reef substrate but are still live as soon as possible after the grounding incident;
- **Substrate stabilisation:** to restore the structural foundation of the reef and allow for rapid re-colonisation of corals by binding or removing loose fragments of rubble;
- **Physical restoration:** the introduction of concrete or limestone structures to provide topographic complexity to the reef and additional surface area of hard substrate that is suitable for settlement of new coral colonies;
- **Biological restoration:** the transplantation of live coral colonies from healthy sections of reef or from nurseries;
- **Combined restoration:** using a combination of artificial structures and coral transplants.

Coral reef restoration has the potential to be very expensive and, therefore, it should be considered and planned carefully and, ideally, in conjunction with those who may be asked to pay for any measures taken. ITOPF's role in coral reef groundings typically involves advising the parties on contractors qualified to undertake damage assessments and restoration, facilitating site surveys, providing technical comments on damage assessment reports and assessing claims arising from the incident.

DEEPWATER HORIZON

The explosion and subsequent oil spill from the offshore drilling rig DEEPWATER HORIZON featured heavily in the world's press throughout 2010. The semi-submersible drilling unit, leased to BP but owned and operated by Transocean, had been working in the Gulf of Mexico for approximately nine years before the 20th April 2010 blow-out explosion and fire on board the rig. Eleven people died in the incident and 17 were injured.

The Macondo well is located 48 miles from the nearest shoreline and soon after the incident the focus of the response shifted to the oil leaking into the Gulf of Mexico and its associated impacts. The well leaked oil at variously reported rates; government estimates of discharge ranged from 62,200 bbl/day on 22nd April to 52,700 bbl/day on 14th July. The oil spill response effort involved the mobilisation of resources from all over the world. Requests for assistance were sent out by both industry and the IMO to government bodies and other relevant organisations. ITOPF was able to supply information on the location of monitoring equipment and fire boom from our database of resources and spill response contractors worldwide. ITOPF also provided advice and information to the Incident Command on techniques and strategies that could be used to minimise the waste generated during the clean-up, particularly on sand and shell beaches.

The use of dispersants was an important, yet potentially controversial, response option and ITOPF's international experience of applying dispersants in different scenarios was called upon by both government agencies and industry. ITOPF's databases and resources were utilised again to provide lists of approved dispersants worldwide and their location. In addition, we provided Country Profiles to enable the US Federal Agency, National Oceanic and Atmospheric Administration (NOAA), to refer to these as part of their presentation to Congress. In the aftermath of the incident ITOPF has been contributing to various meetings of stakeholders and experts in order to discuss and review the use of dispersants in the response.

As often occurs after a large oil spill incident, numerous R&D projects have been commissioned by government agencies, industry and other interested parties, the results of which are being monitored by ITOPF. Latterly, ITOPF has been invited to join an Advisory Committee comprised of a consortium of stakeholders in the Gulf region and to act as 'advisers/mentors' to various R&D projects being funded by BP in the aftermath of the DEEPWATER



▲ Release of dispersant from a fixed wing aircraft over the DEEPWATER HORIZON oil spill, May 2010 (photo courtesy of USCG)

HORIZON incident. In addition to the need to interpret the findings from the different research initiatives taking place, ITOPF anticipates that issues associated with Natural Resource Damage Assessment

(NRDA), which involves carrying out studies to assess the extent of any damage caused by an incident and any measures necessary to restore the environment, will continue for many years to come.

ITOPF Appointed Visiting Professor at the World Maritime University

In April 2011 ITOPF was delighted to accept the appointment of Visiting Professor at the World Maritime University in Malmö, Sweden. The university, which operates under the auspices of the IMO, offers postgraduate education and training to men and women involved in shipping, port operations and maritime affairs, particularly those from developing countries.

Alex Hunt was the first visiting professor under this arrangement and shared ITOPF's first-hand experience of the fate and behaviour of oil and the realities of spill response with students on the Masters of Science in Maritime Affairs programme. We anticipate that our contribution will complement WMU's sound academic teaching programme by providing all-important exposure to real-life scenarios and practical solutions.

We are pleased to have the opportunity to support the university's aim of creating a network of graduates fully aware of the IMO's regulatory framework; this in turn will help to promote safe, secure and environmentally friendly shipping worldwide as many of WMU's alumni go on to occupy key positions in maritime administrations in their home countries. Our involvement will also help ITOPF to foster good working relationships for the future with governments around the world.

▼ In July we welcomed a group of WMU students to the ITOPF offices and library



Research and Development (R&D) initiatives

Encouraging and supporting R&D initiatives that provide innovative and practical approaches to enhancing 'best practice' during spill response and environmental monitoring remains high on our list of priorities. To this end, ITOPF is currently providing funding for two R&D projects: one that will improve our knowledge of the fate and effects of dispersed oil in near-shore waters, and the other that will provide recommendations on the preferred treatment of oiled birds based on the post-release survival rate of birds after cleaning and rehabilitation.

DISCOBIOL project

The use of dispersants can be a very effective response to an oil spill. When dispersants are used offshore the depth and flow of water allow for rapid dilution, so that concentrations of dispersed oil quickly reduce to levels that do not generally give rise to significant harm to the environment. However, in many countries, if an oil spill occurs close to the coast limits are imposed on the use of dispersants because of concerns that the shallow waters will not allow for sufficient dilution of dispersed oil subsequently leading to adverse effects. Nevertheless, in certain circumstances, the need to protect highly sensitive coastal resources may warrant consideration of dispersants in near-shore waters, especially if biodegradation of the dispersed oil is likely to occur.

ITOPF is a partner in a joint research

project, entitled 'DISCOBIOL', under the leadership of the French association CEDRE (Centre of Documentation, Research and Experimentation on Accidental Water Pollution). The aim of the project is to provide decision-makers with information on the net environmental benefit of using dispersants in near-shore areas and will involve assessing the toxicity and impacts of dispersed oils on different habitats and resources found in coastal and estuarine environments of temperate climates.

Although the project is not due to conclude until the end of 2012, most of the experimental work has already finished. Preliminary results of the research into short term toxicity showed that for the organisms tested (species found in coastal and estuarine areas) the lethal concentration of dispersed oil is far higher than concentrations of chemically dispersed oil typically found in the water column during actual oil spills. The sub-lethal effects

of dispersed oil were assessed over a two week period by monitoring a series of 'bio-markers' (biological measures used to assess health), the results of which indicate that the impacts of oil intoxication are reversible for the vast majority of the test organisms, at least according to the bio-markers studied. While these preliminary results may suggest that dispersants could be considered for use in near-shore waters, the results from all the experiments will need to be analysed before any final project conclusions are made.

Oiled bird rehabilitation

ITOPF is recognised as having an important role to play in the development of pragmatic procedures and objective advice on wildlife rehabilitation and, over the years, has contributed to various workshops and committees on this subject. In what is clearly an emotive issue, ITOPF is keen to support science-based appraisals of the evidence, relying on the analysis of real data to back up strategies for wildlife response. For birds in particular, opinions differ on the efficacy of cleaning and rehabilitation following contamination by oil. Many argue that all effort should be expended to try to clean oiled birds as they can be rehabilitated successfully and returned to the wild. Others contest that they have a significantly shortened lifespan as a direct result of being oiled, handled and cleaned.

Recently, an opportunity arose for ITOPF to fund an interesting project to investigate the survivability of different species of oiled birds after they have been cleaned and released. The study began in May 2011 under the leadership of SEA ALARM, an organisation that works with governments, NGOs and the oil and maritime industries on issues related to oiled wildlife preparedness and response. The project will be undertaken in three phases and will involve a review of some 30 years of data from the Netherlands, Belgium and the UK. Andrew Tucker will be part of the Steering Committee on behalf of ITOPF and will provide practical advice and guidance throughout the project, which is due to be completed in the spring of 2012. It is anticipated that the results will assist in the development of recommendations on the preferred treatment of oiled birds, i.e. whether to rehabilitate or to euthanize, and will be reported in peer-reviewed journals.

Because of the importance of this issue, especially in view of the potential for significant claims for compensation following oil pollution incidents, we have undertaken to fund the project in its entirety on behalf of our shipowners, their P&I Clubs and the IOPC Funds.

◀ *Cleaning an eider duck after a spill in Norway*



ITOPF signs co-operation agreement with the IMO



ITOPF and the IMO have signed a Letter of Agreement (LoA) formalising the long-standing cooperative relationship that exists between the two organisations.

This Agreement is intended to facilitate mutual support of the ratification and implementation of key conventions relating to oil and HNS preparedness and response and to promote national, regional and international cooperative mechanisms for responding effectively to spills.

The LoA recognises ITOPF's pre-eminence as an pollution response organisation and acknowledges the support and technical input that we have provided to the IMO for its various conferences, training courses, seminars and workshops.

We look forward to continuing to work with the IMO to assist Member States in building capacity, improving pollution preparedness and implementing the provisions of IMO's Conventions.

◆ Dr Karen Purnell, Managing Director, ITOPF and Mr J.O. Espinoza-Ferrey, Director, Marine Environmental Division, IMO

China update

Emphasis on China as a region warranting particular focus remains high in ITOPF's Strategic Plan, especially in view of the imminent requirement for shipowners to contract with approved spill responders. At the request of the People's Republic of China, Maritime Safety Administration (MSA), ITOPF has recently contributed to training courses for MSA personnel and other government agencies on oil and HNS response in the region. In addition, ITOPF is working closely with the International Group of P&I Clubs and representatives of industry and government in China to provide support and advice on best practice in spill response and rates for the hire of equipment during an incident.

ITOPF's Board Meeting will be held in Beijing in November 2011 and a seminar will be scheduled for industry and government in order to discuss response and preparedness to oil pollution and to consider the new pollution regulations in China.



◆ Shoreline clean-up in Guangdong province, China

Meeting our shipowners and their P&I insurers

During the course of 2010/11 we have sought to visit as many of our shipowning Members and Associates and their P&I Clubs as possible in order to raise awareness of the services we offer. Presentations have been made to several hundred personnel from over 20 shipowner and P&I Club offices in Asia, the Far East, Europe, Scandinavia, South America and North America. Our aim is to continue to create opportunities to meet our shipowners and their insurers when we are visiting different countries around the world.



◆ Dr Rebecca Coward presenting to MSC in Geneva in June 2011

Staff news

During 2010/11 we recruited three new Technical Advisers. **Dr Rebecca Coward** joined ITOPF in August 2010. She has a degree in Marine Environmental Science and a PhD in marine antifouling. She was previously employed by Thames Water, working on pollution tracing, identification and remediation of watercourses in the Thames region. **Dr Annabelle Nicolas** joined ITOPF in January 2011. She is an organic chemist with a Masters degree in Chemical Engineering and in July, we were joined by **Dr Nicola Beer**, a marine ecologist who has previously worked in the UK, New Zealand and the Caribbean. She has experience in environmental impact assessment in relation to marine aggregate extraction and fisheries characterisation and monitoring.

Helen Chapman, Paul Vorwerk and Natasha Lippens resigned as Technical Advisers last year to live and work in the USA, New Zealand and China respectively.

From time to time, ITOPF advertises for Technical Advisers on our website and we are particularly keen to encourage applications from candidates with a strong, practical scientific background and fluency in more than one language.

We have also recruited two new Technical Support Coordinators, in particular to enhance our capacity to deal with claims



▲ Left to right: *Iain Harrison, Rebecca Coward, Annabelle Nicolas, Susannah Musk and Nicola Beer*

arising from incidents. **Susannah Musk** has a degree in Marine Biology and Coastal Ecology and a background in dangerous goods insurance. In addition to claims work, she is responsible for ITOPF's tanker spills database and statistics. **Iain Harrison** has a Masters degree in Law and Environmental Science and has previously worked as an environmental consultant and an

environmental risk underwriter. His duties include claims assessment, the maintenance of the equipment and contractor database and other project work.

Hugh Parker, who retired from ITOPF in April 2010 after 30 years' service, continues to work with us in an advisory capacity, in particular, on the revision of the Technical Information Papers (TIPs).



▲ *Callisto film crew on site at an incident in Liverpool Docks, UK*

ITOPF's new publications and training materials

ITOPF's series of Technical Information Papers (TIPs) is currently being updated and expanded to reflect technological advances and ITOPF's more recent collective experience on a wide range of marine pollution topics. 17 new TIPs will be available towards the end of the year.

Work is also progressing on a revision of ITOPF's reference book *Response to Marine Oil Spills*, first published in 1987. A new edition is due later this year.

To facilitate progress on ITOPF's series of educational films, arrangements have been made to mobilise Callisto Productions Limited to join ITOPF's technical advisers on site at oil spill incidents. Discretion is always applied by ITOPF's technical staff when on

site and care will be taken to ensure that the P&I Club case handler is informed when Callisto will be working with ITOPF and to ensure that sensitive imagery is not used in the production of the films.

Mailing list

If you would like to be added to our mailing list for *Ocean Orbit*, or wish your details to be amended, please email us at terrygoodchild@itopf.com, indicating your preference for a printed or electronic version or both. A PDF version of *Ocean Orbit* is also available on our website.



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