

Recent spills around Europe (1991-2002)

Sea Empress, 15 February 1996

THE INCIDENT

On the evening of 15 February 1996, a Liberian oil tanker, the *Sea Empress*, with a cargo of 130,000 tonnes of light crude North Sea oil, ran aground at the entrance to Milford Haven Bay (United Kingdom). A contingency plan was implemented by the British Maritime and Coastguard Agency in order to stabilise the vessel, remove the cargo and refloat her as quickly as possible. During the night of 21 February, with assistance from 12 tugs, the oil tanker was towed towards a disused oil wharf at a former oil refinery in Milford Haven Bay. The vessel was then surrounded by containment booms. She had already lost nearly 73,000 tonnes of her cargo.

RESPONSE

Response at sea involved two main strategies: dispersion and recovery. Chemical dispersion was implemented offshore by aircraft. Containment and recovery were carried out by oil spill response vessels offshore and barges and fishing boats in inshore waters. 8,500 tonnes of emulsion were recovered (containing 4,000 tonnes of oil) in operations boasting unprecedented international collaboration. On land, over 500 people were mobilised to work on around 30 response workites. Two kilometres of boom were deployed to protect river mouths and marshes, as well as entrances to ports and harbours.

IMPACT

From 1st March, fishing was banned in the affected area. The ban was extended to the estuaries and rivers that were home to migratory species (e.g. salmon and sea trout).

The fishing bans were gradually lifted from 20th May. 200 km of coastline were intermittently affected. The impact on birds and mammals remained relatively low in comparison to the quantity of oil spilled. 3,000 bird corpses and 6,900 oiled birds were collected. A national committee, the *Sea Empress* Environmental Committee (SEEC), was set up to organise and oversee the impact studies. A full report was published in late 1997.

COMPENSATION

The limit of possible compensation was set at 65 million Euros. By mid-June 1996, around 200 claims had already been lodged. By the end of 2004, 53 million Euros of compensation had been settled out of court. In February 1999, the unsatisfied claims were taken to court. Several lawsuits are still pending today.

Cause of accident	Quantity transported	Pollutant	Quantity spilled	Waste collected	Length of coast polluted	Compensation claimed	Compensation awarded
Grounding	130,000 t	Light crude oil	73,000 t	47,000 t	200 km	71 million €*	53 million €*

* Case in progress



Recovery of the pollution at sea © Cedre ↑
Arrival of the Sea Empress at Milford Haven after the incident © Cedre ↓

Erika, 12 December 1999

THE INCIDENT

On 11 December 1999, the Maltese tanker *Erika*, carrying 31,000 tonnes of heavy fuel oil, was traveling from Dunkirk (France) to Livorno (Italy) when she suffered structural damage in adverse weather conditions. The following day, the crew was airlifted to safety in extreme conditions. The vessel broke in two about 30 nautical miles south of Penmarc'h (Brittany, France). The bow sank during the night. The stern was taken in tow by the *Abeille Flandre* but sank the following day. The two sections of the wreck lay 10 km apart, 120 m deep, with almost 20,000 tonnes of fuel oil still onboard, slowly leaking into the sea.

RESPONSE

The French maritime pollution response plan was activated on 12 December. The fuel oil was difficult to pump from the water surface due to its viscosity and the rough sea conditions. However, 1,200 tonnes had been recovered when operations were brought to a close on 23 December. Booms were deployed on most of the sensitive sites along the threatened shoreline to protect them from the arrival of slicks. In the departments of Vendée, Charente-Maritime, Loire-Atlantique, Morbihan and Finistère the French land-based pollution response plan was activated between 22 and 24 December. Several thousand people (armed forces,

fire service, private companies and volunteers) helped to clean up the shoreline. In many areas, new arrivals of fuel oil meant that accomplished operations had to be resumed. During the summer of 2000, the fuel oil remaining imprisoned within the wreck (nearly 11,000 tonnes) was pumped out after fluidification.

IMPACT

Over 400 km of shoreline were polluted and 70,000 oiled birds, alive and dead, were collected. Despite the precautions taken, it was impossible to avoid additional deterioration to the sites affected during clean-up operations. Fishing, shellfish collection, salt production and the tourist industry were affected by the pollution. An impact follow-up programme was set up by the Ministry for the Environment.

COMPENSATION

The compensation limit was set at 185 million Euros. In October 2007, the IOPC Funds established 129 million Euros of approved clean-up expenses and economic damages. 7,000 claims were lodged to give a total of 388 million Euros and 285 claimants embarked upon legal proceedings for a sum of 62 million Euros.

Cause of accident	Quantity transported	Pollutant	Quantity spilled	Waste collected	Length of coast polluted	Compensation claimed	Compensation awarded
Structural damage	31,000 t	Heavy fuel oil	20,000 t	270,000 t	400 km	388 million €*	129 million €*

* Case in progress



Shipwrecking of the Erika © Marine nationale

Prestige, 13 November 2002

THE INCIDENT

On 13 November 2002, the Bahamian oil tanker the *Prestige* sent out a distress call off the coast of Galicia (Spain). She was transporting 77,000 tonnes of heavy fuel oil from the terminals at Ventspils (Latvia) and Saint Petersburg (Russia) to Singapore. The crew was airlifted to safety and the vessel was taken in tow. After 6 days spent at sea in search of a port of refuge, the *Prestige* broke in two and sank in waters 3,500 m deep, 130 nautical miles off the coast of a region which had already experienced 2 major oil spills. The quantity of fuel oil spilled was estimated at less than 25,000 tonnes by Spanish specialists. This estimation was later increased to 64,000 tonnes.

RESPONSE

Unparalleled response operations at sea were able to take place thanks to the fact that the vessel was moved away. Despite the very high viscosity of the pollutant and the difficult sea conditions, 7 oil spill response vessels from 5 countries were able to carry out recovery operations off the coast of Galicia. From the end of December, the specialised vessels were supported at sea by an unprecedented mobilisation of fleets of fishing boats. In the estuaries, thousands of coastal fishermen and shellfish collectors helped with response to the spill, with their boats and makeshift recovery means.

The joint action of specialised vessels and fishing boats resulted in the recovery of over 53,000 tonnes of emulsion containing nearly a third of the fuel oil spilled.

IMPACT

The fuel oil which was not recovered at sea began, over a period of weeks, to pollute several thousand kilometres of coastline, first in Spain, then in France, Portugal and as far as the Netherlands. Shortly after the incident, exclusion areas were set up in Galicia where fishing, shellfish collection and the sale of sea produce were banned along the shoreline. Later, these bans were gradually lifted, the last ones in October 2003. The summer tourist season was affected in all the areas hit by the pollution. Over 23,000 oiled birds were treated in rescue centres. Specialists estimated the total number of birds killed by the pollution at between 150,000 and 230,000.

THE WRECK

The risk presented by the fuel trapped in the wreck of the *Prestige* could not be ignored. The volume of pollutant, the depth and the distance exceeded the realms of all previously experienced oil spills. An unrivalled recovery operation was studied, tested and carried out for the first time ever. Upon completion, on 30 September 2004, 13,600 tonnes of fuel had been recovered.

COMPENSATION

In June 2006, the IOPC Funds annual report positioned the claims connected to the *Prestige* spill at 868 million Euros, of which 755 million were for Spain, 109 million for France and 4 million for Portugal. This amount far exceeded the available limit of 171 million Euros and payments were initially restricted to 15% of the amounts accepted, then later increased to 30%.

Cause of accident	Quantity transported	Pollutant	Quantity spilled	Waste collected	Length of coast polluted	Compensation claimed	Compensation awarded
Structural damage	77,000 t	Heavy fuel oil	64,000 t	170,000 t	2,000 km	868 million €*	57 million €*

* Case in progress



Shipwrecking of the Prestige © BSAM/Douanes françaises ↑
Shoreline clean-up: manual and mechanical collection © Cedre ↓



Shipwrecking of the Braer © ITOFF/Jean-Yves HUET ↑
Sheen in areas used for fish farming © ITOFF/Jean-Yves HUET ↓

Braer, 5 January 1993

THE INCIDENT

On the night of 4 January 1993, the Liberian oil tanker the *Braer* was transporting 84,500 tonnes of light North Sea oil from Norway to Canada when she suffered technical difficulties, followed by complete engine failure. At 5 am, 10 nautical miles from the coast, a Mayday was sent out. The crew was airlifted from the vessel 4 hours later. The vessel drifted, then grounded at around 11:20 am, south of the Shetland Islands (Scotland) and gradually broke, letting all of her cargo escape over a period of around 10 days.

RESPONSE

The weather conditions made response at sea impossible and restricted onshore response operations. 8,000 tonnes of oil were however pumped from the vessel and transferred onto a barge. Dispersants were applied by aircraft but the main part of the oil was dispersed in the water column by wave action. A number of floating booms were used to protect the coast, with limited results. The oil did not stick to rocks and infiltrated only to a small extent into the water-soaked sand. Clean-up operations were carried out manually and occasionally using mechanical means. 2,000 tonnes of polluted materials were recovered.

Cause of accident	Quantity transported	Pollutant	Quantity spilled	Waste collected	Length of coast polluted	Compensation claimed	Compensation awarded
Technical failure	84,500 t	Light crude oil	84,500 t	2,000 t	15 km	222 million €	75 million €

IMPACT

The authorities imposed a fishing ban in a large area surrounding the vessel. Despite the use of sorbent booms, salmon farms were affected and thus had to destroy their fish, which had become unfit for human consumption, over a period of weeks. Flocks of sheep suffered from ingestion of polluted grass, breathing in oil vapours and the impregnation of their wool with oil. A grazing exclusion zone was put in place and it was decided that the sheep should be kept in sheepsfolds. Oil particles and vapours soiled house roofs. Produce from 50 km² of agricultural land was banned from consumption.

COMPENSATION

The State, public services and over 2,000 individual victims lodged claims. The majority of these claims were settled out of court in the 3 years following the incident. The unsatisfied claimants embarked upon legal proceedings and pending payments were put on hold, as the total claimed amount largely exceeded the available limit. After an initial court case, the British government withdrew its claim for clean-up expenses, allowing the other claims to be negotiated one after the other out of court. In total, the equivalent of 75 million Euros was allocated.

Haven, 11 April 1991

THE INCIDENT

On 11 April 1991, near the port of Genoa (Italy), an explosion shook the Cypriot oil tanker the *Haven*, loaded with 144,000 tonnes of Iranian crude oil. The vessel went on fire. The following day, the bow broke off and sank in waters 460 m deep. On 13 April, the first oil slicks began to reach the shoreline. On 14 April, after a series of explosions, the stern sank while it was being towed towards the coast, in waters 80 m deep.

RESPONSE

Response leaders chose not to extinguish the flames, so that as much as possible of the spilled oil would burn off to reduce water pollution. The wreck was towed towards the coast to limit the extent of shoreline pollution. The quantity of oil burned was estimated at over 100,000 tonnes, while 3,000 tonnes remained in the wreck. Response at sea was conducted using floating booms and surface skimmers. Booms were set up to protect ports and sensitive areas of the coast. Clean-up operations were conducted on the affected shores.

IMPACT

A large quantity of tarry residues from the burning of the oil rapidly sank to the seafloor, while the remainder of the cargo was dispersed by currents and wind. Despite response operations at sea, slicks drifted westwards, polluting many parts of Italy's Ligurian coast, then the French Côte d'Azur. By the end of May,

sonar measurements showed 10 cm thick tar deposits over an area of 12 ha around the wreck.

COMPENSATION

In autumn 1991, a lawsuit involving multiple claimants began in Italy, with battles over the compensation limit and the issue of environmental damages. The Italian government presented a claim for 60 million Euros for damages to the marine environment, on the basis of national law. The Ligurian region lodged an identical claim. The IOPC Funds rejected these claims, as they were outside of its responsibility. In 1995, in the face of a highly complex case, an overall payment offer of 82 million Euros was presented to the Italian government. This offer included a 15 million Euro "voluntary payment" (a sum which did not require justification of quantifiable damages). In 1996, the court assessed the environmental damages as representing a third of the clean-up costs, i.e. 24 million Euros. In March 1999, a specific law, named the "Haven law", formalised a global payment close to the previous offer and confirmed the insurer's "voluntary payment".

The *Haven* incident, the most serious spill which had ever occurred in the Mediterranean, highlighted a number of fundamental questions on ecological damages in the international system and brought into existence an unprecedented environmental restoration programme, almost 15 years after the spill.

Cause of accident	Quantity transported	Pollutant	Quantity spilled	Waste collected	Length of coast polluted	Compensation claimed	Compensation awarded
Explosion/Fire	144,000 t	Crude oil	144,000 t	3,300 t	100 km	112 million €	65 million €

Consequences

This exceptional series of spills brought to light many questions in the countries affected, triggered the creation of national inquiry commissions and generated major changes in contingency plans and response and prevention means (new procedures, new high sea tugs, new oil spill response vessels...).

Two sets of complementary measures were established at European level, known as the "Erika packages". These measures reinforced the control of vessels and maritime traffic, accelerated the phase-out of single-hulled tankers and led to the creation of the European Maritime Safety Agency (EMSA) and an international compensation fund with a payment capacity of nearly one billion Euros for a single spill.

A third package of measures designed to improve control of maritime transport is currently being implemented.

Aegean Sea, 3 December 1992

THE INCIDENT

On 3 December 1992, before dawn, the Greek tanker the *Aegean Sea*, loaded with 79,000 tonnes of crude oil, was entering the port of La Coruña (Galicia, Spain), when she was caught in a storm, grounded and broke in two. Her cargo took fire. By midday, the city was covered with an immense cloud of black smoke. The fire was under control by the following day.

RESPONSE

The local inhabitants liable to breathe in harmful fumes were evacuated. Containment operations on the water using towed booms were conducted, in addition to pumping the slicks from the shore and manual recovery on the shoreline. These operations resulted in the recovery of 5,000 m³ of emulsion and 1,200 m³ of contaminated waste which was then incinerated. On 9 December, operations began to lighten the vessel to recover the thousand odd tonnes of oil remaining in the stern. This operation was completed on 21 December.

IMPACT

Nearly 300 km of coastline were polluted, in an important area for fishing, aquaculture and shellfish collection. Coastal fishing and aquaculture activities were suspended. This measure affected the professional activity of over 4,000 people, who were still waiting for compensation promised by the State in the wake of the *Urquiola* spill in 1976 which affected the same areas. Compensation was set in motion and the bans were gradually lifted between January and September 1993.

COMPENSATION

Nearly 900 individuals, companies and cooperatives presented claims for a total of almost 400 million Euros. An initial trial in 1996, followed by an appeal judgement in 1997, established the joint responsibility of the captain and the harbour pilot for the accident. This meant that the shipowner (and behind him the IOPC Funds) and the Spanish government held equal financial responsibility. In 2000, an out-of-court settlement to the value of a quarter of the 320 million Euros of unsatisfied claims terminated the proceedings.

Cause of accident	Quantity transported	Pollutant	Quantity spilled	Waste collected	Length of coast polluted	Compensation claimed	Compensation awarded
Grounding	79,000 t	Crude oil	67,000 t	2,200 t	300 km	384 million €*	56 million €*

* Case in progress



500 km

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