

Disposal of Chemical Waste

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Objectives:

Chemical waste is any chemical that exhibits hazardous characteristics as defined by federal and Illinois rules and regulations. This is intended to provide the user of chemicals with safe storage, and use of such chemicals in compliance with regulatory requirements.

Material & methods:

The risk of chemicals in laboratories includes elements, compounds, mixtures, commercial products, cleaning products, solvents, and lubricants. Many chemicals are poisonous, irritating, corrosive, carcinogenic, pyrophoric, or explosive. It is not uncommon for chemicals to have two or more of these properties. Chemicals that may be relatively safe when used alone can become very dangerous when mixed with other substances, either in a planned experiment or by accident. Furthermore, a material may not present any risk of exposure in one form, but may in another (e.g. solid vs. aerosol). Therefore, personnel who handle chemicals must consider the hazards and use appropriate controls and procedures such as Purchase small amounts that you will use up within a year, buy pre-made molar and normal solutions, read labels, handling and storage information on the manufacturer's label, Purchase chemicals in plastic containers to minimize potential breakage. If this is not possible, purchase shatter-resistant plastic coated bottles, Manage first-in, first-out, Indicate the date received and the date opened Pay particular attention to expiration dates. Dispose of open, partially used or expired chemicals, peroxide-forming compounds require frequent testing or disposal; keep all chemical containers off floors, carts and electrical equipment. Physically segregate chemicals according to compatibility, label the secondary storage containers or areas in which particularly hazardous chemicals may be used. These substances must be kept in a designated area and store hazardous chemicals below eye level. This simple task greatly reduces the likelihood of something falling from above and breaking. Cabinets with doors are safer locations than open shelves for hazardous chemicals. Safely transport any hazardous chemical and Place in secondary containment such as a bottle carrier is recommended. Avoid placing any chemical container in direct sunlight, underneath a sink or near heat sources. Place volatile or flammable chemicals only in specially designed refrigerators. Do not store hazardous chemicals in cold rooms. Be careful with reactive chemicals. Keep and read the SDS for each reactive chemical.

Result:

The user of chemicals is provided with general guide lines on safe storage, and use of such chemicals in compliance with regulatory requirements.