

COE Safety Policy – COE-SP-0001

Working Alone or In Isolation

Facility: NMSU College of Engineering Facilities and Collaborative Areas

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Scope: This document describes definitions and procedures for personnel working alone in COE facilities and collaborative areas.

Date: December 07,-2017

Revision: Zero(0)

Introduction:

First and foremost the College of Engineering (COE) strives to provide a safe and healthy work environment for students, faculty and staff. We understand that research projects and experiments can require day and night time support. And while researchers are frequently asked to continue their work for long hours, we believe that this work should be conducted without undue risks to them. By ensuring that researchers do not work alone, in isolation, or without access to emergency support in case of an accident, the risk of serious injury is greatly reduced.

We recognized that nearly all activities in a laboratory could result in serious injury (e.g. cuts from broken glass or hitting ones head in a fall) the intent of this policy is to have the Principal Investigator (PI), COE Safety Specialist and researchers involved make a careful assessment of activities that may create a potentially hazardous condition. Guidelines for making these assessments are included in this document.

This policy would not apply to areas such as offices, conference rooms, break rooms, or classrooms where hazardous materials, equipment or operations would not be expected to be present. It is intended to mitigate those incidents and accidents where there is an immediate need for assistance from one or more individuals. These other individuals

can provide help and/or call for assistance (e.g. emergency responders).

Consideration for length of time requested for a working alone activity and training of the researcher as well as several other factors will be taken into consideration during the hazard analysis of a situation.

Hazard analysis techniques will be completed using one of three standard formats: What If, FMEA (Failure Modes and Effects Analysis) or HAZOP (Hazard and Operability Study). When complete, the hazard analysis will be summarized and attached to the approval form at the end of this document. Completed documents will be archived with the COE Safety Specialist and the academic department as appropriate.

Details of the Policy:

Definitions:

- Working Alone: Performance of any work by an individual who is not directly supervised by another person, or within audible or visible range of another individual and where assistance is not immediately available in the event of an injury, illness or emergency. This applies any time of day or night.
- Work: Means physical or mental effort or activity directed toward the production or accomplishment of something, regardless of employment status.
- Hazard: A situation, condition or object that may be dangerous to the safety or health of a person.
- Work Area: Any location where COE conducts business, academic projects or research is performed and considered part of the work area. This includes traditional business, classroom, and physical plant environments, field locations, collaborative sites, shops, studios, labs or other off-site work locations. Even storage rooms that are rarely used can be considered isolated and with limited contact to others in case of emergency.

Working Alone Activities Not Allowed

Potentially hazardous activities involving any of the following tasks are not allowed to be conducted alone or in an isolated area. To determine if an activity is potentially hazardous, details of the task(s) need to be established and a risk evaluation conducted. :

Item	Description
1.	Machine shop activities
2.	Hazardous materials – laboratory or elsewhere
3.	Hazardous machines or equipment - autoclaves, pressure vessels, vacuum chambers, reactors, rocket and aircraft propulsion, etc.
4.	Energy generating/transmitting equipment - laser, radio frequency, microwave, generators, etc.
5.	Working from heights – roofs, platforms, scaffolds, areal lift, cranes, etc.
6.	Lifting and moving material – using cranes, hoists, block & tackle etc.
7.	Portable and stationary power tools
8.	Flammable and/or combustible chemicals
9.	Cryogenic materials such as liquid nitrogen, liquid oxygen, etc.
10.	High pressure equipment
11.	High temperature equipment – boilers, ovens, kilns etc.
12.	Welding, cutting and brazing
13.	Infectious materials including use of sharps and blades
14.	Exposed electrical circuits, unless energy limited
15.	Field Studies, inspection and data gathering
16.	Confined space and engulfment hazards

Procedure to Evaluate Other Working Alone Activities

For cases that fall outside the activities shown above, or thought to be low risk, the PI can request that the COE Safety Specialist perform a hazard analysis of the situation to determine if working alone is appropriate and what mitigation needs to be in place to ensure that the researcher's activities take place in a safe environment.

Considerations for the hazard analysis will include but not be limited to the following:

1. Hazards of the activity involved
2. Hazards of the work area
3. Access to emergency equipment
4. Means of communications in case of emergency
5. Training and maturity of the researcher
6. Length of time the researcher will be working alone
7. Location of the work and its accessibility to emergency responders
8. Required PPE available and researcher training in its use
9. Environmental conditions such as heat, cold, fatigue, vectors, etc.

The researcher and PI are required to participate in the hazard analysis discussion. They will be required to review and approve the summary results and abide by the requirements set forth in that document. The COE Safety Specialist shall be notified of any changes to the approved work alone activities. At which point, the hazard analysis will be revised to reflect these different, changed, conditions. A revised approval form will be generated for this change.

As part of this evaluation, additional training for the researcher may be required to ensure safe work while alone.

Attachments

1. References

- a. Massachusetts Institute of Technology – Working Alone Policy, May 2012
- b. Arizona State University, Environmental Health and Safety, Procedures for Working Alone with Hazardous Materials, Processes, or Equipment, July 2015
- c. UT Dallas, Procedures for Working Alone, June 2012
- d. NMSU, Environmental Health and Safety, Chemical Hygiene Plan

2. Working Alone Approval Form

Document # _____ - _____ - _____ Rev _____

Working Alone Approval Form

Department: _____

Building/Room#: _____ / _____

Principal Investigator: _____

Researcher: _____

COE Safety Specialist: _____

Date: _____

Description of research activities including Project Name(s):

Description of activities requested for working alone:

Describe why this work cannot be done during regular hours or with other researchers present:

Approximate length of time, day/night and weekdays planned for work alone:

Location description and accessibility:

List hazards of activity and/or general area:

List any safety considerations (e.g. location of eye wash, safety shower, fire extinguishers etc.):

Hazard Analysis (yes/no). If yes, attach to this document.

Working Alone Approval

Working Alone Approvals:

Researcher Name

Signature

Date

Principal Investigator

Signature

Date

Department Head

Signature

Date

COE Safety Specialist

Signature

Date
