

May 27, 2009



HAZARDOUS WASTE MANUAL

Procedure Cover Sheet

Procedure Title: Spill Response

Procedure Number: TSO-07-10-REV 0

Effective Date: 01 September, 2007

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A. INTRODUCTION

Occasionally chemicals or other hazardous materials are spilled and need to be cleaned up. It is the TSO's duty to respond to hazardous waste spills quickly and effectively in order to protect the public and environment. If the spill is large and/or presents a danger to TSO personnel, the fire department should be contacted since they are prepared for all types and magnitudes of accidents.

B. PURPOSE

The purpose of this procedure is to outline the proper way to respond to a variety of spills, and to explain TSO responsibilities as first responders.

C. PROCEDURE

How is the TSO contacted?

Emergency calls may reach the Technical Safety Office either directly or through Public Safety. The phone numbers for both the TSO and Public Safety are located on phones near the SAA and on the "Emergency Spill Assistance" cover of all SAA binders. SAA managers should also have a copy of the orange "Spill Assistance" sticker that is included in the SAA binder. During business hours, employees who find a spill can contact the TSO directly by calling x 2310. Public Safety may also call the TSO and request their assistance in cases of emergency. If an emergency occurs after-hours, Public Safety will notify TSO personnel using a list of emergency contacts that includes TSO staff home and cell phone numbers.

What do we ask when a spill is reported?

- What was spilled (chemical name) and the quantity
- What building and room number
- The specific location where the spill occurred
- Is anyone injured or unconscious on the scene
- The contact information for the person reporting the spill

How do we respond?

Once TSO personnel have the pertinent information, they should consult the Material Safety Data Sheet (MSDS) of the chemical. The TSO possesses a binder containing many MSDS listings for common chemicals, but an MSDS can be located online very quickly and easily using a keyword search. The MSDS includes a spill response section that details suitable PPE and provides best practices for spill clean-up. Before leaving for the scene of the spill, TSO responders should obtain the appropriate spill kit from the TSO storage area in Physical Sciences Room 102. These spill kits contain items such as absorbent paper, gloves, and other equipment necessary for a hazardous material spill clean-up.

What do we not respond to?

The TSO is not required to sample spills that can be handled by Custodial Services. These spills may involve water, vomit, blood, feces, urine, etc. If it is necessary for TSO staff to respond to a spill involving biological waste, a 10% solution of bleach should be poured over the spill since it is capable of killing > 99% of biological pathogens.

How should materials used to clean-up spills be disposed of?

All rags, absorbent pads, etc. that have been used in the clean-up of a spill and are contaminated with the spilled substance are considered to be hazardous waste. They should be consolidated into a trash bag or another suitable container and labeled as solid waste with the spilled chemical's name (see the procedure on Labeling Waste). The container then can be transported to the TAA shed for storage until a hazardous waste disposal company removes it permanently.

D. SPECIFIC SPILLS

1. Mercury

Specific equipment is required when responding to a mercury spill. The mercury spill kit in the Physical Sciences Room 102 storage area includes all the items necessary, including mercury syringes, mercury absorbent powder and mercury indicator. When using the mercury absorbent, water must be added so that the mercury absorbent material forms an amalgam with the mercury. After cleaning up all the mercury, mercury indicator (sulfur) is sprinkled over the contaminated area and left to stand for 1-3 days. If the yellow powder turns brown, mercury is still present and the area should be cleaned again by repeating the absorbent and indicator process until all the mercury is removed.

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2. *Blood*

Although the TSO is not usually required to respond to calls involving blood, it is possible if necessary to absorb wet blood using an absorbent pad. Any pads or rags used in the clean-up should be placed in a biowaste bag and taken to the biowaste shed. Dried blood can be removed using a solution of 10% bleach. If the stain is in an outdoor location such as a parking lot, or on an unsmooth surface, covering the area with the bleach solution is sufficient.

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REVISION TRACKER

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