

PAJ OIL SPILL CONFERENCE 2001

1-2 March 2001

The BRAER and SEA EMPRESS Incidents and Developments in Oil Spill Response Programmes after the Incidents

The TORREY CANYON

Public attention in the United Kingdom became focused on the impact of major oil pollution in March 1967 when the tanker *TORREY CANYON* hit the Seven Stones rocks, between the Isles of Scilly and Lands End. She was carrying 117,000 tonnes of Kuwait crude oil. Some 30,000 tonnes escaped straight away and a further 20,000 tonnes over the next 7 days. After the failure of an attempt by salvors to drag her off the rocks another 50,000 tonnes was lost. Finally she was bombed to burn off the 20,000 tonnes or so still on board.

The UK was effectively unprepared for a disaster on this scale and the spraying of industrial detergent on shore to minimise pollution of the coasts created more problems than it solved. However the incident soon faded in the public conscience – after all there was human error involved and little chance of the same situation reoccurring.

For the next 6 years all was peace. There were casualties – but nothing on a scale that could generate serious public alarm.

The BRAER

Then on 5th January 1993 one of the Shetland Island's worst nightmares became a reality.

The tanker *BRAER* went aground onto rocks at Garths Ness. She was fully laden with 84,700 tonnes of Norwegian Gullfaks oil and a further 1600 tonnes of heavy fuel oil in her bunkers. The weather was atrocious – storm force winds and mountainous seas and all of

the cargo was lost. Here were all the makings of a major economic and ecological disaster for the whole island community.

In the event the consequences were serious – but miraculously less catastrophic than expected. The reason was that Gullfaks is a relatively volatile crude, which the high winds, and exceptional seas were largely able to disperse.

However these circumstances were clearly “one-off”. Nobody could imagine the reoccurrence of such a combination – yet the Shetland Isles economy depended upon the presence of large tankers in her waters and at the Sullom Voe terminal. The islander’s fears for the future were reinforced.

The Government acted swiftly in appointing Lord Donaldson of Lymington to Chair an enquiry:

“To advise on whether any further measures are appropriate and feasible to protect the United Kingdom coastline from pollution from merchant shipping.”

This led to the first Donaldson report, published in May 1994, “Safer Ships Cleaner Seas”. But even as the Government’s response was being implemented the UK suffered a yet greater disaster.

SEA EMPRESS

In 1996 the grounding and subsequent salvage of the *SEA EMPRESS* in Milford Haven unfolded before the eyes of a startled nation. Here, on their television screens everyone was able to see monstrous forces at work brushing aside the seemingly puny human attempts at control at all levels. Then came the aftermath of this inability to tackle the incident as huge quantities of oil fouled mile after mile of shoreline and pictures of the effects on wildlife were broadcast night after night to a horrified nation.

The media occupied their time by investigating and exploiting every perceived failure in control and operational systems. The Government reacted and the seeds of the present national response plan were sown.

What was needed was a new and effective response plan. A documented system, which would take on board all lessons learned to date, and be flexible enough to cope with every level of nationally co-ordinated response from the relatively small to the largest imaginable.

A plan that is backed by clear and comprehensive responses and which is tailored to meet every aspect of an incident. In which all participants know exactly where they stand, what their role is and, most important of all, what the command structure is.

This is the Contingency Plan for Marine Pollution from Shipping and Offshore Installations (NCP).

Work on preparing for a new Plan began with reviewing and resetting the rock on which it would be built. The organisation that would produce it, own it, maintain it and operate it. Thus during 1998 the then Maritime Safety Agency and The Coastguard Agency were transformed into the all-embracing Maritime and Coastguard Agency (MCA) which was established and ready to apply itself fully to the task after its full commissioning in April of last year.

But even as the MCA was being created work was progressing elsewhere, which would set parameters of the final Plan.

LORD DONALDSON'S REVIEW

Following SEA EMPRESS Lord Donaldson of Lymington had once again been commissioned – this time to review salvage and state intervention and their command and control.

The findings of the Review were innovative and specific.

The Review made 26 recommendations of which Government accepted 23 and three were set aside to be considered further.

None were rejected.

The Review also drew four fundamental conclusions:

1. The involvement of Ministers in operational decisions is not a practical option.
2. That in any deteriorating situation there will come a time when the Government in terms of its statutory powers and responsibilities is entitled to intervene and give directions. This is the “Trigger” point. From this point on Government has a continuing and inescapable responsibility to monitor events closely and, if necessary, control the whole salvage operation.
3. That officers of the MCA as a whole should take a more proactive role in operations in response to pollution than had been the case in the past.
 - They should be able to take early steps to make salvage and counter pollution assistance available.
 - They should be trained to acquire specialist knowledge of salvage and counter pollution.
4. That similar state power of intervention and control should be available for incidents involving offshore installations.

The Review concluded that there are four distinct theatres of activity in a major marine pollution incident:

- **Search and rescue**
- **Salvage**
- **Clean-up at sea**
- **Clean-up of the shoreline**

It was predicated on the assumption that there would be separate multi-disciplinary units, created for each incident, to deal with each of these functions.

It specified that in the case of salvage activities ultimate control over all operations become the responsibility of a single designated Secretary of State's Representative for purposes of maritime salvage and intervention (SOSREP).

Worryingly, for me at least, SOSREP could not abdicate his, or indeed her, responsibility. Whether or not he exercised any intervention powers at all he would be in no doubt what so ever that he was in charge and would be held responsible for the outcome of all plans and decisions.

Put simply - to ignore a situation is not an option.

These separate "response units" now form the corner stones of the National Contingency Plan.

- **Multi-Incident Liaison Team (MILT)**

For purposes of search and rescue there is a Multi-Incident Liaison Team led by the Coastguards.

- **Salvage Control Unit (SCU)**

Salvage Activities are the responsibility of SOSREP who is supported by a Salvage Control Unit. The SCU comprises a small group of specified persons who alone can represent key interests such as the salvor, the casualty owners, or a harbour authority. It also includes any advisors that are felt necessary e.g. a specialist independent salvage advisor or a chemical cargoes specialist. The SCU however is not a committee – at all times the final decisions will be the sole responsibility of SOSREP.

- **Marine Response Centre (MRC)**

In a national level response the at-sea clean-up activity is directed and co-ordinated by the Marine Response Centre. This is likely to be established at the nearest appropriate Coastguard station. It may be set up in harbour authority buildings if pollution lay within a port jurisdiction. In a national incident the MCA Head Of Operations will control the MRC.

- **Shoreline Response Centre**

When the threat of pollution to the shoreline exceeds the capability of the most affected local authorities, or Environment and Heritage Service (EHS) of the DoE (in Northern Ireland), and the MCA indicates a national response is required, those local authorities, or EHS, will set up a Shoreline Response Centre. The purpose of an SRC is to provide an organisation through which local authorities can discharge their responsibilities for preventing and mitigating pollution of the shoreline.

- **Environment Group**

In any maritime incident in the UK requiring a regional or national response there will be an Environment Group formed. The core membership of the Group comes from the relevant statutory nature conservation agency, fisheries department, environmental regulator, and (in the case of incidents beyond territorial waters) the Joint Nature Conservation Committee. The Group will advise on environmental aspects and impacts of all operations and is a common facility providing comprehensive advice to the operational units through nominated Environmental Liaison Officers.

In March 1999 Lord Donaldson's second report *Salvage and Intervention and their Command and Control* (the Donaldson Review) was published. Four days later a vessel carrying an extremely hazardous cargo of explosive chemical suffered an engine room fire and was abandoned at anchor within a mile of a lee shore. As police began evacuating nearby houses, John Astbury Director of Maritime operations in the newly formed MCA became the first single person to wield State powers of intervention on behalf of the UK Government acting as the SOSREP.

19th March MULTITANK ASCANIA

Pentland Firth

The Master of this chemical tanker reported to Pentland MRSC that the vessel was drifting in the Pentland Firth after suffering an engine room fire.

She was laden with around 1800 tonnes of vinyl acetate, a chemical that is used in paint production and is highly explosive. An LOF was eventually signed and the vessel towed to Scapa flow.

The Government's Emergency Towing Vessel *ANGLIAN PRINCE* stood by during the salvage operation and acted as a passive escort during the final tow.

Things had already changed dramatically in the UK response to maritime disasters.

A new model of response was born

From then on the UK would take up the mantle of state control of salvage and pollution prevention. Its reactions would be positive not dithering.

And people in the world outside would watch with interest to see how it all turned out.

They didn't have long to wait. On 24th August 1999 the *NORWEGIAN DREAM*, a cruise ship decided to go poaching for part of the deck cargo of the container ship *EVER DECENT* around 20 miles north east of Ramsgate.

24th August EVER DECENT/NORWEGIAN DREAM

Dover Strait

NORWEGIAN DREAM had 1,750 passengers and a further 838 crew aboard at the time and unbelievably escaped the collision with only three minor casualties. Despite suffering severe damage to her bow and being holed above the waterline her watertight doors maintained their integrity and she was able to proceed to port under her own power.

EVER DECENT was not so lucky. A 55,000 tonne Container ship, she had 25 crew on board and suffered serious damage including a breach of her number three Wing Ballast tank.

She was trimmed down by the head, had lost several containers overboard and had approximately 18 containers on fire. Consideration was given to beaching her on the Falls Bank.

An Anglo-Dutch salvage consortium was speedily appointed and seven tugs were tasked to the scene.

This was the biggest event so far and, for the first time, a fully functional Donaldson-style Salvage Control Unit was established at Dover Marine Rescue Co-ordination Centre (MRCC). This included representation from the salvors Smit Tak and Klyne Tugs.

Units were also established to respond to any marine pollution and to monitor any potential impact on the shoreline. Powers of Intervention were again exercised and the Salvors were required to clear all Salvage and Passage Plans through the MCA.

The fire was eventually extinguished after 5 days and a formal Passage Plan to Zeebrugge, which was also agreed by the French, and Belgian authorities was approved.

MCA AS SALVOR

Lord Donaldson had also drawn the fundamental conclusion that the MCA should play a much larger part in operations in response to a threat of significant pollution.

To enable it to fulfil this role the MCA has the ability to mobilise various equipment and resources.

- **Emergency Towing Vessels (ETVs)**

There are a number of tugs or “Emergency Towing Vessels” stationed at strategic locations around the United Kingdom. At present there is an all year ETV stationed in the Dover Straits under a joint Anglo-French partnership. Other ETVs are stationed in the South West Approaches, the Minches and in the Pentland / Shetland area during winter months only.

- **Coastguard Agreement for Salvage and Towing (CAST)**

The MCA also has call-off agreements (CAST) with various tug and salvage organisations around the coast, which can be activated subject to the vessels being available.

Each of the present ETVs is of the Anchor Handling Towing and Supply (AHTS) design. This is *FAR TURBOT* stationed in the Dover Straits. As can be seen she has a large after deck, which can accommodate survivors, salvage equipment, or as a platform for deploying counter pollution equipment.

She also has a powerful fire fighting capability and can sustain over 130 tonne bollard pull.

- **Stockpiles**

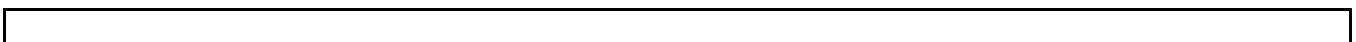
This is part of the MCA’s stockpiled equipment at Milford Haven. The list of salvage equipment includes:

- Cargo Transfer Equipment (ship to ship)
- Inert gas generator, pumps, fenders, intrinsically safe lighting
- Communication systems
- Chemical transfer equipment, chemical resistant pumps, hoses and protective equipment, BA sets etc.

Counter pollution equipment is also dispersed around the country:

- At-sea stockpiles of equipment are held at Milford Haven and Dundee
- On-shore pollution stockpiles of equipment are based at Southampton and Inverness
- Stockpiles of dispersants are held in 14 locations around the UK

Lord Donaldson’s recommendation that the MCA should play a larger part than hitherto bore fruit in September 1999 when the *MV SONIA*, carrying 5,300 tones of grain, limped into Sandown Bay off the Isle of Wight and announced to the world that she was sinking.



1st September

SONIA

Isle of Wight

SONIA was the ship that no one wanted. She was a general cargo ship carrying a cargo of 5,300 tonnes of grain and 447 tonnes of bunker fuel oil.

Whilst on passage through the Solent she suffered a fractured inlet pipe which led to flooding of her engine room and complete loss of power.

Her salvation was enabled by the use of a naval tug from Portsmouth, salvage equipment from the MCA's stockpiles, and the MCA's ability to activate tug and towage support through the CAST agreement.

SONIA had suffered from the fracture of a salt-water inlet pipe leading to flooding of her engine room and eventually complete loss of power. She was sinking slowly, but surely, and she contained 447 tonnes of bunker fuel. The impact of this on the shore would have been dramatic to say the least.

Yet there was no salvage interest in the vessel. Eventually she was recovered by the use of a naval harbour tug from Portsmouth, salvage equipment from the MCA's own stockpiles in Milford Haven and the use of a pre-contracted tug operating, initially, under the Coastguard Agreement for Salvage and Towage (CAST).

On this occasion powers of state intervention were also used and SOSREP introduced a Total Exclusion Zone around the casualty. SOSREP also ordered that oily water from the engine room be pumped overboard. Illegal perhaps – but this whole operation cost well under half a million pounds - the cost of clean-up of the spilled bunkers would have made this amount seem trifling.

PROGRESS WITH THE NCP AND OPRC PLANS

By May of 1999 the revised NCP was considered at a consultative forum attended by 55 key representatives prior to a formal consultation process through the summer.

And indeed this was to be a very busy summer.

As part of its' commitment to the International Convention on Oil Pollution Preparedness and Co-operation the UK had to ensure that all port and harbour authorities covered by the Regulations made under the convention produced contingency plans of their own which would be compatible with the proposed NCP. Principal Counter Pollution and Salvage Officers had been appointed to ensure that this task was completed in their respective areas of responsibility by August. That was an estimated 250 plans (now around 200). Their role also includes acting as duty counter pollution and salvage response officers in order to provide a round the clock contact point and assistance for SOSREP.

At the same time scientists from the MCA were travelling the country gathering together local groups with environmental interests and working with the Environment Agency to establish “sleeping” Environmental Groups and nominated Environmental Liaison Officers to work with the NCP Response Units in an incident.

An initial trial of the proposed NCP and the Clyde OPRC plan was held on Clydeside in early October through Exercise DALRIADA, the first of a series of four national exercises recommended by Lord Donaldson.

On 8th November the final draft of the NCP was resubmitted to the consultative forum and agreed.

Paradoxically the previous day, the reefer *DOLE AMERICA* was in collision with the Nab Tower in the Solent approaches and part of the NCP response had been activated.

7th November

DOLE AMERICA

Solent approaches

The reefer *DOLE AMERICA* collided with the Nab Tower in the Solent approaches.

Prompt action by the pilot saved the day when the vessel was driven aground outside the main channel to prevent her from capsizing.

The vessel proved to be extensively damaged with gashes above water level and one below which was over twenty metres in length. Holds 2 and 3 were open to the sea and 5,100 litres of lube oil was spilled. A further 535 tonnes of HFO was known to be aboard.

A Salvage Control Unit was established at Solent MRSC, Intervention powers were exercised and an exclusion zone was established around the vessel.

She was later refloated with the aid of sheerlegs under a LOF agreement and towed into Southampton for repair.

Once again a Salvage Control Unit involving salvors was established. There was also an Environment Group formed, which proved the worth of the MCA scientists' endeavours. But this incident was to be our first real chance to exercise the interaction between Harbour Masters and SOSREP.

It worked well, and, with the active input of QHM Portsmouth and the Southampton Port Authority, the casualty was eventually refloated and taken to Southampton.

On the casualty's arrival at Southampton access to dry dock facilities was refused by private owners, which served to hinder the final process of the salvage. This underlines the need for powers to issue directions to riparian owners and managers of facilities such as berths, wharfs and jetties. That such powers be available was the first of Lord Donaldson's recommendations and they will be included in forthcoming legislation.

The NCP was eventually published in its present form in January of this year. But even before the printed copies were off the press we were again testing it to the full at Exercise HUMEX on Humberside – this time alongside the Humber response plan. The exercise was again a success and information on its progress and learning points has been published.

USING THE NCP

As luck would have it we have enjoyed a millennium free of major incidents to date. But this has by no means meant that the state powers of intervention have not been tested. There are minor incidents occurring all the time – for instance the weekend during which I wrote this presentation saw two vessels drifting without power off lee shores in the English Channel. One had to receive a formal direction to take a line from the ETV before she would accept any help – as the tow was secured she was drifting at an estimated 3.5 knots towards Dungeness Point!

The flexibility of the NCP to address relatively minor incidents was tested during the COASTAL BAY incident at Anglesey in July.

21st July 2000

COASTAL BAY

Church Bay, Anglesey

At 0034 Holyhead MRSC received a report that the container ship *COASTAL BAY* was hard aground in Church Bay on the west coast of Anglesey and in sight of Holyhead Coastguard Station. *Coastal Bay* grounded on an amenity beach, just outside Holyhead port limits, but in an environmentally sensitive area.

The Antilles registered vessel of 2,463 gt and 88 metres in length, with a crew of 7 onboard, had been on passage from Dublin to Liverpool. Her cargo was mixed containers, many of which were empty and she also carried 71 tonnes of gas oil. There were no casualties, but the Holyhead lifeboat stood by for much of the incident. Grounding caused a crack between the forepeak bulkhead and number 3 fuel tank, resulting in the leakage of approximately 250 litres of gas oil. Further investigation revealed plate damage extending over approximately 25 feet to the underwater section of the bow, as well as damage to the propeller.

MV Coastal Bay was refloated by the Liverpool tug *Trafalgar* (60 tonne bollard pull) at 0248 on 22 July, after an earlier attempt over the high water period on the afternoon of 21 July failed. After an underwater dive survey and a passage plan approved by SOSREP, she departed under tow during the evening of 22 July, arriving in Liverpool the next morning to dock down in Gladstone dock for repairs.

On this occasion a Salvage Control Unit and an Environmental Group were established to oversee and monitor progress of the salvage.

At the beginning of October attention was focused on the Falmouth area where the full NCP and Search and Rescue and counter pollution was tested during the third major national exercise – Exercise KERNOW.

KERNOW certainly served to test the whole national response in action in the most difficult of circumstances. For my part in the Salvage Control Unit the interests of the environmentalists, salvors and insurers, harbour authorities and national considerations were set directly against each other. In the end SOSREP had to make overriding decisions which were certainly not to everyone's liking. But despite this, and most importantly, there was an acceptance that these decisions were necessary. This, I believe, was because the close working within the Salvage Control Unit ensured that all participants had a full awareness of each others problems and of how hard they had worked towards addressing those of the other interests. There was no right answer and little room for compromise. In this light decisions were accepted and all attention immediately refocused on addressing the new problems of the next stage.

Recently we have explored new grounds in salvaging *the MV LAGIK*, which was stranded and blocking the River Nene and the approaches to Wisbech Harbour in Lincoln England. *LAGIK* was abandoned by her owners and the task of removing the wreck and pollutants was taken up by the Government, through the MCA, and the local Harbour Authority in partnership. The cost of the project is around £1.25 million and the partners have joined in legal action for recovery.

WHAT HAS CHANGED

The NCP in itself is no more than a paper document. It is as only as good as the last time it was used and then only as good as the people, agencies and organisations, which input into making it work. In short our response to incidents requires:

- Positive commitment by all parties and respect for each other's role.
- Seamless working between different faculties e.g. environmental interests with salvors, salvage operations with legal, investigative and enforcement agencies.
- The presence of resources to avert, or delay, disaster and to provide assistance to persons involved.

The new NCP reflects this philosophy. It is a living document, which is there to provide guidance rather than a prescriptive approach to incidents. Already we have shown that the model can just as easily be used in its entirety as broken into constituent units tailored to meet particular circumstances.

Already we are working towards updating it to include the fruits of lessons learned.

The state response through the MCA has also changed. In all theatres there is now strong leadership and guidance. Changes to our approach have enabled swift, positive and

decisive responses to be made in all areas. The option to delay, not take a decision or to refer issues to a committee have been removed.

This positive and structured approach has, I believe, led to vastly increased credibility and that translates into confident willing working partnerships with other organisations.

SOSREP with all his powers is now being seen more as a pragmatic working partner rather than a source of interference. SOSREP is there to keep the state's hand on the tiller and to enable the best response, in terms of environmental protection, to be formulated and enacted with the minimum of delay or external complication.

Fears that such a role would lead to unwarranted involvement in the affairs of Harbour Masters and salvors are now being dispelled as we work and learn together.

Feedback from external parties is becoming ever more positive too. Indeed the former President of the International Salvage Union himself, Mr Hans Walenkamp felt able to commend developments in the UK to the last International Tug and Salvage Convention in Jersey and more recently to the 3^d International Conference on Salvage and Wreck in London.

We are also developing closer partnerships with our international partners and this will lead to better response coverage through strategic resource deployment. By this I mean combined strategies for aspects of response such as helicopters, ETV deployment and radar coverage.

HOW CAN WE IMPROVE FURTHER?

Progress is a moving concept and we still have issues to address.

The MCA is currently publishing its review of Emergency Towing Vessel (ETV) provision around the United Kingdom.

This document :

- Includes an up-to-date accident and spillage risk assessment within UK waters.
- Makes recommendations for future coverage.
- Is supported by a comprehensive cost benefits analysis.

By the end of this year there will be draft regulations for extending state powers of intervention to offshore installations.

There will also be draft legislation designed to address the present anomaly, which prevents British fire-fighting services from operating at sea.

And there will be powers for SOSREP to issue Directions to Riparian wharf owners.

Importantly, for salvors and myself, there is likely to be legislation drafted to address responder immunity for spillages during salvage operations. In this context let me assure you that the need to preserve and support our remaining professional salvage companies by removing bureaucratic burdens is dear to our hearts.

Safety in our harbours will be improved by the introduction of a Port Marine Code and the MCA will be busy with the task of implementation of the Convention on Highly Noxious Substances.

AND FINALLY

Finally let me quote to you from The UK Coastguard handbook of 1920.

“If a subordinate, in the absence of a superior, neglects to depart from the letter of his orders, when such departure is clearly demanded by circumstances, and failure is caused, he will be held responsible for such failure.

A man who has thoroughly grasped the above knows exactly where he stands and has no excuse for hesitation.

The excuse that “I had no orders” is far too frequent.

One may go as far as saying that prompt action, even if it does not happen to be quite the right action, is preferable to masterly inactivity.”

- Maybe things haven't changed that much after all !