Absorbents, Spill Kits, Drain Protection Mats, Secondary Containment Pallets and Sumps are all used to prevent spillages of hazardous materials from contaminating the environment or causing harm to the individual. Depending on the type of liquid spilled, the level of competence of spill responders and availability of suitable protective equipment these hazards can be controlled and removed. This brief paper attempts to explain just some of the steps that you should take in specifying your spill response inventory and preparing your company to be able to respond to an incident should it occur.

Identifying the hazards on your site

Spill Inventory Selection made simple

Survey your site and identify the Risk Cells. These are the areas around your site where activities, processes, equipment and hazardous liquids are used and stored.

Assess the hazards that exist within each risk cell and decide what liquids are likely to be spilled and where they are likely to run.

Plan your response, the equipment you will need the people who will need to be trained and the protective equipment that they will need per risk cell.

Implement the necessary procurement of equipment, develop your spill contingency plans, train the spill teams and incident commanders.

Review your progress by testing your plans by running simulation events and desk top runs of your procedures and plans.

Audit your systems, plans and equipment on an annual basis by involving an external company who has the ability to test your systems and spill team.

Product InformationThe Sapira system is recognised world wide as being the most effective way of developing your spill response procedures in a logical and step-by-step way. There is no easy or short cut way of undertaking this process and in the ever-litigious world in which we do business it is only asking for trouble if you fail to build the necessary due diligence and evidence of your duty of care.

Few companies have the luxury of resource to allow them to have a fully trained emergency response team on stand by for the unplanned event. Yet with the advent of Environmental Management Systems and the ever-increasing penalties imposed by breeches of environmental legislation more and more companies invest in spill products and emergency equipment and expect their assigned spill team members to become experts over night as a result of a single classroom spill course or worse still by watching a video. As a result many put themselves at risk of personal injury claims as well as the potential for environmental costs caused by a complete failure of their desktop theory. Not only is this caused by the lack of connection many make to health and safety issues when developing their environmental initiatives but it is also naive to expect any incident to run smoothly under these circumstances. Unplanned incidents require decisions to be made by people, who in most day to day operations, have little experience of incident command or emergency response. In fact our experiences are, that if a company has developed its spill contingency plans on the back of an EMS initiative like ISO14001, on many occasions, this has been done with little reference to site health and safety policy or initiatives. The simple steps shown opposite therefore are designed to take you logically through the various elements involved in spill product procurement.

Adsorbents specification and use

Few people appreciate that there are in fact both absorbents and adsorbents. In the main with a few notable exceptions the majority of commercially available products in today's market are adsorbents. These rely on surface tension to do their work and release the adsorbed liquid when subject to pressure such as squeezing or wringing. Meltblown products such as pads, rolls, wipers, socks and cushions behave in this way and as a result are classed as such. An absorbent is distinguished by the fact that it will increase in size by taking the liquid through its cellular structure. Release is much slower and requires considerable amounts of energy such as heat and pressure. Some manufacturers combine the properties of adsorbents and absorbents making socks and cushions that are fast wicking and have a greater capacity of absorption. These products tend to be used in general-purpose products having the ability to absorb and gell aqueous liquids as well as adsorbing oils and mild chemicals.

Beware the kit that includes PPE

Personal Protective Equipment should be provided on an individual basis, the user should be trained in its use and have been fit tested in the case of masks. Kits that have been purchased and deployed without suitable risk assessment containing PPE for general use, by anyone, where no risk assessment has taken place or been recorded put you at risk of personal injury claims.

Spill Kit Specification

Q. What is the purpose of this spill kit?

Q. What is the likely volume that could be spilled?

Q. What type of liquid could be spilled
- a) Oil only?
- b) Non aggressive chemicals?
- c) Hazardous/aggressive chemicals?

Q. What type of container is required?
- a) Static/Mobile
- b) Bag/Tub/W-Bin/Cart
- c) Single Use or Re-useable

Q. Does the spill kit require a location sign?

Q. Is the location clearly designated ?

Q. Who will use the kit?

Q. Have the spill responders been trained?

Q. Have the spill responders been provided with adequate PPE?

Q. When was the last time you ran and recorded a spill drill?

Q. When was the last time that you were audited on your spill response and contingency plans (ISO14001 does not count)?

Legislation Overview and Pollution Prevention Guidelines

Why buy spill products? Very simply legislation is slanted against you if you undertake any processes that use, or cause you to store, any liquids that are considered to be pollutants. The UK's environment agencies the EA, SEPA and EHS (Northern Ireland) have onerous powers and if, as a result of spillage, they can prove negligence they have the ability to fine individuals as well as companies. Everyone now has a duty of care to the environment and it is your responsibility to prove that you have not knowingly, or should have known that you could, pollute. The only liquid that is allowed to enter a surface drain, a drain that ends up in a river or stream, is rainwater. Spills entering the ground which have the potential to enter sources of drinking water or aquifers can result in immediate fines. Remember these fines are against the individual and rarely are more than often are into thousands of pounds depending on the circumstances. Health and Safety legislation also plays it's part when spill products are being specified since duty of care raises its head here also. It is important therefore that no company deploys spill kits or PPE without being able to demonstrate that adequate training and simulations have been carried out to ensure the competence of the work force and spill responders who would be using the equipment.

Useful Links

UK Environment Agency
www.environment-agency.gov.uk

NetRegs
www.netregs.gov.uk/netregs

Environment and Heritage Service
www.ehsni.gov.uk

Sapira HSE
www.sapira-hse.com

Sapira Network
www.sapira-international.com