

UTS 174 – Environmental Health and Safety: Risk Assessment Guidelines

UTS 174 – Environmental Health and Safety Policy contains the following statement in the “Procedures” section relative to performing a risk assessment: *Each UT institution shall perform a risk assessment to identify environmental, health, and safety hazards that are present on their respective campus, along with the associated compliance requirements. Policies and procedures shall be created and implemented to address the identified environmental, health, and safety risks on each campus. Subject areas to be included in the risk assessment may include but are not be limited to occupational safety, fire and life safety, chemical safety, biological safety, radiation safety, environmental affairs, and emergency management. Each institution shall have the authority to determine the appropriate EH&S risk assessment methodology, policies, and procedures for their respective institutions. EH&S policies and procedures shall be continuously assessed by each institution and programs updated accordingly to maintain a compliant and effective environmental, health, and safety program.*

The following guidelines are provided to help each institution with developing a risk assessment process meeting the objectives for the listed subject areas in the statement. Each institution will determine its own level of risk assessment to comply with this policy based on existing campus facilities / programs and new facilities / programs that may present new or unique hazards.

An environmental health and safety risk assessment is an initial and ongoing audit process or review of activities at each institution for potential exposure to hazards, threats, and environmental pollutants based on probability of occurrence and magnitude of potential loss or harm. The risk assessment process helps to identify regulatory requirements and reviews processes and procedures in place to comply with applicable environmental health and safety regulations and best management practices. The purpose is to help each institution focus on areas of concern, mitigate potential harm or loss to people, intellectual property, facilities, or damage to institutional reputation, and prioritize their use of resources in order to maximize response and recovery efforts.

- **Occupational Safety Risk Assessment – may include but is not limited to the following items:**
 - Areas for consideration of risk assessment for special hazards include:
 - Art studios / sculpture and ceramic support areas.
 - Facilities: physical plant / shops and trades / grounds maintenance / custodial.
 - Hazardous waste collection storage and processing units.
 - Laboratory animal facilities (Vivaria).

- Laboratories: clinical/medical, research and teaching.
 - Medical, dental and surgical facilities (hospitals, teaching, and outpatient).
 - Print shops / Photo development dark rooms.
- Periodic risk / hazard assessment surveys of these areas is recommended.
- Job Hazard Analysis (JHA) of various positions / locations for hazard exposures.
 - Physical – presence of noise, electric shock, extreme hot / cold, lasers, etc.
 - Biological – presence of recombinant DNA and other potentially infectious agents / materials.
 - Chemical – presence of corrosives, flammables, pyrophoric materials, nano-materials, peroxide formers, toxic materials, etc.
 - Radiological – presence of radioisotopes, radioactive materials, or radiation producing machines / x-ray devices.
 - Environmental controls and personal protective equipment in place.
- Review of position JHA for potential inclusion in an Occupational Health Program.
 - Positions / job functions working with animals.
 - Positions / job functions requiring respiratory protection.
 - Positions / job functions working with infectious agents and / or bloodborne pathogens.
 - Positions / job functions working with extremely hazardous substances / toxins.
 - Positions / job functions working in high noise or high dust environments.
 - Positions / job functions working with radioactive materials.
 - Positions / job functions working with class 3b or IV lasers.
 - Emergency response personnel – HazMat, trained givers of first-aid/CPR/AED, and police personnel.
- **Fire & Life Safety Risk Assessment – may include but is not limited to the following risk assessment items:**
 - Acquisitions of real property with buildings to be used for campus purposes, whether the acquisition of the real property interest is by gift, purchase, or lease, and conversions of buildings that are to be used for campus purposes must have a Fire & Life Safety evaluation completed for compliance with NFPA 101 or NFPA 101A Life Safety Code as per *UTSA 135 – Fire and Life Safety Reviews*.
 - Ongoing periodic risk evaluation programs, to include fire alarm and suppression system testing and maintenance, should be in place at each institution to ensure fire and life safety systems are in compliance with the applicable revision of the NFPA 101 Life Safety Code, and other NFPA codes as referenced therein, and as adopted by the State Fire Marshal’s Office.

- These would include inspections / evaluations by institutional staff, a professional engineering firm, and the State Fire Marshal or a third party insurance carrier.
- **Environmental Affairs Risk Assessment – may include but is not limited to the following risk assessment items:**
 - Acquisitions of real property by U.T. institutions will complete an environmental site assessment (ESA) prior to acquisition of any real property asset, except as specifically provided for exemption in policy *UTS 161 - Environmental Review for Acquisition of Real Property*.
 - All existing buildings and structures should be risk assessed with a survey for any asbestos containing materials (ACM) or have a builder’s certificate noting the building or structure as free of ACM in compliance with the Texas Asbestos Health Protection Rules (TAHPR).
 - Environmentally sensitive features (creeks, streams, aquifer recharge karst features, animal habitat, etc.) on campus should be documented and risk assessed for potential sources of contamination initially and for environmental impact by each new construction project. Storm water drainage retention basins should be evaluated periodically and plans to mitigate contamination of creeks, streams and rivers such as a Spill Prevention Control and Countermeasures Plan for oil based products should be implemented as required by regulatory authority.
 - Sources of potential air pollution such as energy plants, boilers, emergency power generators, incinerators, and kilns should be reviewed to ensure applicable permits and source reduction methodologies are in place.
 - Hazardous waste storage areas should be reviewed for proper containment, any necessary permits, and that proper processing, transport and storage procedures to mitigate spills or releases are in place.
- **Emergency Management Risk Assessment – may include but is not limited to the following items:**
 - A review and assessment of the availability of multi-hazard emergency management plans and scheduled exercises to practice emergency response procedures as per *UTS 172 – Emergency Management*. UTS 172 has requirements for an annual review of the emergency management program.
 - A security and vulnerability review for hazards and potential terrorist targets on campus. UTS 172 has periodic requirements for this assessment.
 - A review for the need and availability of appropriate emergency notification systems for each campus and building.
 - A review and assessment of qualified personnel to participate in the incident command system (ICS) and national incident management system (NIMS) and basic readiness.