### **Guidance Sheet 5: Major Chemical Spill**

Image of a spill kit

The purpose of this guidance sheet is to provide information on how to respond to and manage a major chemical spill or release.

A major spill or release is one in which the response is beyond the capability of the local area and which requires the intervention of emergency services. Whereas minor spills involve minor quantities and are readily contained and cleaned up at the local level, major spills involve a significant release of chemicals or materials that pose a major health and safety risk to persons or damage to the environment.

## Major spills

Major chemical spills and releases include airborne releases, which may represent a respiratory risk or absorption risk via skin, or both, depending on the properties of the chemical. Containment and clean up may require specialised equipment only available to the emergency services, such as breathing apparatus or chemical resistant clothing. Major gas leaks may occur due to rupture or disturbance of a gas pipeline, for example during excavation or construction works and in this case the energy supplier as well as emergency services will be involved.

There may also be secondary risks arising from the release of chemicals or materials.

For example, in the event of a gas leak there is the potential for fire or explosion if there are sources of ignition present. Power supplies may also be affected and systems such as ventilation or alarms may not be operational.

## Pre-planning

The extent of a major incident can often be minimised by pre-planning. The School’s Emergency Management Plan provides a means to ensure the key steps to respond and manage a major chemical spill are in place

It is recommended that schools review their Emergency Management Plan and their chemical stocks:

1. Update assembly locations (e.g. distance or shelter behind structures in event of fire or explosion).
2. Identify the type of information to be provided to emergency services. For example, plans showing the location of laboratories, gas tanks, or chemical stores and the location of isolation of gas and electricity are useful in an emergency.
3. Ensure local isolation switches are identified and marked on emergency plans and a copy of the plans are located in an accessible area.
4. Review chemicals to ensure specific emergency response arrangements are developed and promulgated for higher risk chemicals (e.g. those where there is a risk associated with respiratory or skin absorption). Consider eliminating those higher risk chemicals or substituting them with safer chemicals.

## Response procedures

The key requirements in responding to a major chemical spill or release are ensuring people are safe, by removing them from the immediate area and moving them to a place of safety, and containment of the chemical or material to prevent the further spread or release and to control associated hazards.

## Teachers and staff

On becoming aware of a chemical spill:

1. Do not touch the spilled chemical, maintain a safe distance and assist any person in immediate danger
2. Call 000 for emergency services, seek and follow advice.
3. Report the emergency immediately to the Chief Warden/Incident Controller who will convene the Incident Management Team if necessary.
4. Move staff and students away from the spill to a safe area and isolate the affected area.
5. Where it is safe to do so, identify the type and quantity of chemical(s) involved and provide the emergency coordinator and emergency services with details and the safety data sheet if possible. If the situation is changing, keep the Chief Warden and emergency services informed on an ongoing basis;

## Chief Warden / Incident Controller

1. Notify the Emergency Services by calling 000 and any other relevant Authority and provide them with as much information about the hazardous material or gas leak as possible, such as nature of spill or release, location and any relevant information such as chemical properties (safety data sheets).
2. Isolate the area affected and ensure people remain upwind
3. If appropriate, commence an evacuation of the affected building and adjacent buildings and coordinate the evacuation. The choice of assembly location should take into account the location of the incident and prevailing winds and if the primary evacuation area is unsuitable, nominate an alternative assembly area
4. Arrange a safe location to meet the emergency services.
5. Establish communications with Incident Management Team and if appropriate shut down gas or electrical services
6. Contact the Department Security Services Unit on 9589 6266 (24 hours) to advise them of the nature of the emergency and to seek further instruction.
7. Notify the all clear once the emergency has passed and on advice from Emergency Services Personnel
8. Document the incident via EduSafe Plus and IRIS and report the incident to WorkSafe Victoria.
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## Containing the spill (Only if safe to do so)

1. Close doors in the areas leading to the spill;
2. Try to minimise the spread of the spill, for example by using a laboratory spill kit;
3. Turn off or remove any ignition sources (such as Bunsen burners, heaters, electrical equipment);
4. Secure the area to prevent any unauthorised persons from entering the vicinity of the spill.

For more information on chemical safety, refer to the Department’s page on [Chemical Management.](http://www.education.vic.gov.au/hrweb/safetyhw/Pages/chemicalmgt.aspx)

**Further assistance** can be obtained by contacting the Department’s **OHS Advisory Service** on 1300 074 175 or [safety@edumail.vic.gov.au](mailto:safety@edumail.vic.gov.au).