

Safetygram

NCI-Frederick

ISM-155

Laboratory Personnel

January 2012

Surplus Chemicals and Waste Minimization

EHS redistributes surplus laboratory chemicals and encourages all programs at the NCI-Frederick to take advantage of this service. Laboratories have requested surplus chemicals valued in excess of \$10,000 per year through this service. The current listing of surplus chemicals is available through the NCI-Frederick home page

<http://home.ncifcrf.gov/ehs/ehs.asp?id=79>

Laboratories generate "waste" - unused or partially used chemicals when they change procedures, discontinue programs, or inadvertently order excess quantities. Unused chemicals can represent a significant portion of both the volume and cost of hazardous waste disposal. Waste Management picks up, sorts, and separates surplus laboratory chemicals suitable for redistribution. Most of the chemicals to be redistributed have not been used and are in unopened containers.

EPA regulations require that each generator minimize the generation of hazardous waste to the extent economically feasible. In addition to fulfilling legal requirements, waste minimization saves purchasing and disposal costs, and reduces potential risks to public health and the environment.

Laboratories can minimize waste generation by:

1. Substituting non-hazardous materials. For example, to clean glassware, replace chromic acid with an alkaline detergent such as Micro (Safetygram ISM-137).
2. Changing procedures. For instance, count radioactive samples in 7 mL instead of 20 mL scintillation vials.
3. Purchasing chemicals in smaller quantities to reduce the amount of unused chemicals that ends up as laboratory waste. The favorable price of large "economy size" packages is quickly offset by the disposal costs for any unused remainder.
4. Using surplus chemicals whenever possible.

Waste minimization may also increase the safety and efficiency of your laboratory. Working with smaller quantities and less hazardous materials reduces the risk of accident and overexposure, decreases storage problems, and decreases the opportunity for chemicals to decompose or become contaminated. Before filling out your next chemical purchase request, ask yourself:

- Is the material available through the surplus chemical inventory?
- Is a less hazardous substitute available?
- Will the material be used in a reasonable period of time?

Please telephone Waste Management at x5718 if you have any questions about surplus chemicals or waste minimization.