Status of the Inland Spill Business in the UK and projections on the <u>future</u>

or White Rabbits, and, Turkeys for Christmas.

It is always difficult when preparing a presentation if you have not seen the papers of fellow contributors. The one comforting thought is that if I do repeat some or all of the points others make then it will act to underline the perceptions in the industry of opportunities and threats we face. Looking at the titles of the papers being presented in the Inland Spills and Waste Management section of the conference the words "Waste Legislation" occurs several times. To some extent those from outside the Common Market may find this aspect introspective, as it is a topic driven by European Legislation. Indeed it may be that we in Europe with spills to clean in future, particularly in the short term, may find the imperatives of the waste legislation more prescriptive than the need to achieve an effective spill clean to acceptable standards.

The number of papers, directed to the issue of waste in spill clean ups, is a very powerful indicator of its current importance to the European Spill Clean Up Industry. The detail may be to some an irrelevance but there is a salutary lesson to all in the realisation that industries, such as ours, which do not operate to predetermined conditions, operate in areas where the law has to be interpreted to cover changing parameters. Any interpretation is a view of an individual. In the UK its relevance is always open to debate until the courts have ruled on the matter. That ruling then takes precedence. However given the subtle variety of spills encountered it is probable that in many cases there will still be room for doubt. Negotiations will need to take place around any interpretation and normally a consensus reached as to a pragmatic interpretation of the law. This allows the clean up to continue. Indeed we are lucky as most in the Environment Agency understand this and look for ways in which their interpretation of the law is coincident with a need to inflict minimal additional damage to the environment. But what if agreement cannot be reached. How do we resolve the situation? The answer is likely to be the clichéd "See you in court!" This situation may be reached through an escalation of clean up costs, which the customer thinks unjustified, or the customer's interpretation of the law is different to that of the enforcement agency or perhaps a criminal prosecution is being threatened. Typical of this is a leak of sewage from a pipe. The Environment Agency decided to prosecute a water company for such an offence. The water company entered a defence that sewage escaping from pipes maintained by a statutory undertaker is not controlled waste under section 33 of the Environmental Protection Act 1990. As this involves clarification of a prime point of law the High Court quickly decided, with the agreement of the parties concerned, to send it to the European Court of Justice for decision. Until that decision is handed down the law is unclear and that decision will almost certainly provoke related questions. What we can all shudder at is the costs involved and wonder what is Joe Public's, or indeed independent spill clean up company's, chance of putting such sums at risk against the state. Does all this mean that any spill clean up company needs, as a matter of urgency, to

start tooling up with lawyers rather than recruiting more R&D staff or operations staff to speed up the removal of the oil. Perhaps we simply take the view that we may not be able to clean up the spill effectively but at least we will not be prosecuted.

A further consideration is "What if the law changes to such an extent that it overtakes events". What then. What happens with the Buncefield Fuel Depot fires of this world? I look forward to hearing more on the details of the clean up later but I believe that foam used to extinguish the fire contained a chemical that is not allowed in wastes above detectable levels. How do you go about such a clean up? What are the increased risks to the environment of not being able to dispose of the contaminated liquids in a controlled predetermined manner to the extent that they have to be taken for long-term storage. Is that preferable to the inclusion of known, but very low levels of the foam chemical? How do you make that call? If you try to do it by computer modelling techniques is it really just a case of bulls^{xx}t baffling brains? And doesn't the same hold for assessments of much smaller spills.

What, then, of novel ways to deal with spills. We frequently have offers of novel products. A recent trend, other than bio-active systems, seems to be secure capture of oil, normally by chemical means. A typical example might be a rubber precursor that uses oil to form a stable rubber. Peel off the skin formed – easy as ABC. Except what is the material we have now produced? Is it waste? We intended to produce it. What is its classification under the European Waste Catalogue and how do we prove it? Unless developers of new products can answer these questions we will not take them up – how can we if we do not know how to get rid of it.

For exactly the same reasons why should we develop our own new products? We would need to be able to answer all of these extra questions on the disposal side before we start to recoup our investment? More problematically will the advice we receive at the start of the research have changed by the time we can introduce the product. Nothing affects business investment more than uncertainty about the future and the only thing I can say with certainty about the future is "I'm not sure".

What of future treatment regimes? Bio-remediation must be the most attractive option particularly for spills that do not present immediate danger to health or the living environment. What we cannot do is use it as a magician uses his magic dust; a little sprinkle of it producing a white rabbit from a hat. We have to know what the mechanisms are for the elimination of hydrocarbon-based materials. We can then assess the risk that the mechanism will increase the mobility of toxic factions. We can look at the risk that the hydrocarbons present will be chopped into more mobile or hazardous fractions? Only by clearly understanding the remediation pathways can we expect that the treatment will be acceptable to the Agency. Only when we can demonstrate no adverse environmental impact can we expect agreement for use of the treatment. Only if this information is available when a product is offered can the suppliers expect us to use it and that presupposes that its use does not entail us in having to jump through the hoops of applying for a waste disposal licence or worse, if there is such a thing. One area of bio-remediation always causes me concern. This is the use of some so-called liquid bio-systems. I remember asking one potential supplier what the bacterial count was in the product he was offering. The reply was none. The liquid simply promoted the growth of the natural oil-eating bacteria in the ground. Not in itself poor methodology but one must ask as to its bio-remediation credentials. The product had "hard" surfactants as its active agents, well known to emulsify hydrocarbon products. Clear the oil quickly off the surface of a road, certainly. Do it by bio-remediation? Perhaps we are back to the white rabbit and magic dust! Or bulls^{**}t trying to baffle brains.

Whatever form of recovery or remediation we use when dealing with an oil spill of whatever size many issues have to be considered, assessed and acted upon. We always hear of the way in which the super spills, the Buncefields of this world, are tackled. No one in their right mind would consider using companies who have no idea of what they are doing in these situations. Yet quite often for smaller spills, which have the same issues and legal complexities as Buncefield, the buying decision is made simply on the basis of price, without any specification for the work to be undertaken and no reference to a company's ability to undertake such work.

One must ask what happens if it goes wrong? Who will pick up the prosecution? The person who had the spill? Perhaps.

The contractor? Certainly.

The company or insurance company who didn't produce an effective specification? Why not?

That is why we need to make sure that people understand the status of Accredited Inland Spills Contractors. We are assessed against strict criteria so that anyone unfortunate enough to have a spill can rely on us getting it right the first time.

We try to understand the law so that we do not leave our customers open to prosecution.

We train our staff so that they know how to recover oil from an area in a way that does not increase the risk of mobilising it.

We know the Health & Safety implications of cleaning up particular spills in the differing ways.

We have specialist equipment and products available to keep waste and its hazards under control. We ensure that the time of clean up and remediation is kept to a minimum.

The Spill Contractors accreditation scheme checks all of these and many more. It puts contractors into ability bands for different types of spills.

Abzorboil, my company, are an accredited company under the scheme. I am sure that we are no different to any other accredited contractors in that we are proud of that accreditation just as much as I am of our ISO 9001 accreditation and Investors in People registration. Not as badges but as ways in which we can ensure that we continue to advance the clean up services we offer. Only by all of us in the industry continually striving to improve our performance, through the accreditation scheme and our trade association, can we expect to be taken seriously. Ultimately, however, we must all understand that the industry will only consider continuing to be accredited where such accreditation carries clout in the market. Where the buyers, in whatever guise, ensure that there is a clear specification to the clean up to be undertaken and recognise that expertise is the only way to produce the clean up required; to the standard required; in the quickest time possible without placing themselves, or their clients, at risk.

To ensure that the scheme remains strong then we must ensure that the accreditation process is well audited and a strong trade association supports it. The move to UK Spill Association is a step in the right direction but it can only be strong if it is given support by all its members.

One of UK Spills key tasks must be to ensure that anyone and everyone associated with a spill clean ups understands the value of the Spill Contractors Scheme. This includes, amongst many others, insurance companies, Environment Agency, Environmental Health Officers and Environmental Managers.

Another will be to ensure the rigour of the accreditation scheme. A third will be to push for legislation clarification and if needed changes. We have to make sure that the operational uncertainties and difficulties of clean up operations are understood and appreciated by those who draft the law. We are not asking for special treatment; just that consideration is given to operations, particularly emergencies, where we are trying to ameliorate the impact of a leak or spill of a toxic material outside of normal site boundaries often from an unknown source at any time around the clock.

The Hazardous Waste Regulations in part, address this. The introduction of the concept of fly tipped wastes was a step in the right direction. Movement of these is allowed under less stringent conditions than might normally be expected. However the system still needs postcodes and when you are in the middle of a field in the wilds of Shropshire in the middle of the night it is sometimes proves a little difficult to find out what the postcode is. Whilst this may be of parochial concern to England and Wales the principal will, I am sure, translate whenever and wherever new environmental laws are being drafted.

All this wonderful care and concern over waste regulation and the need for accredited companies to undertake spill clean ups does detract from what is really the most important question of all. What level of clean do we have to reach and how is this going to be measured?

This is perhaps the biggest issue, outside of waste, facing the industry and unlike the issues raised earlier it is one that, whilst receiving much attention, seems to be making little progress. It really should be the subject of most concern wherever spills are to be cleaned. The famous Dutch values are well known and they have been summarised, with many caveats, under:

| Material | Earth/sediment in mg/kg | | Groundwater in µg/kg | |
|-------------|-------------------------|-------------|----------------------|-------------|
| | Target Value | Interventio | Target | Interventio |
| | | n | Value | n |
| Mineral Oil | 50 | 5000 | 50 | 600 |
| | | | | |

Adjustments are made dependant on the type of oil causing the contamination. It must be remembered that the Dutch are looking to ensure

that the land is returned to a state fit for any use whilst the British approach is trying to ensure that the contamination levels are appropriate for whatever the land will be used. This allows different levels of contamination for domestic gardens and allotments or car parks or landscaped areas or hard cover. It is interesting that the UK's Interdepartmental Committee for the Redevelopment of Contaminated Land (ICRCL) produced figures which, associated with several footnotes, exceptions and caveats, gave "Trigger Concentrations" for former coal carbonisation sites of a threshold of 1,000 mg/kg and an intervention level of 10,000. These figures were withdrawn in early 2003. They are to be replaced by levels of contamination derived from the Contaminated Land Exposure Assessment (CLEA) methodology. I am not sure exactly when the value will be produced for hydrocarbons but whenever it will be useful not only in dealing with sites with long standing historic, almost steady state, contamination but also for sites which are recent and still dynamic. The values themselves will be of import but so too will the way in which those values are to be measured. What exactly will the impact be of bio-remediation on those values and how will you balance clean and threshold action levels. If the values are adopted and test procedures agreed to produce significant and consistent figures then all we need to do is to make sure that the samples of contaminated ground tested are representative of the area as a whole.

What of the values produced. As a contractor I would like to see the values of mineral oils left in the ground reduced to "None Detectable". But I know this would simply put us in the same bind as at Buncefield. It is likely that any argument suggesting that the ground can have a high level of hydrocarbon contamination would be an anathema to all contractors – turkeys voting for Christmas, or is it Thanksgiving, springs to mind. If we are to be a well regarded as specialist contractors with a high status in industry generally and be the ones approached for any and every spill then perhaps we need to start plucking. We need to make sure that as individual companies, as Trade Associations and as contractors around the world we contribute our expertise, not in the pursuit of the impossible but in the pursuit of levels of clean that are appropriate to each individual site and the individual oils that have been spilt. That the techniques we use are as quick, speedy and cost effective as possible and that each clean is to levels which allow the land to be used subsequently for any purpose.