Office of Research Compliance and Safety

Faculty in-service Training

May, 9,2025



Institute-wide Priorities

Support and promote scientific integrity in NMT research





Enhance and maintain a positive safety culture

NMT Research Compliance and Safety Goals

Protect the integrity of NMT research and the safety of all those involved by:

- Evaluating research compliance and safety risk areas.
- •Streamlining institutional responses and protocols to address these risk areas.
- Drafting and updating institutional policies.
- Providing resources to faculty and staff.



Research Compliance and Safety Full-time Staff

Mikell Coleman, J.D; Director of Research Compliance

• Research Integrity Officer (RIO)

Theresa Kappel, Contractor Special Security Officer Trainee

• Supports contract-specific security requirements

Elissa Keen, Industrial Security Specialist, Playas Research and Training Center

• Facility Security Officer (FSO) for PRTC

Sheila O'Sullivan, J.D.; Policy Analyst

• Reviews NMT policies, procedures and practices for compliance with research related regulations and funding agency mandates. Implements COI policy requirements.

Ben Thomas; Hazardous Materials and Laboratory Safety Specialist

• Coordinates hazardous waste disposal; conducts laboratory inspections, monitors compliance with health and safety regulations

Val Thomas, M.S., Research Compliance Officer

• Coordinates human subjects and animal protections and export control

Troylyn Zimmerly Armijo, M.S.; Industrial Security Specialist

• Facility Security Officer (FSO) for NMT

Research Compliance and Safety Part-time Staff*

Stacy Kuykendall, Radiation Safety Officer Julia Ricci, Alternate Radiation Safety Officer Titus Ispirescu, Laser Safety Officer Budge Jones, Alternate Facility Security Officer Miguel Luna, Acting Contractor Special Security Officer Loretta Urban, Industrial Security Subject Matter Expert (SME)

*NMT part-time employees or employees with full-time jobs in other departments or research centers, who fulfill technical specialty areas in addition to their regular duties



Research Compliance and Safety Agenda

- Responsible Conduct of Research training and resources
- •Human Subjects Protections (IRB)
- Animal Subjects Protections (IACUC)
- Conflicts of Interest in Research
- Industrial Security
- •Laboratory Safety/Hazardous Materials Safety
- •Q & A

Office of Research Compliance and Safety Contact Information

General Questions: research.compliance@nmt.edu Hazardous Materials & Laboratory Safety: <u>hazmat@nmt.edu</u> Conflicts of Interest: <u>coi@nmt.edu</u> Export Controls: <u>export@nmt.edu</u> Institutional Review Board: irb@nmt.edu Laser Safety Officer: LSO@nmt.edu Radiation Safety Officer: <u>RSO@nmt.edu</u> Industrial Security: securityinbox@icasa.nmt.edu Animal Care & Use: iacuc@nmt.edu

Val Thomas M.S. Research Compliance Officer

- AA in Psychology from UNM Valencia Campus - 2018
- BA in Psychology from UNM -2021
- MS in Public Engagement from NMT - 2024

Worked at NMT since 2020 Worked in Research Compliance since 2023



My Areas of Compliance

Responsible Conduct of Research (RCR) <u>RCR</u> info <u>CITI Training</u>

Export Control Export/Import info

Institutional Review Board (IRB) IRB info

<u>irb@nmt.edu</u>

Animal Subject Research (IACUC) iacuc@nmt.edu **Compliance Forms**

IRB Application

RCR Database

<u>Pre-Proposal Research Compliance</u> <u>Screening Form</u>



NMT Conflicts of Interest in Research Disclosure Requirements



Conflict of interest means a situation associated with an investigator's participation in NMT Research where it reasonably appears, on an actual or potential basis, that: the investigator's significant financial interest could directly and significantly affect the design, conduct or reporting of NMT research activities; or, the investigator's situation could directly and significantly compromise their professional commitments or allegiance to NMT.



What is a Conflict of Interest?

- A potential Conflict of Interest may exist if an individual's outside interests, especially financial, may affect or be perceived to affect his or her research, teaching, commitment to, or administrative activities at the University.
- The appearance of a Conflict may be as damaging as an actual COI.



New <u>NMT Conflicts of Interest in Research</u> <u>Policy</u>

https://www.nmt.edu/policies/

NMT COI in Research Procedures



Conflicts of Interest Disclosure Form

Required for all "investigators":

Changes from last year

- income equity interest thresholds
- sponsored / reimbursed travel

reporting requirements



Training

- COI training conducted annually by NMT staff
- offered through CITI
 - CITI training is required of all investigators every four (4) years



Investigator means the principal investigator, the co-principal investigator, and any other person (including faculty, staff, and students) who are responsible for the design, conduct, or reporting of NMT research. Any individual responsible for a task that could have an effect on the research design, conduct, or reporting is considered to be an investigator, even if the individual does not have sole or primary responsibility for the task or the research.



Mentor/Principal Investigator Role in Training and Compliance

Mentoring the next generation of Scientists

- Ongoing training in Laboratory Practice
- Research design and execution
- Ethics
- Compliance with regulatory requirements Ongoing training in Ethics Ongoing disclosure requirements



Discussion points:

- Current climate of insecurity and distrust.
- As an academic research institution, we must be vigilantly compliant and all aspects of our research endeavors must be above reproach.
- Once in compliance as investigators, we have less to do and less to worry about.

Compliance Checks at Proposal Stage

Routing Sheet

Compliance Checks Sheet



Industrial Security

• What is Industrial Security

• The Industrial Security Program is a multi-disciplinary security program focused on the protection of classified information developed by or entrusted to U.S. industry operating under the National Industrial Security Program (NISP).

• How you can help?

- Receive reports of suspicious activity
- Receive reports of academic solicitation

• How I can serve you?

- Provide international travel briefings. Country specific risk assessment
- Security services related to classified contracts
- Provide security awareness trainings
- *Report to Troylyn*



Hazardous Waste & Laboratory Safety

Benjamin Thomas,

Hazardous Materials and Laboratory Safety Specialist

Topics We Will Cover Today:

Hazardous Waste: Labeling, Satellite Accumulation Areas, & Disposal

Lab Safety Reviews

Lab Closeouts

Hazardous Waste: Labeling, SAA's, & Disposal



Labeling

HAZARDOUS WASTE

New Mexico Institute of Mining and Technology Name: First and last name of responsible party

Location: Building name and Room number

Complete list of chemical constituents with percentages.

List hazard classifications in the order that **HAZARD:** they appear on the Safety Data Sheet.

Fill out the day that hazardous Satellite Accumulation Area Start date: waste was initially generated. Leave blank. HAZMAT will fill this Central Accumulation Area Start date: portion out. Leave blank. HAZMAT will fill this portion 90/180 pickup date out. For "Contents", write the Chemical Name in the line. Some chemical isomers may have different hazard classifications, and some abbreviations are used for two completely different compounds: BSA can be Bovine serum albumin or Bis(trimethylsilyl) acetamide

If contents will not fit in this space legibly, use another Hazardous Waste Label, or a blank sticker (Hazmat recommends using blank Avery 8164 shipping labels).

Labeling Don'ts

HAZARDOUS WASTE	
 New Mexico Institute of Mining and Technology	
Name:	
 Contents: 34 HCI, NHy CH3 CO2	
HAZARD: TOxic	-
Satellite Accumulation Area Start Date: 5/4/25	
Central Accumulation Area Start date: 5/9/25	
90/180 pickup date:5/9/25	

Labeling Do's

HAZARDOUS WASTE	
 Name: Ben Thomas	
Location: Research Office Building 113	
Contents: 3 Moler Hydrochloric Acid, Amnonium Acetate	
HAZARD: Corrosive, Acate Toxicity, Irritant	
Satellite Accumulation Area Start Date: 5/9/25	
Central Accumulation Area Start date:	
90/180 pickup date:	



Establishment of a SAA at or near the point of generation is required by <u>40 CFR 262.15 (a)</u>. The SAA must be inside the same lab that it was generated!

NMT Satellite Accumulation Area Survey



Satellite Accumulation Area Signage

SATELLITE

ACCUMULATION



\Rightarrow

Satellite Accumulation Area

(SAA)

This area has been designated as a Satellite Accumulation Area

There may be no more than 55 gallons of hazardous waste, or 1 liter of acutely hazardous (P-Listed) waste at this SAA at any one time.

➤ All waste must be labeled upon generation.

 Use Hazardous Waste Labels provided by Research Compliance. Make sure to add chemical names (<u>NO</u> <u>CHEMICAL FORMULAS</u>) and concentrations

(percentage, ppm, or molarity).

The label must provide an indication of the type(s) of hazards

of the waste (e.g. Corrosive, Flammable, Toxic, etc.).

 Add initial date of waste generation under "Satellite Accumulation Area Start Date".

 DO NOT add a date to the "Central Accumulation Area Start Date". Research Compliance will fill this out when the waste is picked up.

Once a container is <u>75% full</u>, please complete an NMT Hazardous Materials Pick Up Form (scan the QR code below). Contact <u>hazmat@nmt.edu</u> if you need any help with this process.

> Store incompatible wastes separately.

Keep lids securely on containers when not actively adding waste.
Ensure that waste containers are undamaged and in good condition.





NMT Hazmat Disposal Request

- 1. Scan the QR code on the updated SAA Sign or go to: <u>https://www.nmt.edu/research/hazmat.php</u>
- 2. Complete the "NMT Hazardous Materials Pick-Up Form" to the best of your ability. Contact hazmat@nmt.edu if you have any questions.
- 3. When the form is submitted, we will automatically be notified. We will then contact you to schedule a time for us to pick up your hazardous waste, typically within 2 3 days from the notification.



Lab Safety: Reviews, Close-Outs, & More



Am I required to have my Lab inspected?

If you have hazardous materials (or perform hazardous procedures) in your lab, your lab must be inspected annually.

Announced Audits:

Pros:

- Preparation Time
- Educational Opportunity
- Less Disruption
- Focused Evaluation

Cons:

- Artificial Compliance
- Misses Real Behavior
- Bias Toward "Showcase"
- Reduced Accountability

Unannounced Audits:

Pros:

- Authentic Snapshot
- Deters Complacency
- Reveals Gaps
- Promotes Accountability

Cons:

- Potentially Disruptive
- Perceived as Policing
- Misinterpretation of Risk
- No Opportunity to Prepare

Since there are many Pros and Cons to both scheduled audits and unscheduled audits, NMT uses a hybrid model: routine announced audits with occasional spot-checks.

Purpose of Lab Close-Outs

- Ensure safety for future occupants
- Prevent lapses in productivity of incoming faculty and departments that need access to these lab spaces
- Maintain regulatory compliance (NMED, EPA, OSHA, etc.)
- Helps mitigate the occurrence of "Unknown" chemical waste, which is both dangerous and costly for NMT to characterize and dispose of
- Alleviate NMT from the financial burden of hiring "High-Hazard" vendors to perform lab clean-outs

Lab Close-Out Procedures

- 1. Notify Research Compliance & Safety by completing the NMT Lab Close-Out Survey. We will then schedule an Initial Walkthrough of the Lab.
- 2. Complete the Lab Close-Out Notification Checklist and email the completed checklist to Hazmat@nmt.edu
- 3. Work with the Lab Safety Specialist to jointly develop a close-out plan customized to your lab and your needs.
- 4. After all work in the lab is completed, a final walkthrough of the space will be conducted.

Lab Safety Side Note: Chemical Inventories

Your chemical inventories must 1be up-to-date and accessible to Research Compliance & Safety for reasons of safety, accountability, and regulatory compliance. It will also help facilitate lab safety reviews.



Lab Safety Side Note: Empty Waste Containers

We can provide you with containers for your hazardous waste at no cost to you.

This goes hand in hand with our philosophy of making the "right thing to do, the easy thing to do."

Lab Safety Side Notes: Perchloric Acid

mott

OPERATING PROCEDURES

Do not use perchloric acid in this fume hood.

Do not use this fume hood for the primary containment of explosive reactions or to store chemicals.

Lab Safety Side Notes: P-Listed Waste

If we need to accept more than 1 liter (or 1 kg) of P-Listed waste, NMT's status as a "Small Quantity Generator" will change to a "Large Quantity Generator". This comes with increased compliance demands from regulatory authorities.

Lab Safety Side Note:

Not all gloves provide the same level of protection.

Nitrile "Medical" or "Exam" gloves are designed to protect an individual from biological hazards, not from chemical hazards!

Lab Safety Side Note:

You can <u>NOT</u> allow empty containers to vent off in a fume hood.

The New Mexico Environmental Department (NMED) considers this "treatment of hazardous waste." NMT does not have a license for treatment.

A Very Special Thank You!

The Office of Research Compliance & Safety extends a heartfelt thank you to everyone who worked with us to be in compliance with the recent dichloromethane ruling from the EPA. We value your hard work and research, and sympathize with you on the difficulties imposed by this ruling.

> If you have any excess or used DCM in your lab, please submit a chemical pick up request at your earliest convenience.

Questions?

For more information all the topics covered today please visit: https://www.nml.edu/research/



Research Compliance and Safety Training Sign In Sheet

https://app.smartsheet.com/b/form/4e0d279b1 edd4934b5e2bbed0ace978c



Thank you!