

# Safetygram

NCI Frederick

ISM164

Laboratory Personnel

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## Mixed Waste

“Mixed wastes” are both radioactive and chemically or biologically hazardous. They are a very expensive class of waste and many research institutions and universities have set policies for reducing or eliminating them.

These wastes are regulated by the Environmental Protection Agency (EPA) and the Nuclear Regulatory Commission (NRC) and require special precautions, storage and handling. The EPA Toxicity Characteristic (TC) rule sets concentration limits for toxic substances in waste materials; wastes exceeding these concentrations are regulated. As one example, a waste containing as little as 6 mg/L of chloroform is characterized as toxic.

Few facilities are licensed to treat and dispose of mixed chemical/radioactive wastes. As a result, mixed waste disposal is frustratingly expensive. As much as twenty times the disposal cost of an identical waste which is not radioactive. This is one of the reasons why EHS is very concerned when the generation of mixed wastes and requests your cooperation in eliminating it whenever possible.

Researchers can help by contacting Waste Management at x1384 whenever they are considering a procedure generating radioactive and chemically hazardous wastes. We have assisted several labs in locating alternative reagents which eliminate the chemical hazard. Other labs use only short lived isotopes which, after storage, eliminates the radioactive hazard.

Segregating wastes also helps. For instance, collecting aqueous and organic wastes in different waste containers or segregating long lived isotope waste from short lived (as explained in Safetygram ISM152). Mixed waste containing radionuclides and medical pathological waste may be disinfected with bleach solutions or other disinfectant to reduce disposal costs. Proper identification and segregation of chemical wastes is described in the Health, Safety and Environmental Compliance Program Manual.

Please avoid generating mixed waste. Segregate, contain and correctly identify those wastes which you must generate. These actions, on your part, will aid NCI Frederick in providing safe, reliable, cost effective waste management.

Call Waste Management, x1384, if you have any questions or before proceeding with generating any mixed wastes.