

Hands on Activity for Pesticide Spills Program

Introduction

Introduce yourself and tell class in this portion of the program they'll be doing a hands on activity on how to handle pesticide spills, specifically a powder pesticide spill. We're also going to show you the new pesticide spill kits you're getting for your trucks, and talk about how to use it all.

Do they think they are prepared in the event of a spill?

Contents of a spill kit:

Pull out all the parts of a spill kit, ask them to name each component, and tell you what it's for.

Protective Equipment:

- Goggles
- Gloves
- Boots or booties
- Waterproof coveralls
- Respirators

Barricades/ Signs:

- Barricade tape
- Chemical Spill Sign

Confinement Materials:

- Whisk broom
- Shovel
- Dust Pan
- Plastic bags
- Sponges
- Absorbents

Decontamination Materials:

- Bleach
- Detergent
- Spray bottle with water

Miscellaneous:

- Permanent Marking Pen
- Emergency #s: Chemtrec: 800-424-9300

Problem Solving Exercise:

Cleaning up a dry powder spill on a washable surface:

Divide group in half. Group A will clean up the spill while Group B observes and critiques their activities. (For a small group like the parks dept. ask for one or two volunteers to do the spill clean up, with the rest looking on and commenting.)

To start the activity, spill corn starch on the floor. Ask Group A to imagine that they have just spilled a dry pesticide on a non-porous surface while adding it to a spray tank. The powder is an eye, skin and respiratory irritant, but it's not flammable. Imagine they are outdoors on an asphalt surface, the edge of a parking lot of a shopping center where they were going to spray some trees. The shopping center is open and there are shoppers nearby. It's also windy.

Ask Group A what they should do first. (Put on personal protective equipment) Have the members of the group doing the clean up put on the equipment necessary.

Containment: What's the next thing they should do? Remember that it's windy. (Wet the spill with the spray bottle lightly to keep it from blowing away)

Ask if they should just hose it down? (No, that would spread the spill further)

There are shoppers coming over to see what's going on. What should they do about that? (Put up sign, marking tape, verbally warn people to stay away)

Sweeping up Spill: Now that they have put on protective equipment, cleared the area, and lightly moistened the dust to keep it from blowing around, what should they do next? (Sweep it up)

Have member from Group A sweep it up. Observe his sweeping method. He should be sweeping the powder toward the center of the contamination to avoid more contamination. Ask Group B if they think he's doing it correctly, and if not, why.

Picking up Spilled Material: Now that they have a pile, ask Group B what the cleanup crew should do with the spilled material. (Options: if uncontaminated, they could put a measured amount into the spray tank. Assume this has been contaminated with materials on the asphalt. The answer should then be, put it into a large plastic bag, with a broom and dust pan.

Decontamination of the spill surface: Ask both groups if they are done with clean up, or if there is more to do. Let them conclude that the surface must be cleaned, and have them determine the correct cleaning method.

Tell them the MSDS handouts for this product indicate it must be cleaned up with detergent and water. The moisture must then be absorbed, swept up, and discarded with the spilled material.

Have group A use detergent and water, then apply some absorbent material (kitty litter), or some of the absorbent stuff, and sweep that up into the plastic bag too. Mention that if they don't have any kitty litter or other absorbent material, they could use soil as a last resort.

What should they do next? Label the plastic bag with what information: Pesticide name, signal word from the pesticide label, and the name of the responsible person, usually the employer.

Final Clean up: What's the final thing they have to do? Clean up contaminated parts of the spill kit. The broom must be discarded; the dust pan can be washed. Next they need to clean their personal protective equipment, and themselves, as with any other pesticide handling activity.

What do they do with the spill materials in the plastic bag? (It should be transported to a proper disposal site. No, they can't put it in the dumpster at the shopping center!)