

UNIVERSITY OF NORTHERN IOWA
PRE-DEMOLITION
ENVIRONMENTAL CHECKLIST

The following is intended as an aid to evaluate potential environmental hazards contained in building materials or spaces prior to start of demolition. The form should be reviewed by the design person from Design & Construction to determine if there is any potential to disturb any environmentally sensitive material listed on the form. If there is a potential problem the appropriate Facilities Management personnel should be contacted to review the area in question and determine if a hazardous material is present that will be disturbed during the construction. Suspect materials should be sampled for testing and evaluation prior to start of demolition or construction. Sampling should be done according to the standard recommended procedures.

Project: _____

Design & Construction Representative: _____

Facilities Management Representative: _____

Asbestos:	Assigned Construction Project Manager
Lead:	Assigned Construction Project Manager
PCBs:	Operations & Maintenance, Supervisor, (Brandon Uhlenhopp)
Mercury:	Operations & Maintenance, Supervisor, (Michael Henny)
CFCs:	Operations & Maintenance, Supervisor, (Michael Henny)
Hazardous/ Radiation/Waste : Waste	Environmental Safety Coordinator, (Gordon Krueger)
Other :	Area Mechanic

Housing & Dining Representative: _____

Asbestos

Asbestos can be found in many types of building materials, products and insulation.
Asbestos presence or absence must be confirmed by sampling and laboratory analysis.

Asbestos type materials can be found on, or in:

Boiler rooms:

Boilers, Furnaces, Fireplaces, and their components: _____

Cement sheets near heating equipment: _____

Boiler insulation: _____

HVAC Duct insulation: _____

Ductwork flexible fabric connections: _____

Fireproofing materials: _____

Firedoors: _____

Flooring:

Vinyl floor tile: _____

Vinyl sheet flooring: _____

Asphalt tile: _____

Linoleum paper backing: _____

Mastic (floor tile, carpet, etc.) _____

Electrical:

Electrical panels: _____

Electrical wiring insulation: _____

Heating and electrical ducts/conduit: _____

Pipe and other insulation:

Aircell (corrugated cardboard) _____

Millboard: _____

Preform: _____

Joint compound: _____

Spray applied insulation: _____

Blown-in insulation: _____

Block: _____

Surfacing materials:

Acoustical plaster: _____

Decorative plaster: _____

Textured paints coatings: _____

Spray applied materials (acoustical, decorative, or insulative): _____

Roofing:

Roofing shingles: _____

Roofing felt: _____

Base Flashing: _____

Cement materials (Transite):

Cement pipes (flues & vent pipes): _____

Cement Wallboard: _____

Cement siding: _____

Pegboard: _____

Ceiling materials:

Ceiling tiles: _____

Ceiling tile adhesives (pucks): _____

Lay in ceiling panels: _____

Acoustical tiles: _____

Miscellaneous:

Taping, joint, and spackling compound: _____

Caulking/putties: _____

Fire curtains and blankets: _____

Laboratory hoods, table tops, gloves, etc.: _____

Gaskets: _____

Lead

Lead and lead based paint are common items in many older buildings. The use was discontinued in 1978, however, many buildings have multiple layers of paint and should be examined carefully. Lead can be found in the following areas:

Lead Based Paint: (woodwork, metal equipment, interior/exterior uses) _____

Lead-Acid Batteries: (lighting, exit signs security systems) _____

Lead flashing molds and roof vents: _____

Lead Pipes and solder: _____

Paints can also be tested for chomium and cadmium .

The presence of lead does not necessarily create a hazardous condition.

Poly-Chlorinated BiPhenyls (PCBs)

PCBs are a family of chlorinated compounds that were dielectric or especially non-conductive. PCBs are oily liquids that are usually pale yellow to clear. The following is a list of areas in buildings where PCBs may be found:

Transformers: _____
Transistors: _____
Capacitors (old appliances, electronic equipment): _____
Heat Transfer Equipment: _____
Light Ballasts: _____

Mercury

In general, do not remove the mercury from a device such as a switch. Keep the product intact and remove and store in a covered container in a manner that will prevent breakage, spillage, or release. Label and store the mercury containing devices to ensure proper handling and disposal.

Specialty Buildings and Concerns:

Clinics, Laboratories, and Schools. Mercury can be found in sink traps and many other pieces of equipment and devices. Special care should be given to mercury items in these buildings.

Batteries:

Smoke Detectors: _____
Emergency Lighting Systems: _____
Elevator Control Panels: _____
Exit Signs: _____
Security systems and Alarms: _____

Lighting:

Fluorescent Lights: _____
High Intensity Discharge: _____
 Metal Halide: _____
 High Pressure Sodium: _____
 Mercury Vapor: _____
 Neon: _____
Switches for lighting using mercury relays: look for any control associated with exterior or automated lighting systems: _____
"Silent" Wall Switches: _____

Heating, Ventilating, and Air Conditioning Systems:

Devices in this category control a variety of functions such as water pressure, air pressure, on/off, and flow control. Check any control associated with air handling units.

- Thermostats: _____
- Aquastats: _____
- Pressurestats: _____
- Firestats: _____
- Manometers: _____
- Thermometers: _____

Boilers, Furnaces, Heaters & Tanks:

- Mercury Flame Sensors by pilot lights: _____
- Manometers, Thermometers, Gauges: _____
- Pressure-trol: _____
- Float or Level Controls: _____
- Space Heater Controls: _____

Electrical Systems:

- Load Meters and Supply Relays: _____
- Phase Splitters: _____
- Microwave Relays: _____
- Mercury Displacement Relays: _____

Other Industrial Equipment and Areas of Mercury Concern:

Any control used for measurement of vacuum, pressure, fluid level, temperature, or flowrate could contain mercury. Included are thermostats, thermometers, manometers, pressurestats, etc. Other switches may have been used in old clocks, water cleaning systems, pneumatic control switches, and other areas.

ChloroFluoroCarbons

CFCs (chlorofluorocarbons) and HCFCs (hydrochlorofluorocarbons) are man-made refrigerants that destroy the ozone layer.

- Fire Extinguishers (both portable and installed halon suppression systems) _____
- Air Conditioners (rooftop, room, and central) _____
- Walk in Coolers (refrigeration or cold storage areas) _____
- Water Fountains and Dehumidifiers: _____
- Refrigerators/Freezers/Chillers: _____
- Heat Pumps: _____
- Vending Machines/Food Display Cases: _____

Hazardous Waste

Hazardous Waste: (all HW including household HW) must be properly handled and disposed of prior to demolition. _____

Other

The following is a list of other environmental and regulatory issues that should be addressed prior to demolition:

Oil: (used oil, hydraulic oils in door closers, elevator shafts, etc.) must be collected and properly disposed of prior to demolition. _____

Tanks: no evidence of former heating tanks or storage tanks exists. _____

Glycol: _____

Lithium Bromide: _____

Any other liquid in mechanical equipment: _____

This guidance document is not intended as a substitute for reading the rules and statues and making your own independent determination of their applicability to your demolition project. This is only intended to be a risk reduction tool to help find potential hazards that would disrupt construction if not found until during the project. Items listed are not necessarily complete or all encompassing, merely a checklist of some potential areas to examine prior to demolition.

