

Guidance for Completing a Project Safety Analysis



TEXAS A&M UNIVERSITY
Environmental
Health & Safety

A **Project Safety Analysis (PSA)** is a proactive planning tool used to identify and assess potential hazards and risks early in the life cycle of a project. The goal is to ensure that appropriate controls are in place to promote a culture of safety, operational efficiency and environmental responsibility across research and academic settings.

The PSA process not only enhances the safety of personnel and protection of the environment, but also contributes to efficient project execution and regulatory compliance.

A PSA is required for:

- Engineering research projects
- Academic or instructional lab activities involving unusual or hazardous procedures
- Student club projects involving technical experimentation or equipment use
- Any activity involving chemical, physical, mechanical or radiological hazards and biological materials not typically encountered in standard academic settings

Core Elements of a PSA

A comprehensive PSA should address the following components:

1. **Hazard Identification** - Evaluate the use of **equipment, chemicals, biological or radiological materials**, and **procedures** that could pose risks. Identify all non-routine activities or novel technologies involved.
2. **Risk Assessment** - Systematically analyze potential risks and estimate the severity and likelihood of incidents. Prioritize risks that require immediate attention or mitigation.
3. **Hierarchy of Controls** - Use hierarchy of controls to mitigate identified hazards ensuring alignment with existing safety standards and best practices. (See [NIOSH Hierarchy of Controls](#).)
4. **Training Requirements** - Identify any skill or knowledge gaps and recommend appropriate safety training. Ensure all project participants are trained before initiating work.
5. **Emergency Response Planning** - Outline response procedures for incidents such as chemical spills, fires, gas leaks or equipment failures. Include contact information for emergency personnel and resources.
6. **Waste and Disposal Management** - Provide a plan for the safe handling and disposal of hazardous chemicals, biological waste, radiological materials or decommissioned equipment.

Support from Environmental Health & Safety (EHS)

EHS Laboratory Safety staff are available to assist with:

- Hazard identification and risk assessment
- Guidance on control measures and engineering solutions
- Access to safety training and compliance resources
- On-site consultation and planning support

How to Submit a PSA

1. **Prepare your PSA** using the template provided by EHS.
2. Email your PSA to: labsafety@tamu.edu and include "**PSA**" in the subject line for prompt processing.
3. EHS will review the submission, schedule a site/lab visit and provide comments or request revisions as needed.
4. Upon final approval, your PSA will serve as your **Project Safety Plan**, required for implementation in any lab, shop or field setting where hazards are present.

For questions or additional information regarding engineering safety or the PSA process, contact:
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