

The role of Inland Spill Response Contractors in shoreline response for oil and chemicals

Over many years in the United Kingdom, inland oil spill clean-up contractors have developed expertise in cleaning up inland spills. From spill in rivers, lakes, docks and harbours to dealing with contaminated ground, a spill response contractor is able to give a cost effective and efficient solution.

The British Oil Spill Control Association (BOSCA) in conjunction with the Regulators (Environment Agency (EA) for England and Wales, Environment & Heritage Service (EHS) in Northern Ireland and the Scottish Environment Protection Agency (SEPA) in Scotland) run a contractors' accreditation scheme which sets standards for spill response and clean-up. Contractors are graded into three levels of competence in each of three areas – freshwater spills, estuarial and marine spills and groundwater. Using a contractor with an appropriate accreditation level enables prospective customers to ensure that they should get the level of competence required in both manpower and equipment.

It is not unknown for inland response contractors to deal with two or three spills a week and thus their staff receives not only formal training (as is required by the Accreditation scheme) but also have regular practical experience in dealing with incidents. With most marine spills, which only happen relatively infrequently, one can look back and criticize the way in which certain aspects of the clean-up were handled. If we had a Sea Empress incident every six months we would probably get quite good at dealing with it. On the other hand inland spill contractors have a wealth of practical experience not only in actually using spill control equipment but also in the integrated logistics of equipment and manpower location, spill co-ordination and waste disposal.

The Maritime & Coastguard Agency (MCA) use the EA/EHS/SEPA Contractors Accreditation Scheme to determine a contractor's suitability for acting as Tier 2 responders for Port & Harbour spills. It is thus already accepted that some inland spill response contractors have a role to play in dealing with Port & Harbour spills. Such contractors generally have their staff formally trained by attending a Nautical Institute accredited training course.

A limited but growing number of inland spill contractors have also developed expertise in dealing with general chemical spill incidents. Chemical incidents can range from drums falling off lorries on the highway to major incidents at industrial sites. Health and safety of personnel in chemical incidents is of the highest priority and having the correct protective clothing is of utmost importance.

Chemicals in the broadest sense present a wide range of hazards and using incorrect clean-up techniques can prove to be both dangerous and potentially catastrophic. The chemical industry operates a 24-hour help line which will give advice on the best way to handle any particular chemical. Spill operations will usually be under the control of a chemist employed by the contractor. However, the basic criteria as for any spill clean-up

still apply - assess the risk, contain the spill, clean up and then correctly dispose of contaminated materials. Practical logistical and equipment use experience gained by competent contractors can be invaluable.

Unlike most European countries, where the Authorities are used as the spill responders, the United Kingdom has always used specialist spill contracting companies to deal with incidents. This has enabled a level of competent expertise in spill response to be built up which is cost effective (because individual companies have to be commercially competitive) well equipped and highly skilled (because in this comparatively small market any contractor is only as good as its last spill). The use of equipment by private contractors also provides a link with the equipment manufacturers. Practical problems experienced in the field can be relayed back to the manufacturer who can often make technical improvements to overcome the problem. This link enables UK spill equipment manufacturers to keep up to date with latest clean-up requirements.

In the UK the authorities role viz. that of the Environment Agency is to be available for emergency first aid response only. It is considered that they should otherwise restrict themselves to acting as industrial policemen, monitoring, enforcing and developing new regulations, but **not** carrying out spill clean-up in its entirety. Whilst it is appreciated that EA officers are often the first on the scene of an incident and quite rightly effect first-aid spill containment themselves, the carrying out of complete clean-ups in what is already a declining market, will inevitably mean in the long term that the current level of contractors spill expertise is lost, clean up costs will increase and there will be a knock-on effect of affecting equipment development.

Perhaps it is appropriate to look at some of the techniques regularly used by inland spill clean-up contractors:

Oil retention booms – the first line of response in any water borne spill. A correctly deployed retention boom will stop oil spreading and give time for the most efficient means of oil removal to be determined. Deploying a boom on a river with any current requires experience and training. Understanding the stresses which can be put on a boom under these circumstances is essential. Boom selection is also of critical importance. Using a boom as a sweep on an inland stretch of water is often necessary, which quickly teaches the operators that with any boom if you sweep too fast the oil goes underneath.

Having contained the oil various methods of removal can be employed, and for large spills a combination of methods are used.

The oil can be skimmed by mechanical means from the water surface. The skimmer discharge would be into an emergency holding tank or possibly firstly through an oil/water separator to the tank. Any oil free water would be returned to the watercourse (upstream of the boom) and the recovered oil tankered away for disposal or recycling. Thus in this operation there has to be co-ordinated the skimmer and pump operation, the presence of an emergency holding tank, possibly an oil/water separator, a recovered oil road tanker and, of equal importance, a licensed liquid waste disposal site.

When the amount of oil present is comparatively small (either after skimming or because of the size of the spill) oil absorbent materials will be used to affect a final polish. When the materials are saturated with oil they are removed from the watercourse and bagged into oily waste bags. These bags then have to be transported and disposed of in a licensed landfill site.

Spills into the ground present a different set of problems. If the land is contaminated but the contamination has not spread to the water table the most common form of treatment is to dig it up and transport it to an appropriately licensed landfill site. Bioremediation techniques may be used for insitu treatment but these are only applicable where the area is not needed for immediate use or where removal of the land is impractical.

The types of oil handled by inland contractors can vary from motor spirit through to heavy fuel oil. Each product presents its own difficulties for response contractors who have to be aware not only of the product's physical properties but also of the "additives" which can be carcinogenic. Thus the handling of any product requires the contractor to have staff who are aware of the possible dangers and ensure that they are issued with appropriate personal protective (PPE) equipment. The contractors are very much aware of their responsibilities under the Health & Safety at Work Act.

The correct application of the expertise available is of course essential, but of equal importance is the need for accurate communication between all parties involved. The logistics of having the right people with the right equipment in the right place at the right time is easy to say but not so easy to do - and even when you have got that right there is the practical communication with the people on the ground who are actually doing the work. They not only have to be communicated with but also have to be kept motivated to do what is usually a very dirty job.

The National Contingency Plan calls for Local Authorities (Local Government) to take the lead assisted by officials from the Maritime & Coastguard Agency (Central Government) who have direct responsibility for operations at sea. When it comes to dealing with oil spills Local Government staff however, are generally inexperienced and do not always have a good level of operational awareness. The result is an inadequate level of managerial experience for shoreline operations, with much learning on the job. This is incompatible with delivery of expectations raised by the formal contingency plans.

It is fully appreciated that one contractor would not have enough managerial resources to handle all of the shoreline response for a major incident, but here is an opportunity to utilise the managerial resources which the private sector can provide by dividing the shoreline into sections and making different contractors responsible for specific areas of clean-up. As has been illustrated earlier commercial spill contractors are used to liaising with each other, with Agency staff, with clients and with sub-contractors. Experienced spill contractors would also be capable of motivating and controlling any Local Authority

staff who may be placed in their charge thus providing an effective, well motivated workforce with specific areas of responsibility.

As a general rule, sooner or later any offshore spill becomes an inland spill when oil starts to contaminate the coastline, estuaries, ports, harbours and beaches. So let us look at the areas where an inland spill contractor has experience which could be of benefit.

- 1) An inland contractor deploys booms on rivers and lakes. The same techniques can be used for booming harbours, beaches and protecting sensitive areas.
- 2) An inland contractor uses oil absorbent materials with their associated disposal problems. The same problems can apply to disposal of contaminated flotsam and jetsam.
- 3) An inland contractor regularly arranges the disposal of oil contaminated wastes and of course has a Waste Carriers Licence. Similar problems exist with the disposal of oil contaminated beach material.
- 4) An inland contractor has to have current knowledge of waste disposal legislation – Section 62 requirements, waste carrier's licenses etc., all of which apply to shoreline spill clean-up.
- 5) Inland contractors have a trained and experienced workforce which is used to supervising unskilled labour which may be required on a beach clean-up. This would include ensuring that the correct PPE was being used and that Health & Safety legislation was being complied with.
- 6) Inland spill contractors have regular experience in co-coordinating a spill response effort – making sure that they have the right equipment with the right people in the right place at the right time. They are also used to liaising with other oil spill contractors which may be required in a long coastline clean-up.
- 7) In an emergency situation paperwork can easily be overlooked. All inland spill contractors are used to keeping accurate records so that eventually bills can be drawn up and verified – otherwise they don't get paid! A similar situation pertains to shoreline clean-up.

The MCA has recognised a role for accredited spill contractors in providing Tier 2 response to Ports & Harbours as required under OPRC legislation but generally inland spill contractors have been an untapped source of expertise in shoreline clean-up. Hopefully their undoubted capabilities and experience will be used in the future.

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