

MANAGEMENT OF CONSTRUCTION AND DEMOLITION WASTE

(For assistance, please contact EHS at (402) 472-4925, or visit our web site at <http://ehs.unl.edu/>)

Purpose

This Safe Operating Procedure provides guidance to University of Nebraska-Lincoln (UNL) staff and/or contractors regarding management of structural building waste (i.e., carpet, brick, mortar, wood, tile, etc.) from construction, renovation, and demolition projects. Management of other types of waste (i.e., solvents, paints, aerosol cans, etc.) and asbestos containing materials is beyond the scope of this SOP.

Potentially Regulated Building Components

Remodeling, renovation, and demolition may trigger several regulations, such as hazardous waste management and disposal, special waste disposal, asbestos in building materials, lead exposure and lead in target housing, polychlorinated biphenyl compounds (PCBs), etc. The list below provides examples of typical building components that may trigger certain regulations. Contact the EHS office if you encounter any of these materials to coordinate proper handling and disposal.

- *Standard fluorescent and high intensity discharge lamps* and associated non-electronic ballasts. See EHS SOP, ***Fluorescent and Other Non-Incandescent Lamps, Light Bulbs, and Ballasts***.
- *Mercury-Containing Thermostats and Switches*.
- *Pipes*. Older structures may contain lead pipes. Lead pipes can be recycled as scrap metal, but cannot be disposed in a construction and demolition or municipal solid waste landfill.
- *Batteries*. Batteries, other than alkaline variety, may contain heavy metals (such as silver, cadmium, and lead) and are regulated under the hazardous waste laws when disposed. See EHS SOP, ***Battery Disposal***.
- *Transformers*. Older transformers may be filled or contaminated with PCBs. Testing for PCBs may be necessary if there is no data for older transformers.
- *Caulking*. Window caulking, masonry expansion joint caulking, or similar architectural applications, used in buildings constructed in 1979 or before, may contain PCBs at regulated concentrations.
- *Exit signs*. Exit signs may operate off batteries or radioactive sources (i.e., tritium). If battery operated, the batteries must be removed prior to demolition. Contact EHS prior to removal of tritium exit signs because several regulatory requirements apply.
- *Smoke detectors*. Smoke detectors contain toxic metals and are regulated under the hazardous waste laws when disposed. Some smoke detectors also contain a radioactive source. See EHS SOP, ***Computers, Electronic Equipment, and Smoke Detectors***.

- *Sump or trap waste.* Depending on the function/purpose of the sump/trap, the sludge may be hazardous, generally for metals, pesticides, or solvents. Coordinate with EHS for evaluation of sump/trap sludge.
- *Paints and coatings.* Windows, doors, handrails, grates, and other surfaces may be coated with lead-based paint. Testing may be necessary to determine both worker protection requirements and disposal options. If the work is conducted in child-occupied facilities or target housing, additional requirements apply (such as credentialing, work practice controls, etc.).
- *Treated timbers.* Landscaping and structural timbers that have been treated with CCA, creosote, or pentachlorophenol may require testing to determine disposal options.
- *Asbestos Containing Building Materials.* Tiles, mastics, pipe insulation, countertops, ceiling textures/tiles, and other building materials containing greater than 1% asbestos are subject to asbestos disposal regulations. These materials must be hauled by a licensed asbestos abatement firm and may not be discarded as ordinary refuse.

Prohibitions

- Demolishing a building or a house and burying it on-site or off-site.
- Using demolition waste other than uncontaminated soil, rock, brick, concrete rubble and asphalt rubble as fill for land improvements.
- Depositing demolition waste in a stream, creek, or river.
- Open burning of buildings or demolition waste without proper state and local permits. Open burning is available with a permit for tree limbs, vegetation and non-treated wood. Open burning is not a permitted means of disposal for treated wood. Ash from the burning of a building is subject to hazardous waste testing/determination.
- Demolishing a commercial, industrial or public building without a thorough inspection to identify asbestos containing materials (ACM) and without a 10-working day advance notice to the Nebraska Department of Health & Human Services and the NDEQ Air Quality Division. Notification to the Lincoln-Lancaster County Health Department is also required within the limits of Lancaster County. Abatement is required prior to demolition. Note that additional worker protection requirements also apply to building demolition and renovation projects that may disturb asbestos containing materials or presume asbestos containing materials. Contact Facilities Management and Planning for additional information.