

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 Facilities Planning 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 Physical Plant 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 Name: \_\_\_\_\_

Description of Project Area and Work Involved: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Facilities Planning Representative: \_\_\_\_\_

Physical Plant Representative: \_\_\_\_\_

Asbestos    Gordon Krueger

Lead        Gordon Krueger

PCBs        Gary Saak

Mercury    Ron Hall

CFCs        Ron Hall

Hazardous Waste    Gordon Krueger

Other        Area Mechanic

DOR 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.