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
 - o Floor Tiles
 - o Walls
 - Ceilings
 - o Roofs
 - Sprayed-On-Insulation
 - Insulation on Plumbing
 - o Laboratory Benches, Cabinets, and Other Laboratory Furnishings
 - o Fume Hoods
 - o 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.
 - o 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.
 - \circ Always **shore from the top down**, and take it out from the bottom up.

Contact EHS: safety@oregonstate.edu oregonstate.edu/ehs/ 541 • 737 • 2273

- 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.