

INSIDE: Laidlaw Environmental Buys Safety-Kleen. Page 56



HAZARDOUS[™]

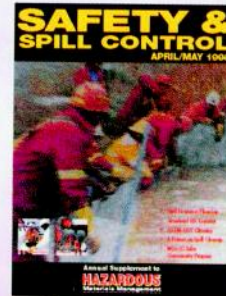
Materials Management

The Canadian Publication of Pollution Prevention and Control™

April / May 1998

EMISSIONS REDUCTION

An Update on the Largest Releases



Special Focus Section
Pages 31-50

www.hazmatmag.com

\$10⁰⁰ CDN.

Safety & Spill Control

What spill response equipment is required? RCRA requires the plan to include "...a list of emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external)), and decontamination equipment), where this equipment is required...[40 CFR 265.52 (e) 1997]."

Under OSHA, the definition of appropriate spill control equipment is limited but is not defined any more clearly than to say that "...US Department of Transportation specified salvage drums or containers and suitable quantities of proper absorbent shall be kept available and used in areas where spills, leaks, or ruptures may occur [29 CFR 1910.120 (j)(1)(viii) 1995]."

Equipment and training

Spill kits, combined with proper training of employees, take the guesswork out of HazMat spill response. By placing spill kits in key locations throughout a plant, spills can be controlled quickly and effectively. HazMat responders have immediate access to absorbent products to effectively dam, dike, and absorb liquids. To determine the number and type of spill kits needed, research the following:

What liquids are most likely to spill? Your answer will not only determine the type of absorbent, but will also dic-

tate the type of personal protective equipment needed. Typically, companies have more than one liquid on site. Liquids may include oils, solvents, coolants, acids, and/or bases. Absorbents basically come in three varieties for different applications: selective, non-selective, and universal.

1. Selective absorbents soak up only petroleum-based liquids and repel water.
2. Non-selective absorbents soak up most liquids, but are not compatible with all liquids of them. For instance, a cellulose sock will absorb an acid, but may react adversely to it.
3. Universal absorbents soak up and are compatible with most liquids including acids and bases.

In which locations are spills most likely to occur?

Loading docks, drum storage areas, near bodies of water—anywhere liquids are stored, dispensed, or transported—are areas where spill kits are necessary. Your answer will determine the number and type of spill kit containers that best suit your application. To meet virtually every need, spill kits are packaged in a variety of containers including mobile, weather-resistant, stationary, or shippable containers. Some kits are packaged in DOT-specified containers to meet OSHA's HAZWOPER requirements. Still, others allow overpacking of punctured or leaking drums.

Given the worst-case scenario, what is the largest spill that could occur?

Your answer will determine how much absorbents to have on hand. If your worst-case scenario is a five-gallon spill or a 100-gallon spill, sufficient absorbents are necessary. Spill kits range in absorbency from one to 146 gallons. Additional spill response tools have been developed including non-absorbent, polyurethane dikes, and drain covers. Dikes divert large spills or completely contain small spills. Drain covers form a seal around drains to prevent the entry of spilled liquids, from entering.

Is additional equipment required?

Personal protective equipment is also required to protect workers who are trained to respond to a spill. The equipment required is dictated by the nature of the incidents which could possibly occur and the hazardous materials encountered. Many choose to outfit spill kits with personal protective equipment for easy access. ♦

Stacie Fronk is the editor of New Pig's Technical Newsletter, New Pig Tech News & Views, in Tipton, Pennsylvania.

**For more information
 Circle Reader Service #142**

Demonstration Proves Product Effective



A firefighter uses Pyrocool F.E.F. to rapidly suppress a fuel fire at a demonstration at the Lambton Industrial Fire School on March 24, 1998.

On March 24, Nochar Canada Inc. demonstrated its Pyrocool Fire Extinguisher Foam at the Lambton Industrial Fire School in Sarnia, Ontario. The objective of the demonstration was to show how a single agent can take the place of a number of different agents or techniques which are not really suited to pressurized or 3-dimensional flammable liquid fires. Importantly, Pyrocool—which is completely biodegradable and non-reportable—doesn't contain any of the fluoro-surfactants used in aqueous film-forming foam technologies which are standard in the industry. When these foams are discharged, they must be reported, contained, and remediated because the implications for the environment can be severe.

The demonstration test results indicate that only a tiny fraction of the product can do a more effective job compared to traditional chemical alternatives, at less than one quarter the cost. The company is currently at work formalizing tests for extinguishing high-heat-release materials such as PVC, polyethylene, and more. ♦

Written by Todd Latham, publisher of this magazine.