Hazardous Materials and Waste Standards

A hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from many sources, ranging from industrial manufacturing processes to human bodily fluids. These wastes come in many forms, including liquids, solids gases, and sludges.

The Environmental Protection Agency (EPA) developed a regulatory definition and process that identifies specific substances known to be hazardous and provides objective criteria for including other materials in the regulated hazardous waste universe. OSHA regulate human waste, body fluids, and biological agents (i.e. bacteria).

To the extent possible, EPA has tried to develop hazardous waste regulations that balance the conservation of resources, while ensuring the protection of human health and environment. Many hazardous wastes can be recycled safely and effectively, while other wastes will be treated and disposed of in landfills or incinerators. Recycling hazardous waste has a variety of benefits including reducing the consumption of raw materials and the volume of waste materials that must be treated and disposed.

Treatment Storage and Disposal Facilities (TSDFs) provide temporary storage and final treatment or disposal for hazardous wastes. Since they manage large volumes of waste and conduct activities that may present a higher degree of risk, TSDFs are stringently regulated. The TSDF requirements establish generic facility management standards, specific provisions governing hazardous waste management units and additional precautions designed to protect soil, ground water and air resources.

The rules that apply to managing hazardous materials inside your facility are mainly concerned with protecting employees who need to work with the materials, as well as patients and visitors who could be affected by the materials.  The general framework for the rules is largely established by the Occupational Safety and Health Administration (OSHA), the federal agency concerned with worker safety. Once materials have been used or exposed, they fall into the "hazardous waste" category and must then comply with another set of rules (RCRA), established by the EPA.

OSHA uses the Hazard Communication Standard (HazCom). Complying with the HazCom is both a legal requirement and good common sense. Good communications, together with good workplace practices should help to reduce the incidence of illness and injuries from chemical sources.

Compliance and pollution prevention does not have to translate to higher operating costs.  By implementing good operating practices, reducing materials generation at the source or recycling wastes health care facilities can improve safety, reduce the volume of hazardous materials present, reduce the volume of hazardous waste generated, lower operating costs and liabilities associated with hazardous material management and waste disposal.

You don’t have to be a medical facility to have someone’s blood dripping all over the floor from a cut from a container, scissor, or knife. Biohazardous waste is waste contaminated with recognizable human blood or bodily fluids that may be infectious, and containers or equipment containing fluid blood or infectious fluids.  Biohazardous waste includes Pathological waste includes tissues, surgical specimens, and body parts such as limbs that must be disposed by incineration. Biohazardous waste does not include dried blood, urine, saliva, or feces.

Following are the basic requirements for the storage and disposal of biohazardous waste:

* Must be disposed in a red biohazard bag that is marked and certified for puncture and tear resistance.
* Must be disposed in a hard sided container with a lid.
* The container must be labeled with biohazard labels that are visible from all sides of the container.
* The container must be kept closed when not actively adding waste to the container.

Pharmaceutical waste is segregated into non-hazardous pharmaceutical waste, trace chemotherapy waste, and RCRA and Bulk Chemotherapy waste.  Hazardous pharmaceutical waste containers must be dated with the accumulation start date.  These containers can be stored for a maximum of 180 days at the point of generation.

Chemical spills may require special procedures for cleaning safety and completely. OSHA requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to downstream users to communicate information on these hazards. The information contained in the SDS is largely the same as the MSDS, except now the SDSs are required to be presented in a consistent user-friendly, 16-section format.

Employers should have the appropriate counter measures in both equipment and chemicals to clean any chemical fluid used in the facility. The SDS should be referenced to be sure the spill is cleaned correctly. Employees should leave chemical spills alone and notify a manager to contact the facility environmental services team to address the spill. Environmental services personnel should be properly trained in managing and cleaning chemical spills.