

Working in Isolation and After Hours Guide

Table of Contents

Purpose	. 3
Scope	. 3
Regulatory	. 3
Definitions	. 3
Responsibilities	. 3
Workers	. 3
Lab Manager/Supervisors	. 4
Dean / Department Chair	. 4
Public Safety	. 4
Environmental Health & Safety (EH&S)	. 4
Procedures	. 4
Hazard Evaluation	. 6
EH&S Contact Information	. 7
Appendix A	. 8
Appendix B	11

Purpose

When laboratory work must take place in isolation or after hours at Rowan University, this plan will help minimize risks and maintain safe operations.

Scope

This guide applies to undergraduate students, graduate students, faculty, and staff. Workers under the age of 18 may not work after hours or in isolation.

This guide applies to all laboratory, engineering, and research facilities at Rowan University. This guide applies to clubs operating on Rowan University-owned and leased spaces.

This guide does not apply to exempt spaces.

Regulatory

OSHA 29 CFR 1910.1450

Definitions

After Hours: Any hours not defined as Operating Hours are considered After Hours. University holidays, closures, and weekends are categorized as after-hours.

Exempt Spaces: Areas with no known hazards, such as classrooms and computer laboratories.

Non-Exempt Spaces: Areas with hazards identified in the Hazard Evaluation table of this guide as being Hazard Level IV through Hazard Level I.

Non-Exempt Spaces Closing Hours: The time at which all operations must cease, and the lab or shop must be vacated in non-exempt spaces.

Operating Hours: The hours of the day during which operations take place under the supervision or knowledge of the supervisor. Working alone during times outside of Operating Hours is considered working in isolation.

Supervisor: Faculty or staff member who, by nature of their employment, is responsible for the laboratory and supervision of students and/or workers in that space.

Worker: Any students (graduate and undergraduate), staff, and faculty working in a laboratory, research laboratory, or manufacturing facility.

Working in Isolation: Workers are working in isolation when supervision is absent, and neither verbal nor visual communication is achievable.

Responsibilities

Workers

• Complete appropriate training for space or lab-specific conditions.

- Request permission to work after hours/in isolation by submitting the "Permission to Work After Hours or In Isolation" form (see appendix A) not later than one week before anticipated work being conducted.
- Keep the Permission to Work After Hours or In Isolation form available when working after hours or in isolation.
- Compliance with this guide and compliance with lab or task-specific Standard Operating Procedures (SOP).
- Report all accidents, incidents, and near-misses per the Chemical Hygiene Plan.

Lab Manager/Supervisors

- Develop an SOP to describe acceptable and prohibited activities for working after hours and/or in isolation.
 - Take necessary steps to eliminate or reduce hazard(s).
 - o Determine the hazard level of work to be completed after hours/in isolation based on the Hazard Evaluation table in this guide.
- Minimize the need for working after hours/in isolation.
- Identify and maintain a list of individuals who will be required to work in isolation and/or after hours.
- Determine the suitability of the worker for working after hours/in isolation.
- Be aware of work being performed in a laboratory after hours or in isolation.
- When necessary, provide adequate staffing for hazardous tasks performed after hours.
- Enforce compliance with this guide.
- Ensure the <u>Laboratory Specific Chemical Hygiene Plan</u> is up to date and posted near the door.
- Ensure the <u>Rowan University Emergency Preparedness Guide</u> is up to date and posted near the door.

Dean / Department Chair

- Maintain a record of people authorized to perform work outside of operating hours or in isolation.
- Limit to the extent possible the number of operations that need to occur after hours.
- Authorize workers to work after non-exempt spaces' closing hours.

Public Safety

- Conduct checks of lab spaces after hours.
- Verify workers have their Permission to Work After Hours or In Isolation form.

Environmental Health & Safety (EH&S)

- Maintain the Working in Isolation and After Hours Guide.
- Assist supervisory staff and workers to identify hazards and develop SOPs.
- Conduct audits to determine compliance and effectiveness of this guide.

Procedures

Rowan University is committed to conducting teaching and research activities in compliance with safety and environmental regulations and in accordance with best practices. Due to the nature of the academic environment, it is sometimes necessary for students or workers to be

present after hours and/or in isolation. Working after hours or in isolation requires specific protocols to be followed to minimize the risk of injury. Individual departments, workshops, and laboratories can establish additional limitations for work under their control that is performed after hours and/or in isolation.

- **Guide Communication:** All Lab Managers/Supervisors must communicate and provide a copy of this guide to all workers to whom they are accountable.
- **Requesting Permission:** Workers who plan to work After Hours or In Isolation must complete the "Permission to Work After Hours/In Isolation" available in Appendix A or on the EH&S Ernie page under "Forms."
 - 1) A complete request includes the following components:
 - i. Completed Form
 - ii. Attached SOP
 - iii. Attached relevant Safety Data Sheets (SDS)

In addition to the above documents, the Lab Manager/Supervisor should include lab-specific training records, such as but not limited to equipment training, chemical hygiene plan training, or bio-safety plan training.

- **Filing of Permission:** The form shall be approved by the Lab Manager/Supervisor. A copy of the approval shall be sent to the Worker, Department Chair, Public Safety, and uploaded into SciShield.
- Working in Isolation: Hazard Levels I and II require the two-person rule. This rule prevents working in isolation by requiring a second person to be within communication distance (speaking or visual) of the worker. This person must be attentive to the activity at hand and approved for working after hours in that space. The SOP will indicate if the second person must also be properly trained on the SOP in use by the worker.
- **Communication Plan: Check-in/Check-out Procedures.** Hazard Levels I and II require the use of check-in and check-out. The frequency of check-in is determined on a case-by-case basis and is documented on the form. Methods of communication include telephone, text message, email, physical visit, etc.

Procedures for a Missed Check-In or Check-Out:

- 1) Lab Manager/Supervisor attempts to contact the Worker using the primary method of communication established in the Communication Plan.
- 2) Lab Manager/Supervisor attempts to contact the Worker using the secondary method of communication established in the Communication Plan.
- 3) Lab Manager/Supervisor goes to the work location or sends someone to verify the whereabouts of the worker.
- 4) If the worker cannot be located, contact Public Safety immediately.
- Non-exempt Spaces Closing Hours: All non-exempt spaces shall be closed and vacated by 2:00am local time. Operations in these spaces should be placed into a safe condition starting approximately one hour before closing time. The closing time of a non-exempt

- space can only be extended with Dean approval as documented on the "Permission to Work After Hours/In Isolation" form.
- **Identification:** When working after hours or in isolation, the worker must carry their Rowan ID Card at all times.
- **Breach of Guide:** A worker who engages in behavior that is a breach of this guide may be required to participate in re-training or have lab access revoked, and if damage or loss occurs after hours, the last person to access the room may also be held responsible.
- **Enforcement:** workers who are found in a lab after hours or working in isolation without proper approval shall be removed from the lab space until they can produce the Permission to Work After Hours or In Isolation form signed by the Lab Manager/Supervisor.

Hazard Evaluation

Hazard Level	Activity
Hazard Level IV	Assembly or modification of laboratory apparatus with no
After Hours acceptable.	chemical, electrical, or other physical hazards present
In Isolation acceptable.	
After Hours and In	
Isolation acceptable.	
Hazard Level III	Routine functions that are a part of a standard operating
After Hours acceptable.	procedure that has been demonstrated to be safe and do not involve hazardous material
In Isolation acceptable.	Extruder type 3-D printers
After Hours and In Isolation acceptable.	Rechargeable/Non-rechargeable batteries below 50 Volts

Hazard Level	Activity				
Hazard Level II	Tasks involving certain hazardous chemicals (see Appendix B)				
After Hours (Two Person Rule applies).	Tasks involving high-pressure equipment				
rerson Rule applies).	Tasks involving cryogenic materials				
In Isolation with Check-In/Check-Out required.	Working from heights				
Working after hours and	Working with high-temperature equipment (ovens, kilns, etc.)				
in isolation is not acceptable.	Machine shop tasks: grinding, welding, lathe, etc.				
acceptusie.	Resin type 3-D printers				
Hazard Level I	Tasks involving acutely hazardous chemicals				
Working after hours is not acceptable at any time.	Tasks involving unstable/explosive/pyrophoric materials				
	Tasks involving entry into a confined space				
In Isolation with Check-In/Check-Out required. Working in isolation is not acceptable at any time.	Tasks involving operating equipment with an obstructed view				
	Tasks involving the use of supplied air respiratory equipment or self-contained breathing apparatus				
	Tasks involving Class 3b or Class 4 LASERS				
	Work with radioactive materials				
	Tasks involving infectious agents				
	Work involving controlled substances				
	Work with moving blades				
	Tasks involving high voltage (above 50 Volts), including battery systems				

EH&S Contact Information

-To contact EH&S immediately, contact:	-To report a workplace injury, use the		
Public Safety: 856-256-4922	Accident Report Form.		
Director of EH&S: 856-256-5170	-Report a potentially hazardous situation		
Laboratory Safety: 856-256-5105	with the Near-Miss/Safety Concern Form.		

Appendix A

Permission to Work After Hours or In Isolation Form

Permission to Work After Hours or In Isolation

Experiment/Procedure Title:
Primary Worker Name:
Secondary Worker Name:
Lab Manager/Supervisor Name:
Work Location (building and room number):
Start Date: End Date:
After Hours/Isolation Workdays (circle): M T W Th F Sa Su
Requested Work Hours:
Permission to Work: ☐ After Hours ☐ In Isolation ☐ In Isolation AND After Hours
Two-Person Rule Required: ☐ Yes ☐ No Check-In/Check-Out Required: ☐ Yes ☐ No
Risk Estimate: Hazard Level I Hazard Level II Hazard Level III Hazard Level IV
Approved Equipment Usage:
Approved Chemical Usage: (attach relevant SDS to this form)
Approved Procedures: (attach relevant SOP to this form)
Communication Plan: Primary Communication Method:
Secondary Communication Method:

Check-in Frequency:	
☐ Hourly ☐ 1-2 Hours ☐ 3-4 Hours	☐ Not Applicable
At initiation and conclusion of work	_
☐ Two Person System (select one): ☐ Spe	
☐ Use of emergency call buttons reports t	o a continuously manned location
Worker Acceptance:	
I have completed appropriate training on the	nis Guide, Lab Safety, and any applicable
Standard Operating Procedures. I agree to f	• • • • • • • • • • • • • • • • • • • •
violation of the guide may result in re-train	ing or having lab access revoked, and if
damage or loss occurs after hours, the last 1	person to access the room may also be held
responsible.	
Signature:	Date:
Print Name:	
Approval:	
Lab Manager/Supervisor:	Date:
Comments:	
Acknowledgement:	
Department Chair:	Date:
Environmental Health & Safety:	Date:
Public Safety:	Date:
Closing Hours Exemption:	
Dean:	Date:
Hours Authorized to Work:	

Appendix B

Suggested Approach for Establishing Chemical Safety Levels

Suggested Approach for Establishing Chemical Safety Levels

Descriptor or Control	Chemical Safety Level 4	Chemical Safety Level 3	Chemical Safety Level 2	Chemical Safety Level 1
CONCEPTUAL HAZARD LEVEL (overview of risk level)	Laboratory hazards equivalent to typical household use of chemicals	Laboratory hazards equivalent to academic lab settings (restricted hazardous chemical inventory; well- established procedures in place)	Moderate or varying laboratory hazards within a narrow range (open hazardous chemical inventory; evolving procedures)	Novel hazards or severe established hazards (high- hazard chemicals or processes with well-established procedures)
CHEMICALS USED (types or characteristics of chemicals used)	Consumer products in consumer packaging; may receive but not open chemical packages	Low concentration acids/bases, lower alcohols, solid salts, simple asphyxiant compressed gases	Typical chemical inventory for a research lab, such as flammable solvents, corrosives, inorganic salts, toxics, flammable gases. Limited amounts (mg quantities) of air or water reactive, pyrophoric materials	Air/water reactive, pyrophoric materials or pyrophoric gases. Explosives or potentially explosive compounds, highly toxic materials (in any state of matter)
TRAINING REQUIREMENTS (prerequisite for people working in the lab)	Observe label and warning signs	General lab safety training in addition to warning labels and signs	Laboratory hazards require laboratory- specific safety training	Laboratory access restricted to people accompanied by experienced personnel
SUPERVISION REQUIREMENTS (safety responsibilities of lab leader(s))	Awareness of work being conducted	Constant supervision or working alone based on specific restrictions	Peer presence or working alone based on specific restrictions	Peer presence