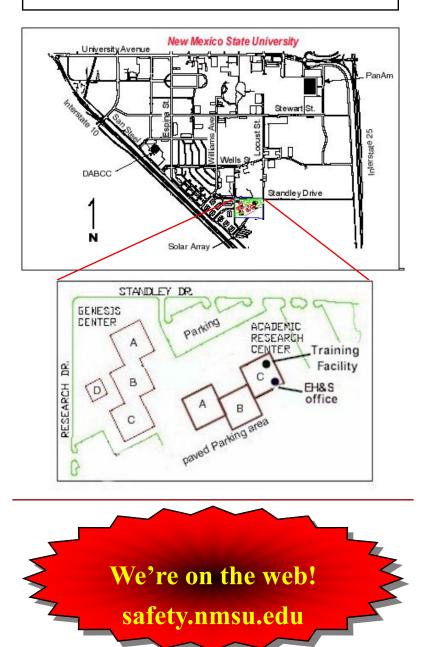
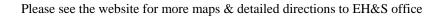
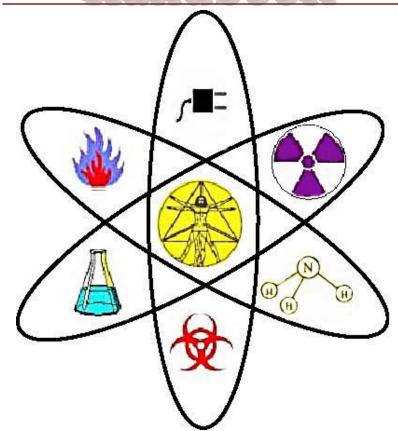
New Mexico State University Environmental Health and Safety 1620 Standley Drive









New Mexico State University

Environmental Health & Safety

EH&S: 575-646-3327 Emergency Number: **911**

WELCOME MESSAGE

Our vision at NMSU is to meet the changing needs of New Mexicans through high-quality, affordable education and through the creation and sharing of knowledge in the true spirit of a land-grant university. The university's risk management goal is to prevent workplace injuries and illnesses, environmental incidents, and property loss. Achieving this goal is the responsibility of every member of the university community.

To achieve our goals, environmental health and safety must be managed as other key activities by integrating them into every process as a good management technique. Every administrator is responsible for ensuring that all research and work activities are conducted within requirements outlined in laws and applicable regulations. Supervisors have particular responsibility for the activities and training of those that report to them and are expected to promote a culture of safety. Every student, employee, contractor, and faculty member must be committed to working in a safe and environmentally conscious manner. For example, we expect all employees to take personal responsibility for their own safety, to be conscientious about the safety of others, and to help identify potential hazards so they can be corrected. Moreover, we must continuously evaluate our processes and look for ways to minimize hazards and implement sustainable and environmentally sound practices.

This Employee Safety Handbook provides information on our safety, health, and environmental policies and procedures. Please read this handbook, as well as, other NMSU safety references and consider safety important to achieve our goals and vision.

Thank you for your support of safe workplace practices at NMSU.

Garrey Carruthers, Ph.D.

President

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23. TRAINING CLASSES

EH&S provides training to improve the working environ-ment of NMSU employees as well as ensuring compliance with regulations related to safety, health and environment protection. Except for Defensive Driving, classes are free. Schedule & registration are on safety.nmsu.edu. Of the twenty plus topics, the more common classes are:

Employee Safety is required for all employees. It introduces NMSU's safety policies & procedures, the role of police, fire & other campus responders, emergency alerts system & plans, common safety problems and other required training.

Hazard Communication (HazCom). This presentation covers NMSU's written HazCom program, inventories, SDSs and labeling of chemicals in work areas.

Defensive Driving Class (DDC) is required to drive a University vehicle. You must give your full name, address, birth date, a current driver's license, and account number (\$).

Laboratory Standard (Lab. Std.). The class covers on OSHA Lab Standard, chemical hygiene plans, SOPs and additional obligations for labs. Prerequisite: HazCom Class.

Hazardous Waste Management. This course presents information on EPA regulations, hazardous waste identification, accumulation, and marking requirements.

Annual Lab Safety Refresher Classes meet OSHA & EPA compliance standards for annual training for lab researchers.

Radiation Safety This class covers regulations, requirements, and principles for radiation use in research.

Biosafety Class This course is for employees working in labs with DNA, infectious material & biohazards.

Bloodborne Pathogens. This class covers steps to prevent exposure to blood, infectious materials and other biohazards.

Respiratory Safety & Fit Testing is required annually for all employees using respirators (including dust masks).

Animal Worker Safety covers safety precautions for employees & researchers working with and around animals.

22. TRAINING CHECKLIST FOR LAB AND RESEARCH AREAS

Activity	Required Training
Do you work with, have, or store chemicals in your work area(s), vehicle, or building?	Hazard communication (Right-to-know) class
Does your area qualify as a lab under the OSHA lab standard?	Lab standard
Do you use infectious agents, human blood, body fluids or tissues in your laboratory?	Biosafety & Bloodborne pathogens
Do you use radioactive materials, x-ray equipment or similar radiation devices?	Radiation safety
Do you produce waste containing chemicals, bio- logical tissues, body fluids, infectious agents or radioactive materials or residues?	Hazardous waste training
Does your research involve animals?	Animal Worker Safety & Contact IACUC*
Does your research involve the use of lasers?	Laser safety
Does your research involve the use of respirators or dust masks?	Respiratory safety and fit testing
Does your laboratory use or service equipment on which an unexpected restarting could cause injury?	Lockout-Tagout
Does your area have confined spaces you enter?	Confined space entry
Do you work with or near electrical hazards?	CPR training
Does your research involve pesticide treated areas or applying pesticides?	Worker Protection Stan- dard, poss. pesticide & respiratory safety
Are there fire extinguishers in your work area or nearby for your use?	Fire extinguisher Training (see Fire dept)
Do you drive a university vehicle?	Defensive driving

*IACUC - Institutional Animal Care and Use Committee

TELEPHONE NUMBERS

NON-EMERGENCY NUMBERS		
Environmental Health & S (EH&S)	afety Fax	575-646-3327 575-646-7898
Campus Health Center (for Employee & student heal		th Center)
Corner of Breland &Stev		575-646-1512
NMSU Security Escort	(after sun dow	n) 575-646-1111
NMSU Fire Department	0	y 575-646-2519 x 575-646-2666
NMSU Police Department	0	ency 646-3311 x 575-646-6346
Poison Control - West Texas Region Poison Center El Paso, Tx. (915) 534-3800, Fax (915) 534-3809		
Website informati Emergenc		poisoncenter.org 1-800-222-1222
NMSU Operator On-campus Announcement Line	-	s 575-646-0111 575-646-1000

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21. TRAINING CHECKLIST NON-LAB AREAS

Activity	Required Training
Do you work with, have, or store chemicals in your work area(s), vehicle, or building?	Hazard communication, (right-to-know) class
Do you produce waste containing chemicals, blood, human body fluids or infectious agents?	Hazardous waste
Do you provide first aid services, work with or have the potential to contact human blood, body fluids, or tissues?	Bloodborne pathogens
Do you work with animals?	Animal Worker Safety & Contact IACUC*
Do you use respirators or dust masks?	Respiratory safety & fit testing
Does your work involve pesticide treated areas or applying pesticides?	WPS, poss. pesticide & respiratory safety
Does your work require hearing protection?	Hearing protection use
Do you use or service equipment on which an unexpected restarting could cause injury?	Lockout-tagout
Does your area have any confined spaces that you must enter?	Confined space entry
Do you work with or near electrical hazards?	Cardio-Pulmonary Resuscitation (CPR)
Does your work involve the use of ladders?	Ladder Safety
Do you perform maintenance or housekeeping in areas with asbestos?	Asbestos Awareness
Do you operate industrial trucks or heavy equip- ment (e.g. forklift, bucket truck, etc.)?	Safe operation of fork lifts (also: aerial lifts, etc)
Are there fire extinguishers in your work area or nearby for your use?	Fire extinguisher training (see Fire dept)
Do you drive a university vehicle?	Defensive Driving Class
Does your work involve lifting heavy objects?	Lifting Safety

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*IACUC - Institutional Animal Care and Use Committee

- Indoor Air Quality Investigation
- Injury and Illness Prevention
- Laboratory Safety Training & Inspection
- Ladder Safety
- Lead Hazards
- Laser Safety
- Safety Data Sheets (SDS)
- Mercury Spill Response/Clean up
- Microwave Ovens Leakage Review
- NMED Radiation Protection Regulation
- Noise Level Evaluations
- Occupational Safety and Health Administration (OSHA) Regulation
- Odors Investigation
- Office Safety
- PCBs
- Radiation Safety and Permitting
- Recombinant DNA
- Refrigerators (flammable storage)
- Regulatory Information
- Regulatory Point-of-Contact for EPA, OSHA, DOT, NMED and Other Regulatory Agencies
- Respiratory Protection
- Risk Assessment
- Safety Training
- Safety Equipment Inspection
- SARA Title III
- Slug Control Program
- Sewage Disposal Monitoring
- Shop Safety Training
- Video Display Terminals
- Ventilation
- Videotapes: Safety Topics
- Waste Minimization



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Credits

The first edition of this publication was composed as part of a Health Science internship by Ron Roberts, NMSU student. It was edited by K. Doolittle, G. Munsell, D. Kaczmarek, and D. Shearer of EH&S. Constructive reviews were provided by D. Smith and B. Woods of Facilities & Services.

This handbook was modeled on similar handbooks by **Indiana University-Purdue University Indianapolis (IUPUI)** and **University of Kentucky (UK).**

Additional information on these topics is available for review on the Environmental Health and Safety web site at http://safety.nmsu.edu.

1. CULTURE OF SAFETY

Environmental Health & Safety Policy

Welcome to New Mexico State University. NMSU encourages and supports all programs that promote safety, good health, and well-being of all university faculty, staff, employees, students and visitors.

Responsibility and accountability

Good environmental, health and safety practices are the responsibility of each NMSU faculty and staff member, student, and visitor. The following is a summary of these responsibilities. The full EH&S policy is on the safety web site (safety.nmsu.edu) and in NMSU Policy Manual.

Individual Responsibility

All New Mexico State University faculty, staff, and students are responsible for:

- a. Participating in mandated training programs provided by Environmental Health & Safety, supervisors and other instructors.
- b. Properly using university supplied materials and equipment.
- c. Using good judgment in carrying out work assignments and following established procedures.
- d. Promptly reporting unsafe conditions, environmental health hazards, as well as injuries and illnesses to the cognizant supervisor or program director.
- e. Giving due consideration to personal safety and the safety of others while performing assigned tasks.
- f. Strictly adhering to federal, state and university safety requirements and guidelines.
- g. Understanding that disregard or chronic negligence of established policies and procedures can result in disciplinary action.

Supervisors Responsibilities

Supervisors, faculty, principal investigators, first line

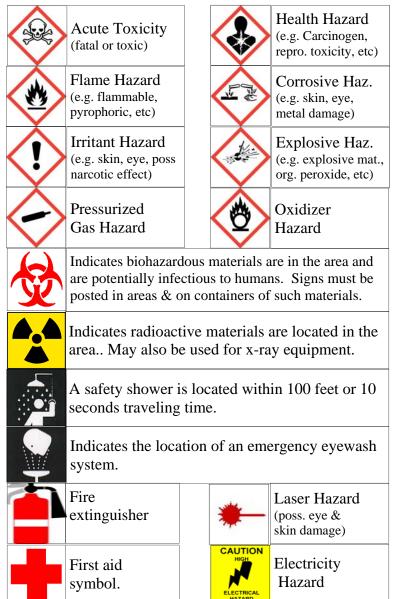
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20. SAFETY SERVICES AND PROGRAMS

- Accident/Injury Investigation
- Air Samples
- Air Quality
- Animal Facility Inspection
- Asbestos Waste Pick-up
- Asbestos Program
- Biological and Biohazardous Waste
- Biosafety Program
- Blood, Bloodborne Pathogens
- Cancer-causing Agents
- Chemical Inventory
- Chemical Spill, Release
- Chemical Waste Pick-up, Disposal
- Community Right-to-know
- Compressed Gases
- Computer Work Stations
- Construction Safety
- Defensive Driving Classes
- Drain Disposal
- Driving Permit for NMSU Vehicles
- Emergency Action Plan
- Emergency Showers and Eyewashes
- Employee Right-to-know
- Environmental Protection Agency (EPA) Regulations
- Ergonomics Classes
- Forklift Operation
- Freezers (flammable storage)
- Fume Hood Safety & Inspection
- Gas Cylinder Safety
- Hazard Assessment
- Hazard Communication Program
- Hazardous Waste: Management/minimization, pick-up, disposal, and spill cleanup
- Hearing Conservation

19. WARNING SYMBOLS & DOOR SIGNS

The following symbols identify hazardous materials, areas, and safety equipment. They are to be used on chemical labels or on lab/shop door signs to identify hazards in the area.



supervisors, and all other persons in authority are responsible for:

- a. Providing safe and healthy environments for those areas and personnel for whom they have supervisory or administrative responsibility, incorporating safety and health issues as an integral part of all activities at the University.
- b. Being continuously cognizant of the safety and health needs of all co-workers and employees for whom they are responsible.
- c. Initiating and enforcing necessary preventive measures to control hazards.
- d. Ensuring necessary support such as engineering and administrative controls, personal protective equipment, occupational medical examinations, and local exhaust ventilation are in place and adequate for operations.
- e. Ensuring employees are trained prior to beginning new tasks.
- f. Reporting injuries and illnesses to Worker's Compensation Office.
- g. Reviewing accident and injury reports for their area(s).
- h. Serving as a focal point for safety and health concerns.
- i. Immediately notifying EH&S when they become aware of a violation of any university, state or federal environmental health or occupational safety rule or regulation. This includes any contact with the state and federal regulatory agencies.

Management Responsibilities

University Administration, all Vice Presidents, Deans and Department Heads are responsible for:

a. Ensuring that facilities and equipment provided meet requirements for a safe work environment for activities being conducted or modify those activities

accordingly to come into compliance with applicable rules, regulations and standards.

- b. Ensuring individuals under their management have the authority and support to implement environmental health and safety policies, practices and programs.
- c. Ensuring areas under their management are in compliance with University, state and federal environmental health and safety policies, practices and programs.
- d. Establishing priorities and committing resources for correction of environmental health and safety deficiencies.
- e. Establishing procedures for dissemination of policies and other safety-related information.
- f. Establishing procedures to implement policies.
- g. Utilizing the system which will be established for assessing safety performance to evaluate their own areas of responsibility and report findings back to central administration.
- h. Immediately notifying EH&S when they become aware of a violation of any university, state or federal environmental health or occupational safety rule or regulation. This includes any contact with the state and federal regulatory agencies.
- **The University President** has ultimate responsibility for establishing and maintaining health and safety programs and establishing a system for assessing safety performance for the University.

EH&S (Safety Office)

Environmental Health and Safety (EH&S), also known as the Safety Office, is responsible for the development, oversight, and management of environmental health and safety programs that provide safe and healthy conditions

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Campus Bicycle Use

NMSU provides bike racks and other facilities at academic and housing units to encourage commuter & campus use of bicycles. Per state law, bicycles on campus streets are considered vehicles & subject to traffic citations. On campus walkways, turf, & all shared paths, bicyclists are required to yield to pedestrians, to slow as needed to prevent accidents, and to signal their presence & intended route. Security suggestions & other details are provided at http://safety.nmsu.edu/programs/BikeSafety



Controlled Access Policy

Except emergencies, specific projects, and on controlled routes motor vehicles are restricted from campus walkways & turf. Details on the Controlled Access Policy is on the EH&S web.

Hazardous Material Shipping

In compliance with DOT regulations, all hazardous materials shipped from NMSU must be via trained, Physical Science Laboratory personnel (details are on the EH&S website).

Hazardous Material Use In Buildings

Hazardous materials (paints, sprays, etc) use inside buildings is to be controlled to keep exposures are below permissible exposure limits. Except in special vented areas (e.g. labs), use of volatiles is restricted:

1. To areas with additional ventilation and

2. By trained employees using respiratory protection. For more information, contact the EH&S 646-3327.

Mercury Minimization

In order to reduce the associated risks and comply with wastewater discharge requirements, NMSU must reduce its use of non-essential elemental mercury and mercury devices. Any remaining materials are to be safe guarded from spillage and listed on the NMSU HazCom inventory system.

Hazardous Waste

All hazardous, infectious and regulated material must be disposed of through or under the supervision of EH&S.

18. SAFETY POLICIES AND PROCEDURES

Several polices relate to protecting your environment, health and safety. The following provide examples, but refer to the policy section on safety.nmsu.edu for complete detail.

Prior Approval/Activity Review

All activities involving unusual or non-routine use of hazardous or highly toxic material as well as hazardous work activities and campus events are to be reviewed & approved before starting. Details & forms are provided at safety.nmsu.edu.

Smoking

State law (\$100-250 fine) prohibits smoking in NMSU buildings and vehicles. University policy restricts smoking beyond 25' of the entrances and air intakes to NMSU buildings. Smoking may be allowed in designated areas.



Nondiscrimination & Reporting Hazards

Employees who report environmental, health or safety problems to internal departments are protected from discrimination (see EH&S web for details). EH&S maintains an open door policy to resolve these issues.

Driving University Vehicles

Prospective drivers of University vehicles must have a valid driver's license and will undergo a motor vehicle records check. Out of state license holders may be required to provide a certified copy of your driving history before a NMSU permit is issued. You will also be required to attend a National Safety Council's defensive driving course (or equivalent). This class is provided monthly by EH&S.

Golf Carts

To allow use on campus streets & walkways, all golf & utility carts used as such must be registered, inspected, and tagged. The inspection is to ensure that they have the proper safety equipment (lights, signals, horn,



brake-lights, seat belts, etc.). Users must have a NMSU cart permit to operate these units (details on website).

for work and study, help protect the environment, and comply with applicable laws and regulations. EH&S provides educational programs, technical assistance, and numerous health and safety services to the NMSU community. The staff also functions as consultants to Deans, Directors, Heads of Academic Departments and Administration. The division makes health and safety investigations as necessary and upon request, assists departments in the development of safety programs and participates in health and safety training and education.

EH&S fulfills its mission to make the campus a safe environment by implementing programs and services in eight major areas.

- 1. Hazardous waste and materials management.
- 2. Regulatory interpretation.
- 3. Health and safety inspections/facility audits.
- 4. Accident and exposure investigations.
- 5. Exposure prevention/indoor air quality.
- 6. Radiation licensing and permitting.
- 7. Education, training and protective equipment.
- 8. Safety standards and procedures.

Other NMSU Departments

In addition, some units (e.g. Fire and Police) have other specific requirements and responsibilities established by agencies external to the University. More information is provided on safety website at http://safety.nmsu.edu.

Safety Committees

The formation of departmental or college safety committees is highly encouraged. Experience has shown that these committees can provide an effective means of implementing safety programs. EH&S can provide guidance and offers staff for membership to aid in the development of these committees.

2. PREVENTION OF OCCUPATIONAL INJURY

A wide variety of injuries can occur on the job. At NMSU the majority of reported incidents fall into the following categories:

- Back injuries and other sprains/strains
- Slips, trips, and falls
- Cuts and abrasions #

Injury prevention depends upon job-knowledge, using equipment properly, recognizing hazards, and a safe-work attitude. Specific training, based on equipment manuals and written standard operating procedures, is required to obtain task and equipment knowledge.

Hazard Recognition

Hazard recognition is a learned skill of identifying where and how safety problems can occur. Job experience and good observation are important characteristics of hazard recognition. A person with a safe-work attitude has an ability which is developed individually and is continually reinforced by management. Persons working with a safe-work attitude perform their work in a safe manner while eliminating known high risk activities.

Methods to prevent occupational injury include the following:

- \square Don't take chances or shortcuts,
- \square Know how to use hazardous materials and equipment,
- \square Take responsibility for personal safety,
- ☑ Be observant,
- ☑ When safety is in doubt, <u>ask!</u>

17. SAFE LIFTING/BACK-INJURY PREVENTION

Back injuries are among the majority of reported incidences occurring at NMSU. Training on safe and proper lifting is provided by EH&S. Listed below are some recommended procedures to help you avoid back injury:

- Loads over 25 pounds may require assistance **ask for help!**
- Position yourself so that the load you are lifting is kept close to your body.
- Lifting a load to shoulder height or higher is risky request assistance!
- Position yourself so that your ears will be above your knees when you are ready to lift.
- Lift with your legs.
- Maintain your balance by placing one foot slightly ahead of the other.
- Complete the lift before turning or twisting your torso with the load. **No dancing!**



16. HAZARD EVALUATION

Industrial hygiene is the study and prevention of occupational illnesses due to materials and conditions present in the workplace. This involves the anticipation, recognition, evaluation, and control of workplace hazards to maintain a healthy and safe environment for all university faculty, staff, students, and visitors. EH&S staff can assist with the evaluation and control of the following hazards:

- Chemical hazards lab chemicals, cleaning supplies, paints, solvents.
- Physical substances heat, cold, radiation, noise.
- **Biological substances** blood, body fluids, infectious agents.
- Indoor air quality health effects experienced while working in campus buildings caused by airborne agents.
- Ergonomics musculoskeletal disorders due to repetitive motions with poor positioning or excessive force.
- Non-Routine & Hazardous Activity -
 - ⇒ Prior Approval Form in HazCom Plan, Lab Guide & Chem. Hygiene Plan;
 - ⇒ Activity Review Permit for employee or student use of campus, bldg, classrooms, etc. Examples include food sales, mechanic apparatus or hazardous material use, rallies, etc



3. PUBLIC SAFETY

NMSU Police

The NMSU Police Department is located on College Drive. All students and staff should report public safety problems to the NMSU Police Department at 646-3311. Any activities which you observe that make you uncomfortable or make you question the appropriateness of the activity should be reported.

Security Escort Service

The NMSU Security Escort Service (646-1111) is provided by the Associated Students of New Mexico State University (ASNMSU). This service provides a person to walk you from one location to another. The area covered ranges from student housing to two blocks off-campus. Even though NMSU is not considered a dangerous campus, the Escort Service provides the added feeling of safety by ensuring students don't have to walk alone at night. The service is provided free of charge to students and is available from dusk until 12:30 am. Sunday - Thursday (646-1111).

Emergency Stations

Emergency call stations are located in many buildings and outside areas throughout the campus. The outside stations are identified by **blue lights** and have an emergency telephone attached. As you park or walk around the campus, make note of where the emergency stations are located. Do not try to apprehend a suspicious person yourself; let the police respond.



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4. EMERGENCY PROCEDURES

Emergency Action Plan

Emergency procedures for your work area are in the Emergency Action Plan (EAP) developed by your department. These include:

- Escape routes & procedures
- Disabled assistance & shutdown procedures
- Coordinators & emergency contacts
- Evacuation assembly site
- Reporting method & evacuation verification

Emergency Notification System

The NMSU ENS system supplements the Emergency Action Plan. It is used to notify NMSU community of emergency incidents, severe weather, fire, chemical release, etc.

This notification system will send voice and text messages with area-specific information to NMSU phones, cells, email & other devices. Additional alert information is provided via NMSU homepage &/or NMSU announcement line

Guides, requirements, links, and other information on the EAP and to register for ENS are provided in the Emergency Management section of the safety web (safety.nmsu.edu).

Chemical Spills - Immediate Danger

If a chemical spill occurs or is discovered and in your

opinion constitutes an immediate danger to yourself or other building occupants

PULL THE FIRE ALARM

to evacuate the building.



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Hand/Arm and Body Protection

Gloves resistant to the chemical(s) in use, a protective smock, lab coat, or coveralls, and at times a splash apron are the correct PPE for handling hazardous chemicals. Specialized gloves and arm sleeve covers are recommended when working with cryogenic or electrical hazards. To reduce cut or abrasion injuries, use puncture or abrasion resistant gloves, arm sleeve covers, and at times an apron.

Head and Foot Protection

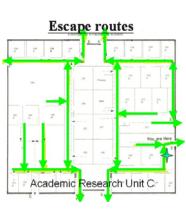
A hard hat or other head protection and foot protection may be required for certain jobs or work areas (e.g. construction zones). Foot protection is required when the potential for foot injury is present from rolling, falling, piercing or electrical hazard. All hard hats or safety shoes must meet the requirements for protection outlined by the American National Standards Institute (ANSI).

Hearing Protection

Certain work areas and job tasks are designated as requiring hearing protection. You are required to wear approved protective equipment; this <u>does not</u> include personal stereos with headphones. Certain work areas or tasks may be designated as requiring additional protective measures. Supervisors are responsible for identifying these areas and for generally providing training on the use of hearing protection equipment. If you have questions about high noise levels in your work area, you should ask your supervisor or contact EH&S for more information.

Respiratory Protection

Some employees are required to wear respirators. Respirators include dust masks, air-purifying negative-pressure respirators, self-contained breathing apparatus, supplied-air respirators, and other such devices. If you must wear a respirators, you must have a medical evaluation, be "fit tested" and trained by EH&S before using it. Annual training is required. NMSU has a written Respiratory Protection Program. Details are in the program section on safety web (safety.nmsu.edu).



15. PERSONAL PROTECTIVE EQUIPMENT

Faculty, staff, and students may be required to wear personal protective equipment (PPE) while performing their jobs or in certain environments (e.g. chemical, art and theater departments, facility and engineering shops). Your supervisor will inform you of and provide the specific PPE you must wear. The following are only general guidelines. If you are required to wear PPE not mentioned here or have other questions, contact your supervisor or EH&S for additional information. More information is available on the safety web site (safety.nmsu.edu).

Eve and Face Protection

Chemical hazards - Safety glasses are the minimum protection for all operations involving chemicals. If a risk of splash to the eyes and face exists when using or dispensing hazardous liquids, non-vented chemical goggles or safety glasses with side shields and full-face shield offer the best protection.

Physical hazards - High-pressure cleaning or spray equipment requires that safety glasses with side shields and fullface shields be worn. Work activities producing chips or dust (e.g. grinding/drilling, power fastening, or power tools) require safety glasses with side shields as the minimum protection level. In some cases full face shields are required.

Welding - Welding operations require full welding hoods with the appropriate tinted vision screen. Safety glasses with side shields must be used with or without the hood. Acetylene-oxygen torch soldering, brazing, or cutting, requires appropriately tinted safety glasses with side shields or tinted goggles.



Lasers - Appropriate safety evewear is a must when using lasers or when in areas with a working laser. Different lasers require different types and shades of eye protection. Lasers are to be registered with EH&S and users must be trained.

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After activating the fire alarm, immediately call the campus emergency number - 911.

For chemical contact, remove contaminated clothing and rinse contaminated skin or eyes continually with fresh water or eye wash solution for 15 minutes.

All Spills - No Immediate Danger

This is for spills that present no immediate danger to you or other building occupants.

All spills with uncontrolled releases (water flooding, cleaning supplies, etc.) or chemical contamination of a person must be reported to your supervisor and EH&S. For



mercury spills, don't clean up, close the area and call EH&S. A spill report should completed for chemical releases, beyond minor incidental spills (See details on web).

Emergencies are reported at 911; Non-emergencies should be reported at 646-3311

Fire

If you see a fire, smell a burning odor or see smoke you believe to be caused by fire, activate the fire alarm and immediately afterwards call 911.



Do not attempt to put out the fire unless you know it is safe to do so. Do not

use a fire extinguisher unless you are trained to do so. All NMSU employees should attend extinguisher training conducted by the NMSU Fire Department (646-2519).

If the fire alarm sounds in your building, evacuate the area immediately. Move away from the building to a predesignated area. Do not use the elevators.

Medical Emergency

Quickly call **911** for immediate medical attention of employees, students, or visitors.

Do not move an injured person <u>unless</u> they are in a **life threatening situation.** Call **911** for:

- ⇒ heart attacks
- \Rightarrow unconscious persons
- \Rightarrow cuts with extreme bleeding
- \Rightarrow broken bones
- \Rightarrow eye or head injuries
- \Rightarrow chemical exposures
- \Rightarrow electric shock
- ⇔ seizures



Or if in doubt, treat the situation as a medical emergency and call **911**.

Weather Hazards

The Sun. Along with the Organ Mountains, the sun is the most prominent feature of the daytime skyline. With the sun comes certain dangers from the high UV level in Las Cruces. Take appropriate precautions to prevent overexposure to the sun such as sun block, headgear, and sunglasses.

The median Las Cruces summertime temperature is 95.5° F. Heat illness (heat exhaustion, heat cramps, heatstroke) is a real issue and is easily prevented. Prevention methods include drinking plenty of **water** (not tea, coffee, sodas, etc.), wearing lightweight, loose fitting, light-colored, clothing, and scheduling outdoor activities during cooler part of day.

Lightning. Lightning is a major component of local storms. If you are caught outside during a lightning storm, seek proper shelter immediately. Safety tips include:



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14. SHOP SAFETY

This section contains a brief summary of conditions that personnel working in shop settings may encounter. Examples of shop safety include, but are not limited to:

Respiratory Protection

This program preserves the health of personnel by preventing exposure to harmful air contaminants. Requirements include medical review, training and **annual** fit testing. Personnel

are trained on the recognition of respiratory hazards, the use and care of appropriate respiratory protection equipment, and the need to comply with university, state and federal regulations. Where practical, exposure to air contaminants will be eliminated by the



application of engineering controls (i.e. enclosure of the operation, ventilation, or substitution of less toxic materials).

Lockout Tagout

This program ensures machines and equipment are isolated from potentially hazardous energy sources (e.g. steam, electrical, mechanical, hydraulic, or gas). To avoid unexpected start-up, lockout or tagout must occur before employees perform service, maintenance, or renovation. Performing this action prevents personal injury, fire, or equipment damage.

Confined Spaces

A confined space is an area with limited or restricted entry/ exits and is not designed for continuous occupancy. It is a permit-required area when it contains a potentially hazardous atmosphere, such as limited oxygen content. It may also require a permit if it contains mechanical and/or electrical equipment, which upon contact or activation may trap, crush, or electrocute persons. Examples of such areas include pump stations, wells, tanks, ducts, utility vaults, steam tunnels and ventilation/exhaust units. Permit required areas are clearly labeled. Call EH&S for permit **before** entry.

13. LABORATORY SAFETY

This section provides only a brief summary of laboratory safety. For more in-depth information refer to the NMSU Guide to Laboratory Safety developed by the University Safety Committee and EH&S (details are provided on the EH&S web site). Staff working in laboratories should be familiar with certain rules; these include:

Chemical Hygiene Plan/Lab Std Training

Departments with labs must have a Chemical Hygiene Plan (updated annually) and appoint a Chem. Hygiene Officer. All lab employees (regular or student) must be trained by EH&S (minimum training - HazCom & Lab Standard)

Food and Drink Consumption

Maintaining food, drink, smoking materials, and cosmetics, in a laboratory potentially exposes employees to toxic substances. Consuming food or drinks, applying cosmetics,

and smoking are not allowed in these areas. Well-defined areas are to be established for their storage and consumption.



Protective Equipment

Clothing is a critical factor in the safety of laboratory personnel. As such, teaching and research laboratories must enforce the OSHA standard for proper clothing worn by people handling hazardous chemicals. At a minimum, lab users must wear the following:

- Safety glasses must be worn at all times in areas where chemicals are being used. Splash goggles (acid goggles) or face shields with splash proof sides must be worn for splash protection from corrosive or dangerous chemicals.
- Protective gloves when the potential exists for contact with corrosive, toxic materials or hazardous materials
- Appropriate protective clothing (pants, lab coats, aprons, or tyvek-type coveralls) and closed-toe shoes in areas where hazardous chemicals are used or stored.

- Quickly get out & way from pools, lakes & water bodies;
- Avoid areas higher than the surrounding landscape
- Get in a hard-topped car;
- Never use a tree as a shelter
- Keep away from metal objects;
- Indoors stay clear of windows, doors, & electric units;
- Don't stand in a crowd of people;
- Unplug computers and equipment and only use the telephone for emergencies.

Wind. Strong winds with

blowing dust are also a frequent problem. The peak months for strong winds in the Las Cruces area is during February and March. However, strong winds can occur at any time during the year. You can best protect yourself by wearing the proper

clothing. If you suffer from respiratory problems, a dust mask or equivalent may be required. Consult your physician for advice.

Rain and High Water. Las Cruces is an extremely arid region. The average annual precipitation for the area is approximately 11 inches. During rain storms the streets can become slick from oils that have built up over time.

Strong and heavy rainstorms are also a reality. When this occurs dangers arise from flash floods and street flooding.

Low-lying areas, such as arroyos, quickly flood and become very hazardous. Do not attempt to cross flooded areas of unknown depth.



5. NON-EMERGENCY INJURY / ILLNESS PROCEDURES

All illnesses and injuries occurring from workplace activities <u>must</u> be reported. Steps to take in identifying incidents and seeking treatment are as follows:

Employee Incident Reporting

Any work-related injury or illness, no matter how minor, must be reported to your supervisor at the time of the incident using form NOA-1 "Notice of Accident." Examples of injuries/illness include but are not limited to: scratches, bruises, burns, dust in eyes, headaches from breathing fumes or vapors, splinters, dislocated joints, broken bones, cuts, muscle strains, particles in the eyes, etc. Form NOA-1 must be submitted within 15 days of the incident to be considered for workers compensation. In addition, report all near misses to your supervisor so that actions can be taken to prevent future occurrences that might not miss.

Supervisor's Reports and Investigation

Your supervisor is required to complete WCA Form E1.2, "Employer's First Report of Injury or Illness". The form "NMSU Worker's Compensation Supervisor Accident Investigation Report" may also be useful Upon completion, these and the NOA-1 form are to be submitted to the NMSU Worker Compensation Coordinator, Campus Health Center, within 24-hours even if medical attention is not required.

When completing the forms, give a detailed description of what happened. Include the names and phone numbers of any witnesses to the incident. Include whether Personal Protective Equipment (PPE) was required by the task and if PPE was used. Also include the dates of recent safety training. This then provides the necessary information to identify the root cause and prevent future incidents or near misses.

12. OFFICE & BUILDING SAFETY

Office areas are typically safer than most other workplaces. However, hazards exist that can potentially cause illness and injury. Situations, materials and equipment that can lead to illness or injury can include the following:

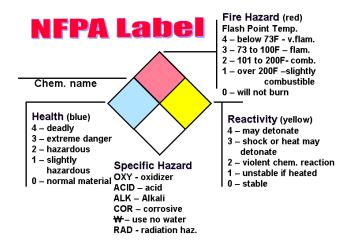
- **Tripping hazards** electrical/phone cords, misplaced supplies, open file cabinet drawers
- **Back injury** improper lifting technique or too heavy of a load for one person
- Falling using equipment other than ladders to reach objects from higher places
- File cabinets tipping over with most of the weight in open top drawer or tripping over drawers that are left open
- ◆ **Shock** using electrical equipment that is ungrounded, with frayed cords or unguarded (GFCI) in wet areas.
- Fire due to improper use of extension cords, surge protectors or multi-plug units
- Chemical exposure from glues, solvents, toners, cleaners, etc.
- ◆ **Computers** cumulative trauma disorder, eye strain, neck/shoulder/ back pain.

Safety Data Sheets

A Safety Data Sheet (SDS, previously called MSDS) is a detailed reference for the chemical prepared by the manufacturer. It contains technical, safety and health information about the chemical. **These documents must be available to all staff on every shift**. All staff must know what an SDS is and where they are located for their work area. Each department and supervisor is responsible for maintaining a set of SDS for the hazardous materials used or stored within their work areas. SDSs are required as part of a NMSU purchase order. Multiple links are available in the resources section of the safety web site (safety.nmsu.edu) to obtain missing SDSs.

Labeling

All containers of hazardous chemicals are required to be correctly labeled. Under new GHS requirements, the manufacture labels must include warnings, pictograms & information to prevent unnecessary exposure to hazardous chemicals (pictograms examples in section 19). Chemicals placed in secondary containers must also be labeled. NMSU uses the NFPA labeling system for secondary containers. The chemical name, its hazard rating (0 low to 4 extreme) for fire, reactivity, toxicity and any specific hazard are marked on the color-coded label.

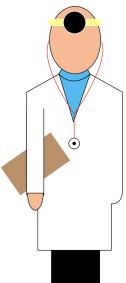


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Getting Medical Attention

If there is an injury at work or an illness believed to be work-related, report to Employee Health Services. If immediate attention is required, do not wait for the injury/ illness report to be completed. However, for exposure to chemicals or chemical products, take a copy of the Safety Data Sheet (SDS) for the material involved with you. The supervisor should obtain a copy from the departmental work files.

Campus Health Center (646-1512) is located at the corner of Breland and Stewart Street. The regular and inter-session hours for Campus Health Center are:



Monday - Friday	7:30 am - 11:30 am, Walk-in hours
•••••	1:00 pm - 4:30 pm, Appointments
	7:30 am - 4:30 pm, Urgent Care

NMSU *requires* that an injured employee see an Campus Health Center physician first for all medical care and for any specialist referrals for a work related injury. Exceptions are:

1. A need for immediate hospital emergency care

2. A serious injury occurring after clinic hours

3. An injury occurring outside the Las Cruces area

If any of the above occur, contact NMSU Worker Compensation Coordinator (646-1512) at the Campus Health Center within 24-hours in order to coordinate all follow-up medical care.

Employees located off-campus and outside the Las Cruces area should report to the nearest emergency medical facility. Documentation must be sent to WC Coordinator c/o Campus Health Center, MSC 3529, NMSU, Las Cruces.

6. ASBESTOS MANAGEMENT

Campus buildings constructed prior to 1981 typically have asbestos within their structures. Asbestos is a fibrous mineral used extensively in building materials as a fire preventative measure before its health hazards were fully known. It is only a hazard if the microscopic fibers are released into the air. Once the fibers are in the air, hu-

mans can breathe in the fibers which become lodged in the lungs. Most people experiencing negative health effects from asbestos have breathed air containing high concentrations of asbestos over long periods of time.

The EH&S Asbestos Operation and Maintenance Program provides direction and guidance to protect everyone's health and help comply with regulations with during renovation projects and normal maintenance activities. NMSU contracts state licensed workers to perform asbestos removal. Asbestos warning signs will indicate the areas where asbestos-containing materials are being removed. These signs will be posted at such a distance from the removal project that an employee may read the signs and safely avoid the regulated area.

To ensure environmentally safe working conditions, **per-sonnel potentially exposed to asbestos in their work activities must attend Asbestos Awareness Training**. Building material should not be disturbed if it is unknown whether or not the material contains asbestos.



11. HAZARD COMMUNICATION PROGRAM

Applicability & Training

The Hazard Communication Program is an OSHA requirement and is intended to provide information regarding the use of hazardous chemicals in the work place. **All NMSU employees** should be familiar with the requirements

of the written program. Employees that use chemicals or chemical products (including common items such as cleaners, glues, photo-chemicals, fuels, paints, insecticides, etc) must receive training from NMSU. EH&S gives this training monthly and provides documentation.



Please see the training section on the safety web for the schedule or to sign up.

Written Program

NMSU has developed a written program for Hazard Communication. Employees have the **right to know the hazards** involved with the chemicals and products with which they work. NMSU maintains a written program available to all employees. It is available at the EH&S office or via the policy section of the safety web site (safety.nmsu.edu). The written program specifies the university policy, training requirements, responsibilities of employees relating to the program, and procedures for program implementation and maintenance.

HazCom Chemical Inventory

Each department is required to conduct and maintain a inventory of chemicals (and chemical products) used or located in their work areas. The HazCom inventory is to be available to users and include identity, approximate quantity, hazard type, location, and contact information. The inventory must be updated annually with EH&S. Details on the web-based inventory are provided on the safety web site. An SDS must be available for each chemicals on the list.

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- Become an advisor for a green student organization
- Minimize waste and recycle where possible.

Waste Minimization includes such techniques as:

- <u>Purchase Control</u>: Purchase only necessary amount required for each complete a job and establish a centralized system within departments to prevent purchasing duplication.
- <u>Inventory Control</u>. Redistribution of unused materials or returning unused, unopened materials to vendors for credit. Clear & proper labeling of containers is also recommended.



• <u>Operational Controls.</u> Periodic reviews to ensure chemical usage is minimized; reducing chemical usage in teaching & research via micro-scale techniques and using less hazardous substitutes when feasible.

<u>EH&S Contribution</u>: EH&S minimizes hazardous waste by bulking or consolidating much of the campus lab hazardous waste for disposal. This is a major cost saving as bulk hazardous waste disposal cost ~1/10 that of disposal of lab pack hazardous waste containers.

Aggie Recycling offers the following recycling programs:

- <u>Beverage Cans</u>: Collection containers are located in vending areas and other campus locations.
- ◆ <u>Office Paper:</u> Desk top collecting bins and other office collection receptacles and collection services are available by contacting Aggie Recycling (646-8159).
- ◆<u>Batteries:</u> EH&S collects batteries for recycling, <u>except</u> standard household-size (A, AA, AAA, C, D, 9-volt). Other items are recycled on a department basis.

7. HAZARDOUS (CHEMICAL) WASTE DISPOSAL

The proper disposal of chemicals is important for the protection of employee health and the environment. The Environmental Protection Agency (EPA) enforces strict laws that govern the proper management of hazardous waste. The EPA often levies steep fines against institutions and sometimes brings criminal charges against individuals who fail to follow proper procedures. Government institutions like NMSU are not immune.

EH&S provides a **hazardous waste manual** (on the web). It is a guide on waste disposal with information on identification, labeling, segregation, storage, packaging, and turn-in of hazardous waste. For areas with hazardous waste streams, training on hazardous waste management is required and provided monthly by EH&S staff. Check the training section on the safety web (safety.nmsu.edu) for scheduling and to sign up for the class.

◆ Bottom line: If you need assistance in determining whether or not you are producing a hazardous waste, call EH&S (646-3327) for assistance. The following is a general list, non-inclusive, of common materials at NMSU that become hazardous wastes when they can no longer be used for their intended purpose. These wastes must be turned into EH&S for proper disposal; they cannot be poured down the drain or placed in a dumpster.

- \Rightarrow Most laboratory chemicals
- \Rightarrow Pesticides, herbicides, rodenticides
- \Rightarrow Florescent bulbs & ballasts, also electronic equipment
- \Rightarrow Special batteries (Ni-Cad, Lithium, & Lead-Acid)
- \Rightarrow All elemental mercury and mercury compounds
- \Rightarrow Paint, thinners, solvents, and adhesives
- \Rightarrow Maintenance materials: degreasers, lubricants & fuels
- \Rightarrow Janitorial materials such as floor waxes and strippers
- \Rightarrow Spill clean-up materials involving the above

• An EH&S Waste Material Tracking Form needs to be completed and attached to each waste container. The form needs to include ALL chemical ingredient names and best estimate of the amount of each in the container, to include ALL diluents (water, alcohols, etc.). This form should be attached to the waste container as soon as waste starts to be collected and can serve as the container label.

• Place waste materials in compatible containers. Waste collection **containers** are available **free of charge** from EH&S. When possible avoid mixing waste chemicals from different waste streams. If mixing must occur, always ensure chemicals are compatible.

• Waste containers must be tightly closed at all times when not in use. Store waste containers only in designated areas.

• When waste containers are **75% full**, they need to collected by EH&S. Package compatible wastes in boxes with packaging materials so that they will not break during transportation. Department of Transportation (DOT) approved shipping boxes are required for liquids.

• NMSU Decommissioning Proce-

dures are used for lab close-outs to reduce cost for analysis of unknowns & disposal of abandoned lab chemi-

cals (details are on the EH&S web under Lab Safety Programs).

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◆ Contact the EH&S office (646-3327) for the tracking forms and to schedule a hazardous waste pick-up. There is **no cost** to the department **for normal waste disposal**. However, analytical **fees for unlabeled or abandoned wastes** will be charged to the responsible department.

10. ENVIRONMENTAL PROTECTION, WASTE MINIMIZATION, SUSTAINABILITY & RECYCLING

NMSU is dedicated to the protection of the environment and asks that you evaluate your work area & activities to help minimize generation of waste items, waste chemicals and wasted energy.

NMSU Storm Water Management Program (SWMP)

New Mexico State University operates a Municipal Separate Storm Sewer System (MS4) that is permitted by the Environmental Protection Agency. The MS4 consists of the streets, drainage ditches, and storm drain pipes that convey storm-water runoff through the campus. The permit requires NMSU to



implement a SWMP program to reduce pollutants in storm-water runoff to the maximum extent practicable. As 'citizens' of NMSU, we all play a part in protecting our natural environment - you can help!

For more information, please visit the NMSU SWMP home page at http://safety.nmsu.edu/programs/environmental/SWMP.htm, or call 646-3327.

The Office of Sustainability develops policies and guidelines for protecting natural resources and to reduce the University's ecological footprint, etc.

Make a difference at NMSU:

- Turn off lights, computer monitor and peripherals
- Send files electronically and print double-sided
- Ride your bike; ride the bus; use Aggie Transit
- Choose green cleaning products and report leaky faucets
- Join the Sustainability Council



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Classification of Radioactive Waste

Solid Waste, includes laboratory trash, paper, plastic, gloves, soils, test tubes and glassware.

Broken glass or sharps must be placed in a rigid, puncture proof container labeled "sharps."

Liquid Scintillation Vial (LSV) Wastes are scintillation fluids inside closed vials.

Bulk Liquid Scintillation Fluids containing other liquids must be clearly labeled with the percentage of each component in the waste container.

Aqueous Wastes that are readily soluble, not otherwise hazardous, and fall within specified limits may be disposed in the sanitary sewer as authorized in the user's permit.

Biological Waste (contaminated animal carcasses, tissues, blood, human and animal secretions) and

Special Waste (hazardous chemical pathogenic or infectious material) requires pre-approval by the RSO at EH&S (646-3327).



8. BIOLOGICAL OR INFECTIOUS WASTE

Infectious waste includes any waste item contaminated with biological agents suspected as being capable of transmitting disease. Infectious waste can be divided into three primary groups:



- Liquid wastes. Items such as blood, other bodily fluids, or culture media which is known or suspected to be contaminated with disease agents.
- **Soft materials.** Includes materials such as dressings, bandages, bedding, toweling, etc. that are saturated to the point that they are capable of releasing blood, bodily fluids or other potentially infectious materials when handled or compressed.
- Sharps. Objects or instruments that are contaminated with blood, bodily fluids, or other infectious agents which could penetrate the skin or could do so if broken. Examples of this include:
 - \Rightarrow glassware
 - \Rightarrow pipettes (glass and hard plastic)
 - \Rightarrow hypodermic needles
 - \Rightarrow scalpel blades
 - \Rightarrow lancets

Segregation and Storage

- Place infectious liquid waste containers into leak proof containers for treatment prior to disposal.
- Place soft infectious waste into an infectious waste bag with the biohazard symbol on it and treat prior to disposal.
- Place infectious sharps into a sharps container for treatment. A sharp container is typically constructed of hard plastic with the biohazard symbol. The responsible department purchases the required autoclave containers, biohazard bags and sharps containers.

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Biohazard (Infectious) Waste Treatment

Biohazardous wastes must be treated as follows:

- Waste classified as Biosafety Level I must be autoclaved at the correct temperature, pressure and time. Upon treatment it may be disposed of as regular trash.
- Waste classified as Biosafety Level II must be autoclaved at the correct temperature, pressure and length of time. A steam sterilization indicator must be included with each load to ensure proper autoclave function. After effective treatment & removal of biohazard symbol, waste may be disposed as trash.

*Note: Personnel must be certified, *in writing*, that they have been properly trained and understand the operating procedures for each steam sterilizer before using the units to treat infectious waste.

- Blood waste and sharps, in sharps containers, are incinerated by a vendor approved by EH&S.
- Untreated biohazardous material (including human blood, body fluids, etc.) must be incinerated by a vendor approved by EH&S.
- Contact the EH&S Office for pick-up of biohazard containers for incineration. Large biohazard containers are available upon request.



9. RADIOACTIVE WASTE MANAGEMENT

All radioactive materials (including uranium & thorium compounds), x-ray devices, and similar radiation equipment must be licensed to be purchased, used and stored at NMSU. Licensing must be done via the NMSU Radiation Safety Officer (RSO) at EH&S. The Radiation Safety Committee reviews each new application. A radiation safety manual is on the NMSU Safety website and radiation training is available from EH&S.

Disposal options for radioactive material include decay in storage, transfer to EH&S, sewer disposal and transfer to a licensed user.

- \Rightarrow Each user of radioactive material is responsible for segregating waste by isotope and type.
- \Rightarrow Waste must be stored in an appropriate, properly labeled, leak proof container.
- \Rightarrow Records of radioisotope use and disposition are maintained by each authorized user.
- ⇒ Biodegradable or environmentally safe scintillation cocktails must be used because of disposal restrictions on hazardous wastes contaminated with radioactivity.
- ⇒ All types of radioactive waste must be segregated by isotope except for carbon-14 and tritium, which may be mixed.

