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Environmental Emergencies

A guide as to how to respond

INTRODUCTION

Most industrial and commercial sites have the potential to cause significant environmental damage.

Where normal controls fail, this can result in chemical spillages, fire or explosion. This can seriously affect eco-systems and surface water and the impact can be immediate and persistent.

Clean-up costs can be very high and the polluter legally responsible for those costs. Also, your reputation can be impacted if a major incident damages the environment or affects the local community.

Organisations have a legal duty under the Control of Major Accident Hazards Regulations 2015 (COMAH) to assess and prepare for emergencies which may have the potential for environmental damage (Major Accidents to the Environment – MATTE). This is summarised as an event or situation which poses serious damage to the environment of a place in the United Kingdom if it threatens contamination of land, water or air, or disrupts or destroys plant or animal life.

Causes of environmental incidents on a site include delivery/use of materials, failure of machinery/plant, flooding, over filling of containment vessels, fire, explosion etc.

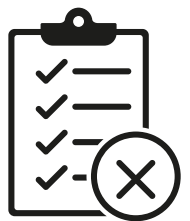


YOU SHOULD PREPARE A PLAN

To help deal with an environmental incident at your premises an Incident Response Plan should be produced which includes:

- Business activities on site and specific details of those processes and activities that have a particularly high potential for environmental harm;
- Details of essential contacts for the emergency services, HSE, water authorities / EA, clean up contractors, key staff, chemical suppliers whose products are on site etc;
- A site drainage plan (using standard / conventional features for drainage plans) which should include drainage arrangements, manufacturing areas, storage areas, details of tank storage, water supplies, location of spill kits etc;
- An inventory of substances on site including quantities, data sheets, storage vessels, production areas etc;
- Emergency procedures for dealing with spillages, leaking containers, water run-off from firefighting etc;
- Details of equipment and materials on site to deal with a pollution incident
- Arrangements for making leaking containers safe, location and use of spill kits, drain blockers and selection of appropriate PPE;
- Evacuation procedures

The Plan should be kept up to date and regularly reviewed (at least every 2 years).



MAKE SURE YOUR STAFF KNOW WHAT TO DO

The effectiveness of the Plan will depend on staff training. Training should include awareness of the Plan and responsibilities; awareness of environmental issues and of the potential for harm of substances on site; use of personal protective equipment; reporting procedures; emergency procedures; clean-up / safe handling and disposal of contaminated waste and materials.

CONTROLLING SPILLAGES

There are many products available to deal with spillages. Sandbags can be used to block off drains etc., or channel flow to a collection point. Proprietary absorbents are available that are more absorbent than sand and can be targeted more specifically.

For punctured drums, tanks etc., sealing devices and substances are available such as pads, clamps, sealing putties and devices that can be inflated to block a damaged area.

Drain seals are designed to block off a drain or seal a pipe. Booms can be used to direct spillage flow, protect drain apertures and contain spillages. Booms can be of absorbent type or physical barrier type inflated with air or water.



THE EFFECTS OF FIRE

It is difficult to prevent environmental damage from a significant fire and therefore prevention is key with the implementation of risk control measures to reduce the risk of fire. This is recognised in Article 16 of the Regulatory Reform (Fire Safety) Order where there is a duty to 'Mitigate the effects of fire' which includes not only to the premises but also to neighbouring premises, the local community and the environment.

Contaminated run-off water from fighting a fire can be environmentally damaging and the products of combustion from the fire including asbestos if present can contaminate the neighbouring area.

There are methods available to contain fire water run-off. The water can be contained on site by containment lagoon (where ground conditions are suitable); a sacrificial area where drains can be blocked and the water held; a temporary lagoon e.g. by using sandbags to contain the water in part of a yard or car park area; pits / trenches; portable storage tanks that can be quickly be brought onto site and used to contain the water.

MORE INFORMATION

Environment Agency www.gov.uk/environment-agency

Department for Environment, Food & Rural Affairs www.gov.uk/department-for-environment-food-rural-affairs

