Safety Instruction

Construction and Remodel Safety

General

- Oregon-OSHA and DEQ regulations on asbestos, lead, and silica require that building materials be sampled prior to demolition, replacement, or remodeling.

Policy

- OSU construction safety policy requires sampling for any construction/remodeling that will impact any of the following building materials, surfaces, or equipment:
  - Carpet
  - Floor Tiles
  - Walls
  - Ceilings
  - Roofs
  - Sprayed-On-Insulation
  - Insulation on Plumbing
  - Laboratory Benches, Cabinets, and Other Laboratory Furnishings
  - Fume Hoods
  - Chalkboards

Sampling and Surveys

- List does not cover ALL regulated material.
- When requested (7-2273), EH&S will perform necessary sampling prior to any demolition activities.
- Sample analysis fees may be the responsibility of the requesting Department/Unit.
- EH&S will consult with departments after the sample results are evaluated.
- Regulatory fines issued by OR-OSHA or DEQ for improper demolition or disposal will be the responsibility of the department or unit.

Excavation Operations

- Special rules apply to excavations. The most serious hazard of trenches is cave-in due to improper shoring and sloping of the trench.
- Other injuries are caused by work activities performed in the trench, including accidents due to falling materials, machinery, and exposure to noxious gases.
- Electrocution from utility lines or pipes, and slips and falls while climbing in and out of trenches are other hazards.
- Factors to consider before shoring or sloping are:
  - Determine the location of underground pipes, electrical, gas, sewage, or fuel lines before digging.
  - Trench depth: If the trench is 5 feet deep or more, it must be shored or sloped. If there is a possibility of soil movement, even shallower trenches have to be shored. If there is any doubt -- shore or slope the trench.
  - Running Soils: The more liquid the soil, the more you need to use additional types of shoring.
  - Changing Weather Conditions: Hard packed soil can become soupy and unstable after rain. Trenches which are safely sloped or shored in dry weather can be very dangerous in wet weather.
  - Heavy loads in the area: Don't park heavy equipment next to a trench. Nearby structures such as buildings, curbs, trees, and utility poles will exert stress on trench shoring.
  - Vibration: If you are digging a trench near a roadway or where other operations create vibration, make the shoring strong enough to withstand the added stress.
  - If a trench is 5 feet deep or more, work should be supervised by an individual knowledgeable about trench safety.
  - Always shore from the top down, and take it out from the bottom up.
o Keep water away from trench banks.
o Make sure electrical lines and cables are grounded, guarded or de-energized.
o Make sure that shoring material is the right kind, in good condition, and free of defects.
o Place soil removed from the trench at least two feet from the trench rim.
o Always wear hard hats and other necessary protective equipment.
o Notify a supervisor when working in a trench.
o For easy, safe and quick exit, set exit ladders every 25 feet for trenches greater than 4 feet deep.
o Post warning signs and barricade areas that may be dangerous to employees or the public.