Asbestos is the name of a group of minerals that occur naturally in the environment. Asbestos deposits can be found throughout the world and it is still mined in Australia, Canada, South Africa and the former Soviet Union. It differs from other minerals in its crystal development, which are long, thin fibers. These fibers are very strong and resistant to heat and chemicals. For these reasons asbestos was added to many older building materials including floor tiles, ceiling tiles, insulation on pipes and ducts, acoustical and decorative coatings, and roofing materials. These types of building materials are presumed to contain asbestos if installed before 1980, unless testing has proven otherwise.

When left intact and undisturbed, these materials do not pose a health risk to building occupants. There is a potential for exposure only when the material becomes damaged to the extent that asbestos fibers become airborne and are inhaled. Asbestos is more likely to release fibers when it is friable. The term friable means the material can be easily crumbled. If powdered or friable forms of asbestos are disturbed and become airborne, an inhalation hazard may result. In non-friable materials like floor tile, ceiling tiles, laboratory cabinet tops, and caulks, the asbestos fibers are tightly bound in a matrix which prevents the release of fibers to the environment unless the material is abraded, sanded or sawed.

If exposed to asbestos, several factors may influence whether harmful health effects will occur. These factors include the dose (how much), the duration (how long), and whether or not you smoke. Generally, adverse health effects from asbestos are the result of long term exposure to high concentration of airborne fibers. According to the EPA, airborne asbestos levels in buildings are typically very much lower than those identified in industrial work places where asbestos health effects have been observed. People who have been exposed to asbestos and are also exposed to cigarette smoke, have a greater risk of developing lung cancer than someone who does not smoke.

When intact and undisturbed, asbestos building materials do not pose a health risk for building occupants. Damaged asbestos containing materials should be reported to Physical
Plant, or to DEHS at 852-6670. Specially trained staff are available to visit the area, determine if a suspect material contains asbestos, and to perform a hazard assessment. To avoid asbestos exposure, never attempt to handle damaged asbestos.

At UofL, DEHS provides asbestos management and abatement services. All work involving removal, repair, maintenance or cleanup of asbestos containing material is conducted by licensed and certified workers in accordance with Federal, State and local OSHA and EPA regulations. Adherence to these regulations is important to assure protection of workers, building occupants and the environment.

It is not necessary to remove all asbestos containing materials from a building to assure a safe workplace." Rather, EPA recommends a practical approach that protects the health of building occupants. This approach includes locating and identifying asbestos materials in buildings, and proper management of the material. The following summarizes the five major facts that EPA has presented in congressional testimony.

- **FACT ONE**: Although asbestos is hazardous, human risk of asbestos disease depends upon exposure.
- **FACT TWO**: Based on available data from across the nation, prevailing asbestos levels in buildings appear to be very low. Accordingly, the health risk faced by building occupants also appears to be very low.
- **FACT THREE**: Removal is often not a building owner's best course of action to reduce asbestos exposure. In fact, an improper removal can create a dangerous situation where one did not previously existed.
- **FACT FOUR**: EPA only requires asbestos removal in order to prevent significant public exposure to asbestos, such as during building renovation or demolition.
- **FACT FIVE**: EPA does recommend in-place management whenever asbestos is discovered. Instead of removal, a conscientious in-place management program will usually control fiber releases, particularly when the materials are not significantly damaged and are not likely to be disturbed.

Asbestos Awareness Training is provided for Physical Plant Maintenance and Custodial staff. For more information about DEHS asbestos polices and services, or questions concerning asbestos in university buildings please contact Kathy Strecker at 852-6670.