

OIL SPILL RESPONSE - EXPERIENCE, TRENDS AND CHALLENGES

Dr Ian C. White OBE, Managing Director, The International Tanker Owners Pollution Federation Ltd (ITOPF)

Paper presented at OPELCOG 2000, 26th International Oil Spill Conference, 15-17 August 2000, Darwin, Australia

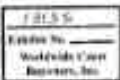
Because of all these limiting factors it is rare, even in ideal conditions and with the greatly improved equipment available today, for more than a relatively small proportion (10-15%) of spilled oil to be recovered from open water situations. In the case of the EXXON VALDEZ, for example, where enormous resources were dedicated to offshore oil recovery, the percentage was at most 9%.

While at sea recovery rates may be low when viewed in a derogatory light, the fact is that the cost of the benefit of such operations can be minimized by applying the benefits of concentration and area where collection will reduce the likelihood of an equally positive outcome of containing situations that will be particularly difficult to deal. This requires a strategic approach to oil spill control, as well as close control of the equipment and recovery operations using suitable techniques of vessel and aircraft deployment, such as containment booms and skimmers.

Because of all these limiting factors it is rare, even in ideal conditions and with the greatly improved equipment available today, for more than a relatively small proportion (10-15%) of spilled oil to be recovered from open water situations. In the case of the EXXON VALDEZ, for example, where enormous resources were dedicated to offshore oil recovery, the percentage was at most 9%.

In the past 30 or so years, involving an ITOPF's first-hand experience of over 400 incidents with wells. This includes recent major accidents such as the OREGON in French Polynesia in Japan, SEA EMPRESS in the UK and TREASURE in South Africa.

While the world is much better prepared and equipped to deal with major marine oil pollution it was in 1987 when the TORREY CANNON ran aground 121,000 tonnes of crude oil in the south-western approaches to the English Channel. It is still the case that we are not able to overcome some of the fundamental technical problems associated with containing such events. What is more regrettable is the fact that most operations of spills are not dealt with as effectively as current technology should allow. This is frequently because those responsible for managing the response operations take insufficient account of the extensive technical knowledge and experience that is available, especially in terms of the lessons that have been learnt from previous spills around the world. In general, therefore, the mistakes of past (senior) operations are all too often repeated. This gives rise to serious questions about the adequacy of the organization and management of response operations, contingency planning and training programmes. The challenge is to improve the situation in the future.



© The International Tanker Owners Pollution Federation Ltd 2001

CONFIDENTIAL

BP-HZN-2170MDL00040004

An oily containment boom collection, the rapid spreading and transportation of oil spill on the open sea tends to be very difficult in the effective application of skimmers. However, the likelihood of success can be increased by using aircraft when it is able to deliver the material more rapidly than ships and with greater precision on to the fastest concentrations of oil in these areas pending the most appropriate means to contain recovery. The success of such a strategy was illustrated in the OLN (AMPHIS) incident when the use of about 400 tonnes of dispersant was judged to have reduced the impact of about 10,000 tonnes of crude oil from the sea surface. Clearly, greater reducing the quantity of oil available to impact sea birds and the coastline.

While the aerial application of dispersant can be highly effective, if distribution amounts of the appropriate type equipped with specialized spraying equipment, as well as large stocks of suitable dispersant chemical. These are unlikely to be immediately available unless the use of dispersant is an integral part of the relevant contingency plan. Without such pre-arranged plans are in place it is difficult to apply the correct amount and mixture as required. This may mean the strategy responsible for spill, in the event of a large transportation, released, the actual availability of the oil and the likelihood of "boom" will rapidly reduce when it is necessary to contain in dispersion material.

In considering a relevant strategy it also has to be recognized that some forms of oil spill are heavy fuel oil and viscous crude are less amenable to dispersant treatment than the others. This does not prevent such items in change from continuing with existing operations long after there is

© The International Tanker Owners Pollution Federation Ltd 2001

CONFIDENTIAL

BP-HZN-2170MDL00040004