

CLEANUP OF ABC (DRY CHEMICAL) FIRE EXTINGUISHER DISCHARGES

INTRODUCTION

Type ABC multi-purpose fire extinguishers contain ammonium phosphate and/or ammonium sulfate powders that can be irritating to the eyes, skin and lungs (see associated MSDS/SDS information). The dry chemical is a pale yellow in color. The dust has an average particle size of 20 micron making it easily airborne.

Caution should be taken to avoid breathing the dust immediately after using the extinguisher as well as when cleaning up discharge residues. During cleanup a dust mask or respirator may be beneficial.

Water quality regulations prohibit rinsing phosphates, sulfates, petroleum products or any other deleterious substance into storm sewer inlets, surface water conveyances or floor drains that lead to creeks and waterways.

The powder residue must be containerized after cleanup, and brought to EH&S.

CLEANUP GUIDANCE

- A HEPA vacuum should be used for cleanups to prevent the dispersion of dust into the air.
- Notify facilities that the ventilation system needs to be shut down during cleanup. This is to prevent the dry chemical powder spreading into the remaining building.
- For large releases, or releases that have contaminated the ventilation system, install a HEPA air scrubber to remove all airborne particles.
- If the ventilation system has been contaminated notify facilities to contact HVAC and Energy Management. An alternate work plan may be needed. If an alternate work plan is needed contact Environmental Health and Safety.
- Because dry chemical fire extinguishers are very corrosive to metal surfaces, those surfaces should be cleaned first. If the surfaces are dry use a static duster to pick up the residue. If the

surfaces are damp or wet, neutralize all metal surfaces using a baking soda solution (1 cup baking soda to 3 gallons water) and excessive amounts of water.

- Clean all equipment. Contact IT for an evaluation of computer equipment that is affected. Contact the Facilities for other affected electrical supplies. Dry chemical residue is not flammable but can cause issues with electronic components.
- Make arrangements with office supervisors and occupants to clean interior draws and cabinets if needed.
- If for some reason HEPA vacuuming cannot be accomplished, do the following:
 - Dry sweeping should only be conducted using a dust suppression material.
 - Wet mopping should be conducted as a last resort since it tends to smear the chemical and sometimes makes it more difficult to clean.
- Collect all dry chemical residue into a plastic bag and notify EH&S for a pick up (x3348).
- PPE required for clean-up procedures- Gloves, Goggles, N-95 particle filtering mask. Recommended outer clothing covers, all exposed clothing should be immediately laundered.

Related Documents:

Amerax Fire Extinguisher SDS <https://chemmanagement.ehs.com/9/75e708a7-fe96-48d3-9586-0134cf6ee291/ebinder/latest-version/140030997>

