



**What types of support does the safety community provide?**

**Jot down the names and numbers of key personnel at your Location.**



You can get support on just about any type of safety issue you can imagine, from typical "fire safety" to the more obscure "aviation safety." The safety umbrella encompasses the environment, health, wellness, and a host of other issues. If it's out there, the REE safety community probably has an expert on the subject. Examples of support include -

- Accident Prevention
- Biological Safety
- Compliance Reviews
- Emergency Response
- Employee Assistance
- Environmental Management
- Fire Prevention
- Hazard Abatement
- Hazardous Waste
- Industrial Hygiene
- Occupational Medical Surveillance
- Personal Protective Equipment
- Pollution Prevention
- Radiation Safety
- Regulatory Compliance
- Training
- Workers' Compensation

. . . as well as many others . . .

*Location Safety Officer, CDSO, or Safety Rep*

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*Safety Committee Chairperson*

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*EAP/OMSP/OWCP Coordinator(s)*

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*Occupant Emergency Coordinator*

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*Fire Department*

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*Spill Response Coordinator*

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*Environmental Protection Specialist*

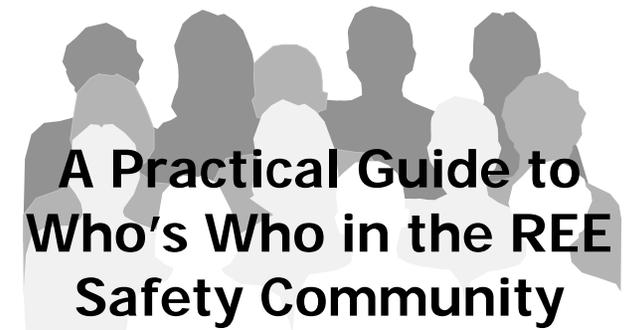
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*Other*

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*Other*

*The U.S. Department of Agriculture offers its programs to all eligible people, regardless of race, color, age, handicap, sex, or national origin, and is an equal opportunity employer.*



Visit our website at  
<http://www.afm.ars.usda.gov>

## Whom do I contact when I have a safety question?

First, contact your agency or location safety representative listed below. This is your primary contact within the REE safety community. If they can't answer your question, speak to them about consulting someone on the next page who can.

Within ERS, NAL, NASS, or NIFA your safety liaison is -

**ERS** Dominique Harris  
(202) 694-5016  
Fax (202) 694-5874

**NAL** Frank Mastria  
(301) 504-5843  
Fax (301) 504-5472

**NASS** Forest Chapman  
(202) 720-5221  
Fax (202) 720-9909

**NIFA** Dennis Kopp  
(202) 690-0745  
Fax (202) 720-8987

Within ARS, each location has a Safety Officer or a Collateral Duty Safety Officer (CDSO). If you don't know who this is, ask your Location Coordinator.

## Whom do I contact if I need additional support?

Within ERS, NAL, NASS, or NIFA, contact Terry Roark, Chief, Safety, Health, and Environmental Management. Within ARS, contact the Area Safety & Health Manager (ASHM) in your Area -

- **BA** David A. Prevar  
(301) 504-5557  
Fax (301) 504-5857
- **MSA** Darrell Williamson  
(662) 686-5343  
Fax (601) 686-5373
- **MWA** Cal Mather  
(309) 681-6608  
Fax (309) 681-6683
- **NAA** Bonnie DiSalvo  
(215) 233-6592  
Fax (215) 233-6558
- **NPA** Bonnie King  
(970) 492-7021  
Fax (970) 492-7031
- **PWA** Alvin Humphrey  
(510) 559-6124  
Fax (510) 559-5683
- **SAA** Earl Griffin  
(706) 546-3574  
Fax (706) 546-3469
- **SPA** Philip A. Smith  
(979) 260-9449  
Fax (979) 260-9344

**Note:** Other ARS support personnel are also available to provide assistance. Please contact your ASHM for a list of personnel in your Area.

## Who heads up the various safety functions within REE?

### Biological Safety

Joe Kozlovac (301) 504-4734  
Fax (301) 504-5002

### Radiation Safety

John Jensen (301) 504-2440  
Fax (301) 504-2450

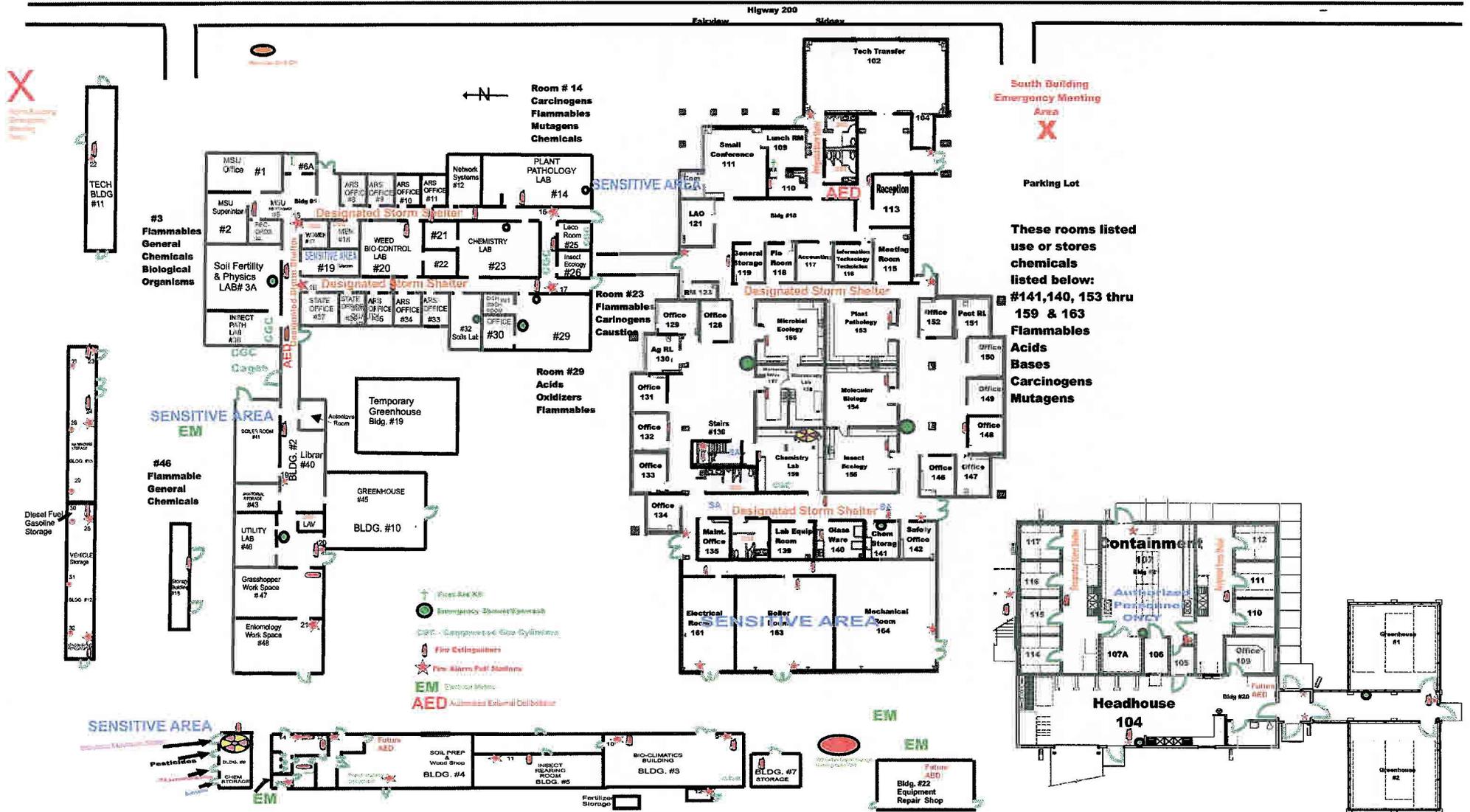
### Industrial Hygiene Environmental Management Occupational Safety & Health

Terry Roark (301) 504-1248  
Fax (301) 504-1252

### Employee Assistance Workers' Compensation Occupational Medical Surveillance

Tonya Morris (301) 504-1489  
Fax (301) 504-1456

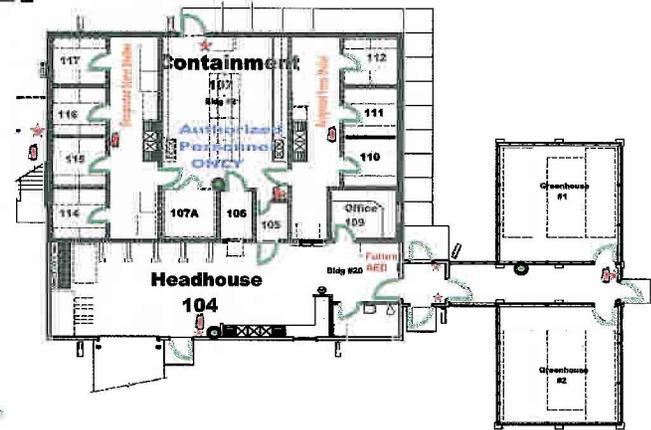
# Emergency Action Plan



South Building  
Emergency Meeting  
Area  
**X**

Parking Lot

These rooms listed  
use or stores  
chemicals  
listed below:  
#141,140, 153 thru  
159 & 163  
Flammables  
Acids  
Bases  
Carcinogens  
Mutagens



## **7. SECURITY**

Buildings, facilities, and offices shall be used only for official business or authorized USDA employee activities. Admittance to any portion may be restricted for security reasons. All ARS (full time, temporary, and volunteer), MSU employees must wear issued photo identification and proximity cards. Employees not wearing ID badges may be sent home to get ID badge. Security statement will be in all employees performance plan. All supervisors are required to make sure all employees are wearing their security badge and fully follow safety and security rules. Visitors must sign in and leave photo identification at front desk to obtain a proximity card. **ALL VISITORS MUST BE ESCORTED BY PERMANT EMPLOYEE.** If permanent employee is not available to escort visitor, the visitor will be allowed to visit with temporary employee at the front desk (North or South building) with the exception the receptionist is present at the time of the visit.

Contractors maybe issued contractor badges, but will be required to leave drivers license at front desk until work is completed and turn in the contractor badge at the end of each work day. If working for longer than 2 days, they will then be issued contractor badge but will not be required to turn in badge each night. Contractors will be escorted to proper personnel. A proximity card system is in place in the South building and Best Lock Systems are in place in all other buildings and some gates. Padlocks secure gates and storage areas that do not have a Best Lock. Access to buildings, gates, and storage areas is authorized by the Research Leader who will instruct the Administrative Officer to issue key(s) to employees as required by their job duties. Employees are required to sign documentation listing keys issued to them. The Administrative Officer maintains a record of keys issued and maintains master keys in a locked key box. It is illegal for locksmiths to reproduce any of the Best System keys. Requests for keys and proximity cards for temporary or volunteer employees must be in formal written format by their supervisor to the RL. Proximity cards will need to be provisioned by IT Specialist (Kevin Dahl). Proximity cards can be issued for 24 hours or more. The duration of a card must be specified in written request. If one time event must notify IT Specialist with a 24 hour notice. **DO NOT LEND YOUR KEYS OR PROXIMITY CARD TO ANYONE.** At the end of a workday, it is the responsibility of each employee to perform a routine check of their work area to ensure that appliances are turned off, equipment is left in appropriate mode, and cabinets locked as required. It is the responsibility of the last employee leaving a building to perform a routine check to ensure doors are closed and locked as required.

Anytime anyone passes through a closed or locked door/gate it is the responsibility of that person to close and/or lock the door/gate. It is the responsibility of any employee who has access to the buildings during other than official hours to keep doors locked while they are in the building to prevent unauthorized persons from entering. North, Tech and all other buildings: As a general rule, relock the door anytime that you use it, **IF** it was already in the "locked mode." North building when front desk is not occupied the front entrance will be "LOCKED". Tech & Admin building the doors will be "Locked" at all times, employees in this building will be responsible to carry their keys with them at all times.

Chemical storage building and chemical room in South building have controlled access. Employee's signature is required to obtain keys to either the chemical storage room or chemical storage building at the front desk in the South building. Employees are aware of certain chemicals and radioactive permits must be purchased by purchasing agent. Biological permits will be obtained through proper procedure listed in the Biological Safety Plan. (Appendix L)

Security levels – these levels are determined by the Department of Homeland Security  
See HSAS (Page 48 )

ARS requires the following as an ALL TIME REQUIREMENTS: All employees to wear there issued identification badges with proximity card before entering any building. All visitors and contractors shall leave driver's license at front desk to obtain visitor badge and will be escorted by a permanent ARS employee while on ARS location.

## **8. ADMISSION TO PROPERTY**

Individuals/groups who wish to engage in any activity at the facility must obtain permission from the Outreach Coordinator, Research Leader/Acting Research Leader or Administrative Officer.

Tech transfer room and library use standard operating procedures are located on P:/admin/tech transfer(or the name of room for SOP).

## **9. PROTECTION OF FACILITY AND REAL PROPERTY**

It is the responsibility of each employee to report any suspicious activity or vehicle, disturbance, violation or emergency. Action taken will depend on the nature and urgency of the situation. Non 911 emergency situations, example: pipe line breaks you would call Facilities Manager (Mark Basta) all other non-911 emergency situations should be reported to the Location Coordinator (Robert Evans), the Superintendent (MSU)(Jerry Bergman), or the Administrative Officer (Barbara Flammond). Call 911 for all Emergencies. If in doubt, it is best to call authorities and report what you have observed. For medical or unlawful act call 911. Remember to always record license numbers of suspicious vehicles.

## **10. THE FOLLOWING ARE PROHIBITED ON GOVERNMENT PROPERTY**

All sections of FPMR 101-20.3 and P&P 240.3 are a part of this plan, however the following are listed as a general reminder:

- On station use or possession of alcoholic beverages and narcotic drugs are prohibited.
- Operation of a motor vehicle by a person under the influence of alcoholic beverages or narcotic drugs is prohibited.
- Soliciting for charity, political purposes, and/or commercial ventures except the Combined Federal Campaign is prohibited.
- Displaying or distributing commercial advertising, except for national or local drives for welfare or health drives, or personnel notices posted by employees on authorized bulletin boards is prohibited.
- Gambling or any games of chance (including lottery, pools, and numbers tickets) involving money or other personnel property is prohibited.
- No weapons allowed on location.

## **11. PROTECTION OF PERSONNEL AND GOVERNMENT PROPERTY**

- Adopt an attitude of personnel responsibility, Remove the opportunity for theft.
- Do not leave money, jewelry, purses, wallets, or other valuables on top of a desk when away from the office (day or night).
- All funds should be locked in a secure place.
- Lock whatever needs to be locked: doors, windows, cabinets, drawers, safes, gates, etc.
- Sign off on computers when you leave the terminal.
- Lock out computer terminals. Lock your car.
- Do not leave valuable articles plainly visible in your car.

## **12. OBSERVE THE FOLLOWING FIRE PREVENTION RULES**

- Maintain good housekeeping in all areas of the building.

- Obey "NO SMOKING" signs.
- Do not throw matches, cigars, cigarettes, ashes, into wastebaskets, or any receptacle containing combustible material.
- If you smoke use ashtrays, and see that all smoking materials and matches are completely extinguished and disposed of in appropriate receptacles.
- Place oily rags and flammable materials in a metal container.
- Appliances with heating elements may be used only when approved by the Research Leader/Acting Research Leader.
- Place a fire resistant pad under appliances with heating elements.
- Deposit all trash in receptacles provided for that purpose.
- Maintain uncluttered passageways leading to fire fighting equipment.
- Report fire hazards and unsafe conditions to the Location Safety Officer, the Research Leader/Acting Research Leader, or the Administrative Officer



## Employee Safety, Occupational Health and Environmental Rights and Responsibilities

**A**ll Employee's have the following safety, health, and environmental-related rights:

1. To be informed of their protections and obligations under the OSHA Act
2. To a workplace free of recognized hazards causing or likely to cause death or serious physical harm, or damage to the environment.
3. To report unsafe and unhealthful working conditions, or a threat to the environment to appropriate officials, and have their report responded to within 24 hours for imminent danger conditions, three working days for potential serious conditions, and 20 working days for other conditions.
4. To anonymously report unsafe or unhealthful working conditions, or a threat to the environment.
5. To seek further resolution, at AREA and higher management levels as necessary, of unsafe or unhealthful conditions, a threat to the environment, if your right to report these conditions is being infringed; or if it appears that inadequate measures are being taken to protect employees from hazards, or to protect the environment.
6. To request that USDOL OSHA or authorized representative conduct an inspection of hazards to employees.
7. To decline to perform his or her assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm, or a significant threat to the environment. Further, that it is coupled with a reasonable belief that there is insufficient time to seek effective redress through normal hazard reporting and abatement procedures.
8. To have official time to participate in the activities provided for in section 19 of the Act, Executive Order 12196, 29 CFR 1960, and the agency occupational safety and health program, and environmental protection program.
9. Access to laws, standards, regulations, codes, directives and manuals pertaining to the REE-ARS Occupational Safety and Health, and Environmental Protection programs.
10. To comment on alternate safety, health, and environmental standards proposed by your location.
11. To have access to worksite injury and illness statistics and to records of monitoring and measuring.
12. To participate in ARS Occupational Safety and Health Programs, and Environmental Protection Programs, and to report unsafe or unhealthful conditions without restraint, interference, coercion, discrimination or reprisal.
13. To be informed of hazards in their workplace and of provisions of the plan to abate the hazards.
14. To assist Occupational Safety and Health and Environmental inspectors by responding to inspector's questions, and by wearing reasonable and necessary personal monitoring devices.



15. To have an employee representative accompany inspectors, or have employees be consulted by the inspector.
16. To request the evaluation of hazard by the National Institute for Occupational Safety and Health.
17. To be trained to recognize hazards, how to abate or report them, and on the SH&E plans and policies.

## **R**EE-ARS Employee Responsibilities Are:

1. To correct all hazards found, when within their capability and authority to correct, and to report the hazard and their actions to their supervisor.
2. To comply with all applicable federal, state, local regulations; and REE-ARS Safety, Occupational Health, Environmental, Radiological, and Biological standards; and all rules, regulations, and orders that apply to their workplace.
3. To report all accidents, injuries, illnesses, and environmental releases to their supervisors.
4. To perform all assigned tasks (including those activities not specifically addressed by existing rules or regulations) in a manner conducive to the safety and health of themselves, their fellow employees, and the environment.
5. To properly use all applicable safety, Occupational Health, Environmental, Radiological and Biological personal protective equipment, devices, and clothing.
6. To avail themselves of medical surveillance, employee assistance, counseling, and other Federal programs to maintain their physical and mental health and safety in accordance with ARS policies and regulations. Supervisory approval/concurrence should be acquired except where confidentiality is guaranteed.

## **W**HERE TO GO FOR ASSISTANCE

### **Your Supervisor:**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

### **Your Location's Collateral Duty Safety Officer:**

Name: JACKIE COUTURE Phone: 406-433-9422

### **Your Location Safety Committee Representatives:**

Name: JILL MILLER Phone: 406-433-2020

Name: BARBARA FLAMMOND Phone: 406-433-9485

### **Area Safety, Health, and Environmental Manager:**

Bonnie King

Phone: 970-492-7021

Fax: 970-492-7031

Email: [bonnie.king@ars.usda.gov](mailto:bonnie.king@ars.usda.gov)

# USDA Federal Employee Only Procedures to Follow in the Event of an Accident/Injury/Illness

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1. Injured employee obtains required First-Aid/Medical Treatment.
  - Initial Medical care in non-emergent cases can be obtained from employee's physician or medical facility of choice.
2. Injured employee notifies supervisor of injury as soon as possible but within 2 workdays of injury.
3. Supervisor, with employee present, immediately contacts location safety officer (Location Admin Officer in his/her absence).
4. Employee, supervisor, Location Safety Officer (Location Admin Officer) complete form CA-1.

- NOTES:
- (1) All work related accidents, injuries and illnesses, no matter how minor, must be reported.
  - (2) The general rule is that all injuries and illnesses which result from events or exposure on the employer's premises are presumed to be work related (i.e., traveling to or from the parking lot, engaging in exercise, eating lunch in the break area).
  - (3) \*\*The above are procedural guidelines for this location. Anyone having knowledge of an accident, incident, injury or illness are to contact the Location Safety Officer and the Location Admin Officer immediately.\*\*



# What A Federal Employee Should Do When Injured at Work

Report to Supervisor	Every job-related injury should be reported as soon as possible to your supervisor. Injury also means any illness or disease that is caused or aggravated by the employment as well as damage to medical braces, artificial limbs and other prosthetic devices.
Obtain Medical Care	Before you obtain medical treatment, ask your supervisor to authorize medical treatment by use of form CA-16. You may initially select the physician to provide necessary treatment. This may be a private physician or, if available, a local Federal medical officer/hospital. Emergency medical treatment may be obtained without prior authorization. Take the form CA-16 and form OWCP-1500/HCFA-1500 to the provider you select. The form OWCP-1500/HCFA 1500 is the billing form physicians must use to submit bills to OWCP. Hospitals and pharmacies may use their own billing forms. On occupational disease claims form CA-16 may not be issued without prior approval from OWCP.
File Written Notice	In traumatic injuries, complete the employee's portion of Form CA-1. Obtain the form from your employing agency, complete and turn it in to your supervisor as soon as possible, but not later than 30 days following the injury. For occupational disease, use form CA-2 instead of form CA-1. For more detailed information carefully read the "Benefits . . ." and "Instructions . . ." sheets which are attached to the Forms CA-1 and CA-2.
Obtain Receipt of Notice	A "Receipt" of Notice of Injury is attached to each Form CA-1 and Form CA-2. Your supervisor should complete the receipt and return it to you for your personal records. If it is not returned to you, ask your supervisor for it.
Submit Claim for COP/Leave and/or Compensation For Wage Loss	If disabled due to traumatic injury, you may claim continuation of pay (COP) not to exceed 45 calendar days or use leave. A claim for COP must be submitted no later than 30 days following the injury (the form CA-1 is designed to serve as a claim for continuation of pay). If disabled and claiming COP, submit to your employing agency within 10 work days medical evidence that you sustained a disabling traumatic injury. If disabled beyond the COP period, or if you are not entitled to COP, you may claim compensation on form CA-7 or use leave. If disabled due to occupational disease, you may claim compensation on form CA-7 or use leave. A claim for compensation for disability should be submitted as soon as possible after it is apparent that you are disabled and will enter a leave-without-pay status.

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The Federal Employees' Compensation Act (FECA) is administered by the U.S. Department of Labor, Employment Standards Administration, Office of Workers' Compensation Programs (OWCP). Benefits include continuation of pay for traumatic injuries, compensation for wage loss, medical care and other assistance for job-related injury or death. For additional information about the FECA, read pamphlet CA-11, "When Injured at Work" or Federal Personnel Manual, Chapter 810, Injury Compensation, available from your employing agency. The agency will also give you the address of the OWCP Office which services your area.

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Post on Employees' Bulletin Board

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U.S. Department of Labor

Employment Standards Administration  
Office of Workers' Compensation Programs

Form CA-10  
(Rev. 8/87)

# When Injured at Work



Facts about compensation  
for civilian employees of the  
Federal Government

U.S. Department of Labor  
Employment Standards Administration  
Office of Workers' Compensation Programs

Publication CA 11  
Revised April 1999

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## Information Guide for Federal Employees

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### Introduction

The Federal Employees' Compensation Act (FECA) (5 U.S.C. 8101 et seq.) is administered by the Office of Workers' Compensation Programs (OWCP) of the U.S. Department of Labor. It provides compensation benefits to civilian employees of the United States for disability due to personal injury sustained while in the performance of duty or to employment-related disease. The FECA also provides for the payment of benefits to dependents if the injury or disease causes the employee's death. Benefits cannot be paid if the injury or death is caused by the willful misconduct of the employee or by the employee's intention to bring about his or her injury or death or that of another, or if intoxication (by alcohol or drugs) is the proximate cause of the injury or death.

### Medical Benefits

An employee is entitled to medical, surgical and hospital services and supplies needed for treatment of an injury as well as transportation for obtaining care. The injured employee has initial choice of physician and may select any qualified local physician or hospital to provide necessary treatment or may use agency medical facilities if available. Except for referral by the attending physician, any change in treating physician after the initial choice must be authorized by OWCP. Otherwise, OWCP will not be liable for the expenses of treatment.

The term "physician" includes surgeons, osteopathic practitioners, podiatrists, dentists, clinical psychologists, optometrists and chiropractors within the scope of their practice as defined by State law. Payment for chiropractic services is limited to treatment consisting of manual manipulation of the spine to correct a subluxation as demonstrated by x-ray to exist. If the physician selected has been excluded from participating in

the Compensation Program, the OWCP District Office will advise the employee of the exclusion and the need to select another physician.

### Compensation for Temporary Total Disability

An employee who sustains a disabling, job-related traumatic injury may request continuation of regular pay for the period of disability (not to exceed 45 calendar days) or sick or annual leave. If disability continues beyond 45 days or the employee is not entitled to continuation of pay, the employee may use sick or annual leave or enter a leave without pay status and claim compensation from OWCP.

When disability results from an occupational disease, the employing agency is not authorized to continue the employee's pay. The employee may use sick or annual leave or enter a leave without pay status and claim compensation.

Compensation for loss of wages may not be paid until after a three-day waiting period, except when permanent effects result from the injury or where the disability causing wage loss exceeds 14 calendar days. Compensation is generally paid at the rate of 2/3 of the salary if the employee has no dependents and 3/4 of the salary if one or more dependents are claimed.

The term "dependent" includes a husband, wife, unmarried child under 18 years of age, and a wholly dependent parent. An unmarried child may qualify as a dependent after reaching the age of 18 if incapable of self-support by reason of mental or physical disability, or as long as the child continues to be a full-time student at an accredited institution, until he or she reaches the age of 23 or has completed four years of education beyond the high school level.

### Compensation for Permanent Effects of Injury

The Act provides a schedule of benefits for permanent impairment of certain members, functions and organs of the body such as the eye, arm, or

kidney and for serious disfigurement of the head, face or neck. For example, an award of 160 weeks of compensation is payable for total loss of vision in one eye.

In addition, compensation for loss of earning capacity may be paid if the employee is unable to resume regular work because of injury-related disability. This compensation is paid on the basis of the difference between the employee's capacity to earn wages after an injury and the wages of the job he or she held when injured.

OWCP may arrange for vocational rehabilitation and provide a maintenance allowance not to exceed \$200 per month. A disabled employee participating in an OWCP-approved training or vocational rehabilitation program is paid at the compensation rate for total disability.

If the employee's condition requires an attendant, an additional amount not to exceed \$1500 per month may be allowed as a medical expense.

### Compensation for Death

If no child is eligible for benefits, the widow or widower's compensation is 50 percent of the employee's pay at the time of death, if death was due to the employment-related injury or disease. If a child or children are eligible for benefits, the widow or widower is entitled to 45 percent of the pay and each child is entitled to 15 percent. If children are the sole survivors, 40 percent is paid for the first child and 15 percent for each additional child, to be shared equally. Other persons such as dependent parents, brothers, sisters, grandparents, and grandchildren may also be entitled to the benefits. The total compensation may not exceed 75 percent of the employee's pay or the pay of the highest step for GS-15 of the General Schedule, except when such excess is created by authorized cost-of-living increases.

Compensation to an employee's surviving spouse terminates upon his or her death or remarriage. A widow or widower's benefits continue, however, if the remarriage takes place after the age of 55. Awards to children, brothers, sisters, and grand-

children terminate at the age of 18, unless the dependent is incapable of self-support, or continues to be a full-time student at an accredited institution, until he or she reaches the age of 23, or has completed four years of education beyond the high school level.

Burial expenses not to exceed \$800 are payable. Transportation of the body to the employee's former residence in the United States is provided when death occurs away from the employee's home station. In addition to any burial expenses or transportation costs, a \$200 allowance is paid for the administrative costs of terminating an employee's status with the Federal Government.

### Cost-of-Living Increases

Compensation payments on account of a disability or death which occurred more than one year before March 1 of each year, are increased on that date by any percentage change in the Consumer Price Index published for December of the preceding year.

### Settlements With Third Parties

Where an employee's injury or death in the performance of duty occurs under circumstances placing a legal liability on a party other than the United States, a portion of the cost of compensation and other benefits paid by OWCP must be refunded from any settlement obtained. OWCP will assist in obtaining the settlement and the Act guarantees that the employee may retain a certain proportion of the settlement (after any attorney fees and costs are deducted) even when the cost of compensation and other benefits exceeds the amount of the settlement.

### Appeal Rights

An employee or survivor who disagrees with a final determination of OWCP may request an oral hearing or a review of the written record from the Branch of Hearings and Review. Oral and/or written evidence in further support of the claim may

be presented. The employee may also request a reconsideration of a decision by submitting a written request to the District Office which issued the decision. The request must be accompanied by evidence not previously submitted. If reconsideration has been requested, a hearing on the same issue may not be granted. The employee or survivor may also request review by the Employees' Compensation Appeals Board (ECAB). Because the ECAB rules solely on the evidence of record at the time the decision was issued, no additional evidence may be presented.

### More Detailed Information

More detailed information about the requirements for coverage and benefits under the Federal Employees' Compensation Act may be obtained from Publication CA-810, *Federal Injury Compensation*, and Pamphlet CA-550, *Questions and Answers About the Federal Employees' Compensation Act*, which answer questions commonly asked about compensation benefits. These publications may be obtained through your employing agency's personnel office.

### What To Do . . .

1. **Keep This Pamphlet.** It is important that you know what you are entitled to, since benefits are not paid automatically. You or your survivors must claim them.
2. **In Case of Injury,** obtain first aid or medical treatment even if the injury is minor. While many minor injuries heal without treatment, a few result in serious prolonged disability that could have been prevented had the employee received treatment when the injury occurred. For traumatic injuries, ask your employer to authorize medical treatment on Form CA-16 BEFORE you go to the doctor. Take Form CA-16 when you go to the doctor, along with Form OWCP-1500, which the doctor must use to submit bills to OWCP. Your employer may authorize medical treatment for occupational disease ONLY if OWCP gives prior approval.

Submit bills promptly, as bills for medical treatment may not be paid if submitted to OWCP more than one year after the calendar year in which you received the treatment or in which the condition was accepted as compensable.

3. **Report Every Injury** to your supervisor. Submit written notice of your injury on Form CA-1 if you sustained a traumatic injury, or Form CA-2 if the injury was an occupational disease or illness. (Forms CA-1 and CA-2 may be obtained from your employing agency or OWCP.)

Form CA-1 must be filed within 30 days of the date of injury to receive continuation of pay (COP) for a disabling traumatic injury. COP may be terminated if medical evidence of the injury-related disability is not submitted to your employer within 10 calendar days. **YOU ARE RESPONSIBLE FOR ENSURING THAT SUCH MEDICAL EVIDENCE IS SUBMITTED TO YOUR EMPLOYING AGENCY.** Form CA-2 should also be filed within 30 days. Any claim which is not submitted within 3 years will be barred by statutory time limitations unless the immediate superior had actual knowledge of the injury or death within 30 days of occurrence.

4. **Establish the Essential Elements of Your Claim.** You must provide the evidence needed to show that you filed for benefits in a timely manner; that you are a civil employee; that the injury occurred as reported and in the performance of duty; and that your condition or disability is related to the injury or factors of your Federal employment. OWCP will assist you in meeting this responsibility, which is called burden of proof, by requesting evidence needed to fulfill the requirements of your claim.
5. **File a Claim for Compensation.** File Form CA-7, *Claim for Compensation on Account of Traumatic Injury or Occupational Disease*, if you cannot return to work because of your injury and you are losing (or expect to lose) pay for more than three days. Give the form

to your supervisor seven to ten days before the end of the COP period, if you received COP. If you are not entitled to COP, submit Form CA-7 when you enter or expect to enter a leave without pay status. All wage loss claims must be supported by medical evidence of injury-related disability for the period of the claim.

If you continue to lose pay after the dates claimed on Form CA-7, submit additional Forms CA-7 through your employer to claim additional compensation until you return to work or until OWCP advises they are no longer needed. You are **not** required to use your sick or annual leave before you claim compensation.

If you choose to use your leave, you may, with your agency's concurrence, request leave buy-back by submitting Forms CA-7, CA-7a and CA-7b to OWCP through your employing agency. Any compensation payment is to be used to partially reimburse your agency for the leave pay. You must also arrange to pay your agency the difference between the leave pay based on your full salary and the compensation payment that was paid at 2/3 or 3/4 of your salary. Your agency will then recredit the leave to your leave record.

6. **Return To Work As Soon As Your Doctor Allows You To Do So.** If your employing agency gives you a written description of a light duty job, you must provide a copy to your doctor and ask if and when you can perform the duties described. If your agency is willing to provide light work, you must ask your doctor to specify your work restrictions. In either case, you must advise your agency immediately of your doctor's instructions concerning return to work, and arrange for your agency to receive written verification of this information. COP or compensation may be terminated if you refuse work which is within your medical restrictions without good cause, or if you do not respond within specified time limits to a job offer from your agency.

In appropriate cases, OWCP provides assistance in arranging for reassignment to lighter duties in cooperation with the employing agency. In addition, injured employees have certain other specified rights under the jurisdiction of the Office of Personnel Management, such as reemployment rights if the disability has been overcome within one year.

7. **Tell Your Family** about the benefits they are entitled to in the event of your death. For assistance in filing a claim, they may contact your employing agency's personnel office or OWCP.

**For Additional Information or When in Doubt About Your Compensation Benefits, Write to the Office of Workers' Compensation Programs.**

*(Obtain the address of the OWCP district office from your employing agency.)*

## BOMB THREATS PROCEDURES

### THE PERSON RECEIVING THE CALL SHOULD:

- Remain calm - do not panic.
- Attract the attention of a coworker while keeping the caller on the line.
- Have the coworker 1) Call 911, 2) Notify Lab director or Research Leader will have personnel evacuate the threatened area by activating fire alarm system. Alternative method would be announced over intercom of bomb threat. Keep the caller on the line as long as possible. Keep them talking gather as much information if possible.

### INFORMATION TO OBTAIN IF POSSIBLE

Note any peculiarities of voice, accent, or mannerisms.

Ask for their name and phone number. Say anything to keep them talking.

Note exact words used by the caller. Did voice sound familiar?

Find out all you can about the bomb, where it is, description of bomb, what kind of bomb, what time was set for detonation, what will cause bomb to go off, did the caller place the bomb, why was the bomb placed.

Pay attention to background noises and sounds that might indicate the location of the caller.

When the caller hangs up, check to insure that the police and Research Leader or office manager have been notified. Person, who received the call, make yourself available for questioning.

### Evacuation Plan

Do not use radios, Do not move anything (because this could cause the bomb to go off), be aware of your surroundings to see if anything out of ordinary (like strange packages, etc.). As you leave the building, remain calm and be aware of anything out of ordinary in pathway to meeting area. All personnel will go across the highway and meet on the other side of the frontage road as shown on the emergency action plan. There will be a head count done at the assembly point by ~~Jackie~~ and Jackie, the head count will then be reported to ~~Bob~~ to assure all personnel are out of building. Bob

### Suspicious Packages

All packages delivered to the building by courier or other mail services must be observed carefully. If a suspicious package or device is located, DO NOT disturb it. Evacuate the area immediately and notify Local Police Department (406) 433-2210.

### III. Laboratory & Field Safety Awareness -

ARS Directive 230.0 pg. 23, Sec. 11. Employees obligation to the employer to work within these rules and regulations.

Any intentional acts not in compliance with rules and regulations can result in disciplinary actions.

#### A. Laboratory & Office -

1. Be conscientious - know what your working with. i.e. chemicals, equipment.
2. Be aware
3. Be safe - ABSOLUTELY NO MOUTH PIPETTING!!
4. If not familiar with task, ASK! eg. Adding acid to H<sub>2</sub>O not H<sub>2</sub>O to acid.
5. Broken glass - goes in separate bucket, not trash
6. Chemical spills - large-small, MSDS's needed?, what was spilled
7. Use fume hoods when necessary
8. No food or beverage in labs!
9. Use safety gloves, goggles, masks, lab coats--if for no other reason, to save your clothes.
10. Comments or suggestions

#### B. Field

1. Be conscientious
2. Always, always, always be aware
3. If not familiar with task, ASK! (know machine operation. Match tool with task. i.e. combine with trailer, not safe)
4. Don't be a GOTTA GO JOE!! Slow Down.
5. Don't put hands or feet or body where they don't belong! i.e. between tractor and plow hitch. Don't use hands to hold hitch up-use crow bar.

#### C. Drivers Safety - Drive safely and by the law

#### D. Bottom Line -

Be safe by looking out for yourself and others. If each of us does this, then it will be safer for all of us.

Acid has PH less than 7 while Bases or Alkali have PH greater than 7:14  
PH 7 is Neutral

PH 1-7 Acid  
PH 7-14 Base or Alkali

PH Neutral

### Lab Safety 2003

Listed below are a few sources that has given ARS a reason to enforce lab coats and other personal protective equipment to be worn at all times when in a laboratory. Lab coats should be removed before leaving a laboratory, example of why: When working with a substance or experiment that has the potential of contaminating another substance or experiment. We need to have respect for one another and respect for other experiments that are taking place on this location.

### **ARS Policies and Procedures – Misconduct, Discipline, and Adverse Action #461.5**

#### Exhibit 2 – Table of Disciplinary Penalties

#### 9.) Safety, Health and Environmental Violations:

- b.) Failure or refusal to wear/use protective equipment/devices when provided and/or when required by ARS Policy and/or regulations.

Penalty for first offense: Reprimand to suspension

Penalty for subsequent offense: Removal

#### **ARS Safety Manual 230.0 DIV – 204 Personal Protective Equipment and Clothing**

General guidelines: Each laboratory worker should be supplied with lab coats. Lab coats should be worn at all times when in the laboratory, unless another type of protective coverall is required.

### **1910.132 CFR (code of federal regulations). General Requirements**

**(a) Application. Protective equipment, including personal protective equipment for eyes, face, head and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact**

### **Location Chemical Hygiene Plan**

**Laboratory Supervisors** are responsible for scheduling time for employees to attend designated training sessions and for assuring that potential hazards of specific projects have been addressed before work is started. Shall ensure applicable parts of the Chemical Hygiene Plan and other safety precautions are incorporated in all research protocols. The supervisor is also responsible for enforcing safe work practices and for reporting hazardous conditions to the Location Safety Specialist.

#### **When to use Personal Protective Equipment**

Bare feet are not permitted in the laboratory. Sandals, open-toed and cloth shoes are prohibited in laboratories when working with select carcinogens, reproductive toxins, substances which have a high degree of toxicity, strong acids and bases, and any substance on the OSHA PEL list carrying a "skin" notation.

Lab coats or other similar clothing protectors are strongly encouraged for all laboratory personnel. Lab coats are required when working with select carcinogens, reproductive toxins, substances which have a high degree of acute toxicity, strong acids and bases, and

any substance on the OSHA PEL (29CFR1910.1000 Table A-1) list carrying a skin notation.

Gloves made of appropriate material are required to protect the hands and arms from thermal burns, cuts, or chemical exposure that may result in absorption through the skin or reaction on the surface of the skin. Gloves are also required when working with particularly hazardous substances where possible transfer from hand to mouth must be avoided. Thus gloves are required for work involving pure or concentrated solutions of select carcinogens, reproductive toxins, substances which have a high degree of acute toxicity, strong acids and bases, and any substance on the OSHA PEL list carrying a skin notation.

Gloves should be carefully selected using guides from the manufacturers. General selection guides are available (see Prudent Practices, p.159); however, glove-resistance to various chemical materials will vary with the manufacturer, model and thickness. Therefore, review a glove-resistance chart from the manufacturer you intend to buy from before purchase.

### **Prudent Practices in the Laboratory:**

Sidney Location Standard Operating Procedure book for general lab procedures. 5.C.2.6 Clothing and Protective Apparel – Long hair and loose clothing or jewelry must be confined when working in the Laboratory. Unrestrained long hair, loose or torn clothing and jewelry can dip into chemicals or become ensnared in equipment and moving machinery. Clothing and hair can catch fire. Sandals and open-toed shoes should never be worn in laboratory in which hazardous chemical are in use.

It is advisable to wear a laboratory coat when working with hazardous chemicals. This particularly important if personal clothing leaves skin exposed. Apparel giving additional protection (e.g., nonpermeable laboratory aprons) is required for work with certain hazardous substances. Because many synthetic fabrics are flammable and can adhere to the skin, they can increase the severity of a burn. Therefore, cotton is the preferred fabric.

From: Jackie Couture  
To: ALL EMPLOYEES  
Date: Thu, Jan 31, 2002 2:20 PM  
Subject: Lab Information

Good afternoon:

The question has come up with regard to when and where to wear lab coats. Of course, lab coats and other protective items MUST always be worn while in the lab to protect you and your clothing. When you are outside the lab, as a general rule, lab coats should be removed as you leave the lab to protect others from chemicals, contaminants, etc that might be on the coats. It is also a matter of professional courtesy to remove your lab coats when you leave your lab to avoid cross contamination of other's research. Always put on a clean lab coat when entering someone else's lab. In short, it is good lab practice to have a lab coat just for "in-the-lab" and another to wear outside the lab.

It is realized that there are times when you need to transport materials from a lab to another location (i.e., autoclave or another lab), however, it is still appropriate to use a different lab coat when outside of your lab, if at all possible. Use your best professional judgement in these cases, and please consider how your actions may affect others.

Attached is a summary of the official ARS policy/regulations on the use of lab coats. These regulations are intended to preserve human health, experiments and the environment. Our limited space (even when the new building labs are available) requires extreme caution to prevent cross contamination of research experiments. We all need to take every precaution possible to protect the integrity of every experiment and each other.

We have ordered shelves with hooks to hang Lab Coats that are to be stored in hallway and to only be worn in hallways. All lab coats that are worn in Lab needs to be stored in the lab to prevent cross contamination. The shelf is to hold your coffee cups.

\*\*\*\*\*  
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1500 North Central Avenue  
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406-433-9422  
E-mail: [jcouture@sidney.ars.usda.gov](mailto:jcouture@sidney.ars.usda.gov)

## Lab Coats why are they so important to wear and remove?

Listed below are a few sources that has given ARS a reason to enforce lab coats to be worn at all times when in a laboratory. Lab coats should be removed before leaving a laboratory, example of why: When working with a substance or experiment that has the potential of contaminating another substance or experiment. We need to have respect for one another and respect for other experiments that are taking place on this location.

### **ARS Policies and Procedures – Misconduct, Discipline, and Adverse Action #461.5 Exhibit 2 – Table of Disciplinary Penalties**

#### **9.) Safety, Health and Environmental Violations:**

- b.) Failure or refusal to wear/use protective equipment/devices when provided and/or when required by ARS Policy and/or regulations.

Penalty for first offense: Reprimand to suspension

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### **1910.132 CFR (code of federal regulations). General Requirements**

(a) *Application.* Protective equipment, including personal protective equipment for eyes, face, head and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation of physical contact.

### **ARS Safety Manual 230.0 DIV-195 Laboratory work Practices**

Laboratory workers are often exposed to a great variety and unique types of potential hazards. Therefore, more precautions must be taken in laboratories than in other workplaces. For example, laboratory work can involve the use of chemicals or reactions of unknown hazard potential, or it can involve exposure to substances that are known to be extremely toxic (e.g., carcinogens). However, laboratories usually handle only small amounts of material at any one time, and exposure to these substances is usually limited to short time duration. It is obvious that a great need exists for an effective and mutually shared safety and health program in the Laboratory. General Recommendations: 1.) Prior to start any work assignment, learn the safety protocols and procedures necessary for the operation. (2.) Use personal protective equipment provided. (3) Know emergency evacuation procedure. (4) Follow proper hazardous waste disposal procedures. (5) Never pipette by mouth. (6) Observe all warning signs. (7) Label all chemicals, reaction containers, test tubes, etc. (8) Avoid working alone, whenever possible. (9) Enroll in the Occupational Medical Surveillance Program. (10) If there is ever a question as to the safety or health of a situation do not proceed without requesting assistance. As questions first and avoid accidents.

ARS Safety Manual 230.0 DIV – 204 Personal Protective Equipment and Clothing  
General guidelines: Each laboratory worker should be supplied with lab coats. Lab coats should be worn at all times when in the laboratory, unless another type of protective coverall is required.

**Prudent Practices in the Laboratory:** Sidney Location Standard Operating Procedure book for general lab procedures. 5.C.2.6 Clothing and Protective Apparel – Long hair and loose clothing or jewelry must be confined when working in the Laboratory. Unrestrained long hair, loose or torn clothing and jewelry can dip into chemicals or become ensnared in equipment and moving machinery. Clothing and hair can catch fire. Sandals and open-toed shoes should never be worn in laboratory in which hazardous chemical are in use. It is advisable to wear a laboratory coat when working with hazardous chemicals. This particularly important if personal clothing leaves skin exposed. Apparel giving additional protection (e.g., nonpermeable laboratory aprons) is required for work with certain hazardous substances. Because many synthetic fabrics are flammable and can adhere to the skin, they can increase the severity of a burn. Therefore, cotton is the preferred fabric.

**Location Chemical Hygiene Plan:** Lab coats or other similar clothing protectors are strongly encouraged for all laboratory personnel. Lab coats are required when working with select carcinogens, reproductive toxins, substances that have a high degree of acute toxicity, strong acids and bases, and any substance on the OSHA-PEL (29CFR1910.1000-Table A-1) list carrying a skin notation.

## SAFETY TIPS & RULES

When ordering chemicals, order ONLY WHAT YOU NEED, to cut down on chemical storage. ALWAYS ASK FOR THE MSDS (material safety data sheet)

### CHEMICAL SPILLS REPORT RIGHT AWAY TO SAFETY OFFICER

You must always read MSDS before working with a chemical.

Anyone taking or receiving chemicals must add or subtract from chemical inventory. You will find the inventory on P:/safety/chemical inventory. You must then find the lab or area to place proper information.

Always place chemical in second containment when moving from one lab to another location. Same goes for when moving or hauling samples that have chemicals or sample has the potential of harming the environment or human health if accidental release. Taking chemical out from chemical storage, you will transfer chemical to where chemical in second containment, to the lab or workspace. Either use the amount needed, in some cases, pour, or scoop into container that you will use. Label the container with chemical name example:(Sodium Hydroxide) *do not use* formula (NAOH).

EVERYONE must practice teamwork. If you do not have teamwork, safety has taken the backseat to your work environment.

Always wash with lukewarm to get chemical out of pores and then rinse with cool water to close pores. This procedure can prevent the chemical exposing you more. If the chemical cannot be disposed of down the sink, try to keep the water contained that you use when rinsing.

Always wear gloves, safety glasses/goggles and lab coats when in lab

Always wear goggles or face shield when operating weed eater.

If you have small cuts or openings in your skin, Always wear gloves while working with any chemical or in field working with plants, soils, etc.

While working in lab or in field NEVER wear open shoes.

Keep food/drinks out of labs.

ALWAYS use MSDS or labels on chemical containers to prevent over exposure to any chemical.

NEVER open laboratory sterilizer when is under pressure.

Close lab door behind you when entering labs this will allow the fume hood to run properly. Each lab has chemicals that pose an inhalation hazard and will need to have fume hoods running properly to prevent inhalation hazard to employees.

No clutter allowed in workspaces. Less clutter means less chance for an accident to occur. When using extension cords keep out of walking area and put them in proper storage area after use or at the end of each day.

NEVER have combustible or flammable chemical near an ignition source. Example: Do not use these chemicals near space heaters or oven areas. If using a space heater, always shut them off before leaving area. Practice fire safety it will save you.

Be aware of blind spots when driving into work yard. Example: the roadway between RM #48 and the soil prep building.

ALWAYS watch out for collisions with another person in hallways, exiting areas, etc.

Always be aware of the activity that is taking place in your work area. If you are aware of what is going on you might be able to avoid an accident.

If working in a confined space. ALWAYS use the buddie system. This means have someone with you when entering and exiting confined space. They might have to pull you out because of heat exhaustion, gas exposure or other exposures.

NEVER load or unload equipment without using spotters or buddie system.

When opening valve on compressed gas cylinders open from behind if possible. If not, then at least from the side of valve. There have been incidents where the valve blew straight forward.

When spraying any chemicals in field, wear proper protective equipment that the chemical requires you to wear. Follow the label.

### DO NOT SMOKE AROUND FLAMMABLES

When working in field makes sure to bring enough water, light clothing, sunscreen, sunglasses, and hat to protect you from heat/sun exposure. Broken glass should be place in glass containers that is available in each lab.

ALWAYS practice safety and we will have a safer work environment. Some protection is better than no protection.

### III. Laboratory & Field Safety Awareness -

ARS Directive 230.0:pg. 23, Sec. 11. Employees obligation to the employer to work within these rules and regulations.

Any intentional acts not in compliance with rules and regulations can result in disciplinary actions.

#### A. Laboratory & Office -

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#### C. Drivers Safety - Drive safely and by the law

#### D. Bottom Line -

Be safe by looking out for yourself and others. If each of us does this, then it will be safer for all of us.

## E DEFINITIONS (continued)

- 2 Acute Effect - Adverse effect on a human or animal which has severe symptoms developing rapidly and coming quickly to a crisis.
- 3 Article - A manufactured item which is formed to a specific shape or design during manufacture; which has end use functions dependent in whole or in part upon its shape or design during end use; and which does not release or otherwise result in exposure to a hazardous chemical under normal conditions of use.
- 4 Biological Agent - Any microorganism or its by-products presenting a physical hazard, health hazard, or potential risk of infection or disease in employees.
- 5 Carcinogen - A substance or agent capable of causing or producing cancer in mammals, including humans. A chemical is considered to be a carcinogen if:
  - o It has been evaluated by the International Agency for Research on Cancer (IARC) and found to be a carcinogen or potential carcinogen; or
  - o It is listed as a carcinogen or potential carcinogen in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or
  - o It is regulated by OSHA as a carcinogen.
- 6 CERCLA Hazardous Substance - A chemical agent included in Table 302.4, List of Hazardous Substances and Reportable Quantities, of 40 CFR Part 302.
- 7 Chemical Agent - Any element, chemical compound or mixture of elements and/or compounds.
- 8 Chemical Name - The name given to a chemical in the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS).
- 9 Chronic Effect - An adverse effect on a human or animal body, with symptoms which develop slowly over a long period of time or which recur frequently.
- 10 Combustible - A term used by NFPA, DOT, and others to classify certain liquids that will burn, on the basis of flash points. Both NFPA and DOT generally define "combustible liquids" as having a flash point

## E DEFINITIONS (continued)

of 100°F (37.8°C) or higher but below 200°F (93.3°C).

11 Compressed Gas:

- a A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70°F (21.1°C); or
- b A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130°F (54.4°C) regardless of the pressure at 70°F (21.1°C); or
- c A liquid having a vapor pressure exceeding 40 psi at 100°F (37.8°C) as determined by ASTM D-323-72.

- 12 Corrosive - A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a chemical is considered to be corrosive if, when tested on the intact skin of albino rabbits by the method described by the U.S. Department of Transportation in Appendix A to 49 CFR Part 173, it destroys or changes irreversibly the structure of the tissue at the site of contact following an exposure period of 4 hours. This term shall not refer to action on inanimate surfaces.
- 13 Disposition - The process by which the possession or control of something is transferred or discarded.
- 14 Explosive - A chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.
- 15 Exposure or Exposed - State of being open and vulnerable to a hazardous chemical in the course of employment by inhalation, ingestion, skin contact, absorption, or any other course; includes potential (accidental or possible) exposure.
- 16 Extremely Hazardous Substance - A chemical agent included in Appendix A, List of Extremely Hazardous Substances and Their Threshold Planning Quantities, of 40 CFR Part 355.
- 17 Flammable - A chemical that includes one of the following categories:

## E DEFINITIONS (continued)

- a "Aerosol, flammable." An aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening;
- b "Gas, flammable." A gas that can burn with the evolution of heat and flame.
- c "Liquid, flammable." Any liquid having a flashpoint below 100°F (37.8°C), except any mixture having components with flashpoints of 100°F (37.8°C) or higher, the total of which make up 99 percent or more of the total volume of the mixture.
- d "Solid, flammable." A solid, other than a blasting agent or explosive as defined in 1910.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A solid is a flammable solid if, when tested by the method described in 16 CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one tenth of an inch per second along its major axis.
- 18 Hazard Assessment - The process of determining if employees are potentially exposed to hazardous chemicals.
- 19 Hazardous Chemical - Any chemical whose presence or use is a physical hazard or a health hazard.
- 20 Health Hazard - A chemical for which there is significant evidence, based on at least one study conducted in accordance with established scientific principles, that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

## E DEFINITIONS (Continued)

- 21 Hepatotoxin - A substance which produces liver damage.
- 22 Highly Toxic - A chemical falling within any of the following categories:
- a A chemical with a median lethal dose (LD50) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
  - b A chemical with a median lethal dose (LD50) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.
  - c A chemical that has a median lethal concentration (LC50) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume, or dust, when administered by continuous inhalation for 1 hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.
- 23 Irritant - A chemical, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact. A chemical is a skin irritant if, when tested on the intact skin of albino rabbits by the methods of 16 CFR 1500.41 for 4 hours exposure or by other appropriate techniques, it results in an empirical score of 5 or more. A chemical is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriate techniques.
- 24 Laboratory Operation - An operation involving the "laboratory use of hazardous chemicals".
- 25 Laboratory Scale - Work with substances in which the containers used for reactions, transfers, and other handling of substances are designed to be easily and safely manipulated by one person.
- 26 Laboratory Use of Hazardous Chemicals - Handling or use of chemical agents in which all of the following conditions are met:
- a Chemical manipulations are carried out on a "laboratory scale";

## E DEFINITIONS (Continued)

- b Multiple chemical procedures or chemicals are used;
  - c The procedures involved are not part of a production process, nor in any way simulate a production process; and.
  - d Protective laboratory practices and equipment are available and in use to minimize the potential for employee exposure to hazardous chemicals.
- 27 Material Safety Data Sheet is a document that describes the physical and chemical properties of an agent, the physical and health hazards associated with an agent, safe methods of disposal, and precaution for safe handling and use of an agent.
- 28 Mutagen - A substance capable of altering the genetic material in a living cell.
- 29 Nephrotoxin - A substance which produces kidney damage.
- 30 Neurotoxin - A substance which produces its primary toxic effect on the nervous system.
- 31 Organic Peroxide - An organic compound that contains the bivalent -O-O structure and may be considered a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.
- 32 Oxidizer - A chemical other than a blasting agent or explosive that initiates or promotes combustion in other materials, causing fire either by itself or through the release of oxygen or other gases.
- 33 Physical Hazard - Means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.
- 34 Pyrophoric - A chemical that will ignite spontaneously in air at a temperature of 130°F (54.4°C) or below.
- 35 Radioactive - A substance that emits rays either naturally or as a result of scientific manipulation.

## E DEFINITIONS (Continued)

- 36 Radionuclide - An isotopic form of an element, either natural or artificial that exhibits radioactivity.
- 37 Reproductive Toxin - Substances that affect either male or female reproductive systems and may impair the ability to have children.
- 38 Requisitioner - The person or individual who submits a written request to procure an item.
- 39 Sensitizer - A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.
- 40 Toxic - A chemical falling within any of the following categories:
- a A chemical with a median lethal dose (LD50) of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
  - b A chemical that has a median lethal dose (LD50) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less, if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.
  - c A chemical that has a median lethal concentration (LC50) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than two milligrams per liter but not more than 20 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.
- 41 Trade Secret - Any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.

## E DEFINITIONS (Continued)

- 42 Unstable Reactive - A chemical that, in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or become self-reactive under conditions of shocks, pressure, or temperature.
- 43 Water-Reactive - A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

## F SCOPE

This chapter applies to all ARS employees including part-time, seasonal, and temporary employees who are identified for inclusion in the program based on a hazard assessment.

A hazard assessment must be performed for all chemical and biological agents known to be present in the workplace. For the hazard assessment of chemical agents only, it is ARS policy to rely on the physical and health hazard evaluations done by chemical manufacturers and importers, that are written on MSDS prepared by them and provided to ARS.

This chapter does not apply to:

- 1 Any hazardous waste as defined by the Solid Waste Disposal Act (as amended by the Resource Conservation and Recovery Act of 1976) and regulated by the Environmental Protection Agency;
- 2 Tobacco or tobacco products;
- 3 Wood or wood products;
- 4 Foods, drugs, or cosmetics intended for personal consumption by employees; and
- 5 Any consumer product as defined by the Consumer Product Safety Act that is used in the same manner of normal consumer use by the general public.

## G POLICY

It is ARS policy to provide information and training to employees on the potential physical and health hazards that may result from exposure to chemical and biological agents in their work environment. Information and training shall be provided to employees by implementing and maintaining the following minimum elements of a Hazard Communication Program:

## G POLICY (Continued)

- 1 Written program.
- 2 Chemical and biological agent inventory system.
- 3 MSDS reference file system.
- 4 Labeling/warning signs.
- 5 Training program.

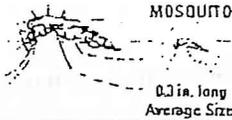
## H AUTHORITIES

- 1 Executive Order 12196, Occupational Safety and Health Programs for Federal Employees.
- 2 29 CFR Part 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs.
- 3 29 CFR Part 1910.1200, Hazard Communication.
- 4 Emergency Planning and Community Right-to-Know Act of 1986 and implementing regulations:
  - a 40 CFR Part 302, Designation, Reportable Quantities, and Notification.
  - b 40 CFR Part 355, Emergency Planning and Notification.
  - c 40 CFR Part 370, Hazardous Chemical Reporting: Community Right-to-Know.
- 5 48 CFR Part 23.3, Hazardous Material Identification and Material Safety Data.
- 6 Departmental Regulation 4400-2, Hazard Communication Programs.
- 7 Departmental Regulation 5023.1, Chemical Hazard Communication.

## I RESPONSIBILITIES

- 1 AD's, Under the Direction of the Administrator, will:
  - a Initiate and operate a comprehensive and viable Area Hazard Communication and Community Right-To-Know Program consistent with the requirements set forth in applicable legislative/executive mandates and the requirements of this chapter.

## MOSQUITOES & BEES



### TO AVOID MOSQUITOES AND BEES:

- Wear light colored clothing. Avoid dark (attracts mosquitoes) and bright colors (attract bees).
- Avoid using heavily scented shampoos, lotions and perfumes before going outdoors.
- Avoid stagnant pools of water. Also change the water in birdbaths or rain barrels at least once a week.
- Use bleach in the family pool to help kill mosquito larvae.
- Use insect repellent on skin and clothes. Follow directions.
- Cover as much of your skin as possible with clothing, hats, socks, etc.
- Seek medical attention (doctor), if you have any difficulty breathing after receiving either a bite from a mosquito or a bee sting.
- To remove a bee stinger without injecting more venom, use the dull edge of credit card and scrape it across your skin surface and the stinger.

**Warning:** Although extremely rare, people can contract Encephalitis, a serious, untreatable and sometimes deadly viral disease, from a mosquito bite.

## TICKS



DEER TICK  
0.06 in. long  
Actual Size

### TO AVOID TICKS:

- Wear light-colored socks and pants to help spot ticks.
- Tuck pant legs into socks to reduce the risk of ticks getting under clothing. Spray socks and pant cuffs with repellent (Deet is proven safe by EPA) for added protection.
- Examine yourself, your pets, and other family members for ticks daily after being outdoors.
- Stay away from heavily wooded areas, high grassy areas, and standing water.
- To remove a tick safely, use a pair of tweezers to grasp the tick's head (without crushing it) and pull directly out.

**Warning:** Deer ticks can carry Rocky Mountain spotted fever and Lyme disease. These are very serious illnesses that need medical treatment as early as possible. Lyme disease, in most cases, can be cured with prescribed antibiotics.

# SPIDERS



*Black Widow* - This poisonous spider is glossy black with a red hourglass mark on its stomach. It's small, with a body just one-half inch in diameter, and lives in woodpiles, sheds and basements. To avoid the spider, keep those areas maintained. The bite itself may not hurt, but could cause bad stomach pain and cramps, breathing difficulty and possibly nausea, sweating, twitching shaking and tingling in the hand. Seek a doctor immediately for treatment of a black widow spider bite.

## CLOTHING AND SUPPLIES NEEDED FOR FIELD

Wear jeans or long legged pants

Wear closed toe shoes (when working on rangeland ideally to wear hiking boots, due to catus/uneven terrain).

Bring a light long sleeve (cotton) shirt may help prevent sunburn, skin cancer or keep you cooler. Extra jacket for change of weather.

Wear leather or cloth gloves as needed. These will be given by safety personal as requested.

Bring safety glasses or goggles if needed for task. Sunglasses for bright days.

Wear a large rim hat if heat bothers you and it will also prevent sunburn, skin cancer and may keep you cooler.

Bring at least a gallon of water per person and enough water-jugs to supply working crew.

Use Sunscreen that rates at least 20 SPF or higher. Make sure it protects against UVA and UVB use on bright days and cloudy days. Bring the bug spray if needed. These will be given by safety personal as requested.

Clean wipes to keep hands clean when needed

Remember tools that are needed for specific jobs. Remember to put gas in vehicle (hehe)

## FIELD SAFETY TIPS

All employees need remind themselves to Stay Aware of what is going on around them.

EXAMPLES: If you are in the field remind your self to look out for rodents, skunks, snakes, poisonous spiders, bees, etc. to help prevent any harm to yourself. If employee is going to spray a field with pesticide or insecticide, that employee needs to make sure the field area is properly labeled. To prevent any other employee from entering the sprayed area. Never stand directly behind equipment, stand to the side so the driver can see you and you are not in a blind spot. Always keep your fingers clear of any pinch hazards when dealing with

equipment. If you have a known allergy to bee stings, make sure to have epi pen with you in field, also make you supervisor and working crew aware of the allergy. Make sure to instruct your supervisor and working crew on how to use epi pen properly. If you are taking any kind of medications please notify your doctor that you work outside in direct sunlight and they may be able to give medications that won't accelerate sun exposure effects like dehydration or heat exhaustion.

Supervisors: need to see that their new employees receive proper safety training and personal protective equipment before entering their work environment. In some cases, the supervisor will train their employees for specific jobs. The training I give is about 2 hours and sometime a little longer.

## Sun Exposure

Antibiotics & other  
medications can have  
effect on you.

The effects of years of exposure to the sun are cumulative and damaging. Ultraviolet rays of the sun cause degenerative changes in the dermis. Prolonged and repeated sun exposure is a major factor in precancerous and cancerous lesions. Fair-skinned persons should be especially cautious about excessive sun exposure since they have smaller amounts of the natural protection afforded by melanin.

### Skin Cancer Facts

- ⇒ It is the most common of all cancers.
- ⇒ Over 600,000 new cases in US are diagnosed each year.
- ⇒ One in every six Americans is affected.
- ⇒ One in every three cancers is a skin cancer.
- ⇒ Most skin cancers are either basal cell carcinoma or squamous cell carcinoma, depending upon the kind of skin cells from which the tumors arise.
- ⇒ This year, over 27,000 Americans will develop malignant melanoma, the most life-threatening form of skin cancer, which can spread rapidly through the body.
- ⇒ The average American's lifetime risk of getting malignant melanoma is currently 1 in 120.
- ⇒ The sun is the cause of at least 90% of all skin cancers.
- ⇒ Skin cancer is completely curable when treated in its earliest stages.
- ⇒ Almost all skin cancers are preventable.

## Sunscreen

Sunscreens can block out UV rays. There are two types of sunscreen-chemical and physical. Chemical works by absorbing and scattering the rays of the sun on the skin. Physical sunscreens are thick and opaque and work by reflecting UV radiation. They are most effective and affordable but, when applied, thick, messy, and cosmetically unacceptable.

FDA has rated sunscreen products. The higher the sun protective factor (SPF), the greater the screening effect up to 15. PABA had been removed from many sunscreen products because it stains clothing and can cause contact dermatitis.

SPF 15 indicates 93% protection.

SPF 30 indicates 97% protection.

Doubling the SPF does not double protection.



Sun most dangerous between 10 AM to 2 PM in standard time or 11 AM to 3 AM daylight time. Overcast days are serious-80% of the UV rays penetrate the clouds.



Hot environment, high altitude, wind and water increase the possibility of sunburn.



Certain topical and systemic medications potentiate the effect of the sun, even with brief exposure. These photosensitizing medications include: tetracycline, tretinoin (Retin-A), some diuretics, some nonsteroidal antiinflammatory drugs, antimicrobials, hypoglycemic agents, birth control pills, sulfonamides, some antipsychotics, and antidepressants, certain topical anesthetics, perfumes, and psoralens. The chemical in these medications absorb light and release energy that harms cells and tissue.

### Using a Sunscreen

1. Test the sunscreen first on a small patch of skin, preferably in the underside of the forearm, to see if any irritation occurs. Sunscreens differ in the types and concentrations of ingredients used.
2. Milky lotions or cream are more soothing than clear lotions, which may contain alcohol, and are easier to see where you have applied.
3. Apply carefully around the eyes, avoiding the upper and lower eye lids.
4. For persons with acne, consult your physician for a sunscreen that won't cause the condition to flare up.
5. Use a sunscreen stick or lip balm for vulnerable areas such as the lips, scalp, nose and ears. Zinc oxide may be used on these sensitive areas.
6. Apply sunscreen liberally on all uncovered areas. Apply when wearing sheer clothing, especially if clothing is likely to get wet.
7. If possible, apply the sunscreen at least 15-30 minutes before exposure. Reapply frequently and liberally every 60-90 minutes. Application time before exposure varies. Check the product.
8. Choose a water-resistant or waterproof product when swimming or perspiring heavily. Reapplication is necessary after swimming and every 1 to 2 hours if one is exercising or perspiring. Towel-dry before reapplying and avoid excessive rubbing of sensitive skin.

## Heat-Related Illness and Treatment

The following are characteristic signs and symptoms of heat stress. The correct first aid to administer under these conditions is also included.

Heat rash may result from continuous exposure to heat or humid air.

- Symptoms
  - Rash
  - Edema
  - Fatigue
- First aid
  - Move to a cooler place and rest.

Heat cramps are caused by heavy sweating with inadequate electrolyte replacement.

- Symptoms
  - Muscle spasms
  - Pain in the hands, feet, and abdomen
  - Place in cool place in resting position
- First aid
  - Cool saline water (1 teaspoon/8 ounces water)
  - Do not use hotpacks
  - Do not massage the cramping area

Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration.

- Symptoms
  - Pale, cool, moist skin
  - Heavy sweating
  - Dizziness
  - Nausea
  - Fainting
- First aid
  - Lay the person down in a cool place.
  - Loosen the patient's clothing.
  - If conscious, give drink of saline water (1 teaspoon/8 ounces water).

Heat Stroke is the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury and death occur. Competent medical help must be obtained.

- Symptoms
  - Red, hot, usually dry skin
  - Lack of or reduced perspiration
  - Nausea
  - Dizziness and confusion
  - Strong, rapid pulse
  - Coma
- First aid
  - Cool immediately.
  - Remove clothing, cover with wet sheet.
  - Place in air conditioned area or cool with fan.
  - Transport to medical facility immediately.
  - Administer oxygen, if possible.
  - Do not apply rubbing alcohol (some may be absorbed through the skin).

# Checklist For Working Safely Outdoors

## Poison Ivy, Oak, and Sumac

- Avoid contact: Leaves of threeXlet them be, whether alive or dead.
- Wear long sleeves and pants, fully cover feet (high boots in fields).
- Know symptoms: itchy rash, swelling, blisters, oozing, or scabbing.
- Don't touch body with hands, clothes, or equipment that touched plant.
- Wash thoroughly after outdoor work. Wash three times after contact, then cleanse with rubbing alcohol.
- For itching: Don't scratch. Try aspirin, hydrocortisone cream, antihistamines.
- See physician for swelling, severe itching, or any strong reaction.

## Plant Allergies

- See physician for reactions to plants or airborne pollens.

## Insect Bites and Stings

- Wear light-colored snug clothes. Don't use colognes.
- Use insect repellent on skin and clothes. Follow label warnings.
- Be alert for wasps, hornets, bees, yellow jackets, mosquitoes, chiggers, black flies, black widow spiders (glossy black with red hourglass mark on stomach).
- Recognize bite and sting symptoms: swelling, itching, redness, pain.
- Use ice for swelling. For itching, use calamine lotion, hydrocortisone cream, or baking soda paste.
- If allergic to stings, remove stinger promptly with fingernail.
- Get immediate medical attention for black widow spider bite, multiple stings, or difficulty breathing or swallowing.
- Check for tiny ticks after all outdoor work.
- Remove tick immediately with fine-tipped tweezers. Grab close to skin, pull entire body straight up. Get medical help if you can't remove it. Then wash with water and cleanse with rubbing alcohol.
- Get prompt medical attention if tick bite causes red spot or if swelling, fever, joint pain, or flu-like symptoms develop later.
- Stay away from snakes and animals, especially if feeding, mating, sick or injured, or acting "drunk" or overly friendly.
- Stand still or back away slowly from a threatening animal.
- Speak in a calm tone.
- Drop any food.
- Hold jacket- or towel-wrapped lower arm toward animal.
- Get prompt medical attention for any snake or animal bite.

## Heat Overexposure

- Build tolerance slowly, especially if you are overweight or have high blood pressure.
- Avoid hot foods and alcohol before working outdoors.
- Drink water before and while working outdoors.
- Wear a brimmed hat plus loose light-colored clothes (if no risk of insects or machine contact).
- Rest in cool place and slowly drink water for fatigue, weakness, serious reactions.

## Also, for:

- Heat cramps: Place wet towels on cramping muscles.
- Heat exhaustion: Loosen clothes and apply cool compresses if weak, sweaty, nauseous, dizzy, or for headache and pale skin. Elevate feet 8B12 inches.
- Heat stroke: Get immediate medical help for weakness, nausea, cramps, sweatingXor skin that's flushed, then pale or purple. Spray with hose to cool

down, provide water if conscious.

#### Cold Overexposure

- Wear several layers of loose-fitting clothes for cold outdoor work.
- Carefully cover feet, hands, and head; use face mask if windy.
- Don't drink alcohol before going out in cold.
- Recognize frostbite symptoms: No pain and loss of feeling, glossy and pale or grayish-yellow skin.
- Wrap potentially frostbitten body part in blankets immediately; get victim to warm spot and provide warm drink.
- Rewarm body part in warm ~~X~~not hot ~~X~~water. Don't rub, apply heat, or break blisters. Don't walk on frostbitten feet.
- Get victim to doctor, elevating and covering affected body parts.

#### Pesticide and Herbicide Exposure

- Read labels (and MSDS if available) and follow precautions.
- Check with supervisor before entering area posted for recent pesticide or herbicide application.
- Be alert for symptoms like rash, nausea, headache, dizziness, etc.
- Get immediate medical attention and follow label or MSDS first-aid instructions:
- Fresh air for inhalation victim; flush exposed skin or eyes with water for at least 15 minutes.

#### Equipment Hazards

- Read instruction manual to identify hazards and precautions to follow.
  - Keep guards in place.
  - Wear eye protection, sturdy shoes with nonslip soles, any other required PPE; avoid loose clothes that could catch in moving parts.
  - Clear rocks and other debris from path of mowers or tractors.
  - Don't smoke around mowers or gasoline supplies.
  - Leave machine, make adjustments, and perform maintenance only if it's off and moving parts have stopped.
  - Wear gloves and take extra precautions to adjust blades and remove grass clippings.
  - Refuel and start mowers outside only ~~X~~machine off, engine cool.
  - Get medical help for objects in eye.
  - Cleanse small cuts or minor wounds with soap and water or hydrogen peroxide.
- Remove all dirt; cover small cuts with bandage.
- Get medical attention for large or slowly healing wounds.
  - Place amputated body part in plastic bag with ice and rush to hospital with victim.
  - Get medical help for severe bleeding; while waiting, apply direct pressure. Apply pressure and elevate body part for continued bleeding.

## Job Hazard Analysis

Hazard	Actions to Eliminate Hazard
Exposure to Herbicide	<p>The herbicide normally to be used is Roundup relatively non-hazardous to humans. This chemical may cause moderate eye irritation. A complete first aid kit will be on the work site and it includes eyewash. If the chemical gets in eyes, alert your crew leader then flush thoroughly with eyewash or drinking water, and call a physician if irritation persists. Prolonged or frequent repeated skin contact with the chemical may cause allergic skin reactions in some individuals.</p> <p>Wear all personal protective gear required on the product label: long-sleeved shirt and long pants (you provide), waterproof gloves (provided by ARS), shoes plus socks (you provide). If you dispense herbicide from the mix tank into your backpack you must also wear a face shield with goggles and respirator or full face respirator. In addition to the required personal protective equipment you may wear additional gear. ARS will provide chemical resistant coveralls, chemical resistant overshoes (limited range of sizes), respirators, and safety glasses/goggles.</p> <p>When using the chemical wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Remove personal protective equipment immediately after handling. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Clothing that may have been exposed to herbicide should be laundered separately from other clothing using detergent and hot water.</p>
Backpacking and Lifting	<p>A five-gallon backpack sprayer weighs 45-50 lbs. Prior to walking; the pack straps should be adjusted to fit your waist, shoulders, and chest. Adjust the straps to position the majority of the weight on the hip belt, using the shoulder and chest straps primarily for security. When lifting a loaded backpack or herbicide jug, remember to lift with your legs and not your back.</p>
Sunstroke, Dehydration, or Heat Exhaustion	<p>Try to do the strenuous physical part of jobs between 6:00 am till 11:00 am if possible. Wear a hat at all times when out in direct sunlight. It is estimated that the major cause of sunstroke is over exposure of the head and face to the sun. Wear waterproof sunblock with UVA/UVB protection. Wear light colored clothing and long sleeves shirts to reflect sun's energy. The higher the SPF numbers the better. For example, a SPF factor of 15 means that in 15 hours of sun exposure the skin "sees" the same amount of sun as in one hour without protection. But don't let this fool you; all sunblock must be reapplied during continued exposure – even the "waterproof" ones. Clothing provides an effective barrier to sunlight; hats, sun-visors and sunglasses can help protect some areas of your face. Slow down, avoid strenuous outdoor activity. Drink plenty of fluids, preferably water or juice. Know the signs of sunstroke, dehydration, and heat exhaustion. Always remember a <b>worker should drink 5 to 7 ounces of fluids every 15 to 20 minutes to replenish the necessary fluids in the body in the course of a day's work in the heat.</b> A human can lose as much as 1 liter of sweat per hour in the heat. (ACGIH) Excessive dehydration of the body, it is essential that water intake during the workday be about equal to the amount of sweat produced. Dehydration can seriously interfere with one's internal thermostat. Take breaks as needed and drink plenty of water at each break, also try to get into shade when on break.</p>

Slipping and Falling in Holes	Wear lace-type boots with skid-resistant soles and tops at least 6 inches high. If possible, when slipping, shift weight backward onto posterior, rather than forward onto arms and face. Plan ahead, selecting safe routes. Watch for changes in ground surface, slick spots, or unusual hazards. Make sure of secure footing and safe working positions. Walk - never run - down slopes. Watch your step.
Confrontation with Bison	Most of Badlands' wildlife is relatively safe to travel around. Bison can travel at a high rate of speed. Although not a carnivorous threat to humans, bison will charge people if they come too close, particularly during rut or calving. Make every effort to avoid bison.
Rattlesnakes	The prairie rattlesnake is the least aggressive of all the rattlers. During the day, they seek out shaded areas, such as crevices and overhangs. You can avoid them by never placing your hands and feet in areas before you can visually inspect the area. Don't reach up and put your hands in a crevice to pull yourself up, for example. They will also rest in grass, waiting for prey. Wear long pants, leather boots at least six inches high, and heavy socks for protection. At night, they seek out pavement or concrete, which will retain the warmth of the daytime sun.
Biohazards/animals	<p>Poisonous plants like poison ivy, poison oak, and poison sumac. Keep this warning in mind: Leaves of three let them be.</p> <p>As for animals (skunks, etc.) and snakes, they usually are anxious to avoid you, and you are to avoid them. If you see one of these creatures, keep your distance. Be especially cautious if animal is mating or eating or one appears sick or hurt. Also beware of animals that seem to friendly or that seems to acting "drunk". Those behaviors are signs of rabies.</p> <p>Insect stings such as bee, wasp or other insect stings or bites. You may notice swelling, redness, and itching or even pain. If you are allergic to bites or stings, they could cause hives, dizziness, stomach cramps, nausea, etc. In rare cases, people feel weak or have troubling breathing or swallowing. In worst instances, some become unconsciousness and even shock or death. Avoiding contact with bees, wasps, etc. Wear light colored clothing. <b>Dark colors attract mosquitoes and bright colors attract bees.</b></p> <p>Some ticks carry a serious illness such as Rocky Mountain Spotted fever and Lyme disease. It is important to identify and treat these illnesses early. Otherwise you could become very sick. Rocky Mountain disease can be deadly. Tuck your pants into boots and sock to prevent ticks from touch your skin.</p> <p>Mosquitoes may now be carrying the west Nile virus. To prevent contact use DEET products and where there is standing water try to avoid. You may also use mosquito nets.</p>
Blisters and Heat Rash	Insure that your shoes or boots are well broken in before using them for hiking or program presentation. Know first aid treatment for blisters and tender spots on feet. Heat rash is typically caused by heat, perspiration, and friction. Wear loose clothing. Treatment for heat rash is to stay out of the sun until it is gone and attempt to keep

	area dry. Treat itch with calamine lotion or burn gel in first aid kits.
Personal Protective Equipment to be worn during field season	Must wear long legged pants, No shorts. Must wear closed toed/closed backing shoes. Some examples: hiking boots, sturdy tennis, etc. can be worn in field. If working around heavy equipment consider wearing steel toed boots. Always bring a large rim hat to cover face and neck areas. Bring along a lightweight and light colored long sleeve shirt to help prevent sunburn. Always bring gloves, sunblock, bug spray, extra shirts, and jackets just in case the weather changes.
Standard Operating Procedures when going to field.	Always inform your supervisor knows where you will be in the field at least by e-mail. Always check out Cell phone, sign out on the check out board located in south building at the front desk or call Jill or Dennis to check you out with your location you will be at in the field. This procedure will help if you are hurt or if we need to contact you in case of an emergency.

## Work-related allergies

Millions of people suffer from allergies caused by every day exposures to agents such as dust mites, cat dander, and pollens. Agents encountered by workers can also cause allergic problems/reactions such as: asthma, nasal and sinus allergy symptoms, skin rashes, hives, and even severe anaphylactic reactions. Examples of these work-related agents include: animal proteins, enzymes, insect body parts, soil and plant dust, flour, natural rubber latex (gloves), and certain reactive chemicals. Asthma is one of the more serious problems that can be caused by work-related allergy. It can cause recurrent attacks of symptoms such as wheezing, chest tightness, shortness of breath, and coughing. In severe cases, these symptoms can be disabling. Fortunately, when potential hazards are recognized, work-related allergies and asthma can often be prevented or their effects minimized.

## **Safety and Occupational Health Specialist - GS-018 -0/ thru 09**

### **Physical Demands**

A significant amount of work is performed in an office environment. However, inspection of facilities frequently involves climbing ladders, working on roofs, etc., and crouching and crawling under structures. There may be need for the incumbent to lift and carry moderately heavy objects.

### **Work Environment**

Although most work is performed in an office, on-site inspections involve exposure to hazardous chemicals, moving equipment, heights, closed spaces, etc. A fair degree of potential risk is involved. The incumbent is required to wear protective clothing/equipment at times.

## **Research Leaders - GS -018-12**

### **Physical Demands**

Typically, work is performed in office setting does some field work. Frequent travel and diverse research operations, the work requires above average agility, dexterity, and personal strength.

### **Work Environment**

The work is performed in office settings and field locations. Occasionally, there may be exposure to the risks and hazards of work environments such as office ergonomics  
**Field:** Incumbent is also exposed to moderate discomforts, such as noise and adverse weather.

A low potential of risk is involved.

## **Microbiologist/Entomologist/Soil Scientist - All Grades**

### **Physical Demands**

Typically, work is performed in office settings, lab and field. The work sometimes requires standing for prolonged periods of time.

### **Work Environment**

Work that is performed in a laboratory and field. Incumbent is exposed to irritant chemicals on an irregular basis; on such occasions, special safety precautions are required and the microbiologist uses protective clothing and gear such as laboratory coat, safety glasses and gloves. **Field:** Incumbent is also exposed to moderate discomforts, such as noise and adverse weather.

## **Biological Science Aid - All Grades**

### **Physical Demands**

Typically, the incumbent performs the work in a laboratory, field, and/or greenhouse setting. Work conditions may range from sedentary to primarily physical. Work requires occasional walking, standing, bending, and carrying items ranging from lightweight (in laboratory conditions) to moderately heavyweight (in field conditions). The work requires regular and recurring physical exertion such as standing for prolonged periods; extreme temps, walking over rough and uneven surfaces; considerable bending, stooping, reaching, or similar activities; or lifting moderately heavy (less than 50 lbs.) items.

**Work Environment**

The work is performed in a laboratory which involves everyday risks or discomforts which requires normal safety precautions. The work area is adequately lighted, heated, and ventilated. The work requires moderate risks or discomforts which require special safety precautions, e.g., working around moving parts, machines, with contagious diseases or irritant chemicals. Incumbent occasionally will be required to use protective clothing or gear such as dust masks, gowns, goggles, gloves. Incumbent is also exposed to moderate discomforts, such as noise and adverse weather.

**Biological Science Laboratory Technician - All grades**

**Physical Demands**

The work requires some physical exertion, such as regular and recurring running, walking, or bending. In many situations the duration of the activity (such as most of a work day) contributes to the arduous nature of the job. In other situations, there may be special requirements for agility or dexterity such as exceptional hand/eye coordination.

**Work Environment**

The work involves regular and recurring moderate risks or discomforts which require special safety precautions, e.g., working with contagious diseases or irritant chemicals or working outdoors. The employee is required to use protective clothing such as gowns, coats, boots, goggles, gloves.

**Engineering Aid - All Grades**

**Physical Demands**

Typically, the incumbent performs the work in a laboratory or field setting but occasionally may work in other settings. Work conditions may range from sedentary to primarily physical. Work requires occasional walking, standing, climbing, crouching, bending, and carrying items ranging from lightweight to moderately heavyweight (less than 50 lbs.). Good eye and hand coordination is necessary to perform satisfactorily.

**Work Environment**

The work is performed in a laboratory, shop, or other research setting which involves everyday risks or discomforts, requiring use of normal safety precautions. Indoor areas are adequately lighted, heated and ventilated.

**Engineering Technician/Mechanical Tech all grades**

**Physical Demands**

The work requires some physical exertion, such as regular and recurring running, walking, or bending. In many situations the duration of the activity (such as most of a work day) contributes to the arduous nature of the job. In other situations, such as in a laboratory, there may be special requirements for agility or dexterity such as exceptional hand/eye coordination.

**Work Environment**

The work is performed in a laboratory, shop, or other research setting which involves regular and recurring moderate risks or discomforts requiring special safety precautions, e.g., working with electronic equipment or working outdoors. The employee is required to use protective clothing such as gowns, coats, boots, goggles, gloves.

## **NPARL Location Policy for Chemical Storage/Inventory for Labs and Storage areas**

The policy for chemical usage is to follow the procedures listed below or we may have to revoke the rights of chemical users if chemical inventory is not kept up to date to meet local, state and federal regulations.

**Chemical Inventories** – these need to be updated as you receive new chemical and when you use chemical or if you use a lot of one chemical, as you empty container of that specific chemical (ex: ethanol, edta, etc). The EPCRA (emergency planning community right to know act) report has taking me longer due to the fact that some chemical inventories were incomplete. This report requires accurate amounts of hazardous chemical on this location. The report is given to Area safety personal and LEPC (local emergency planning committee). Local emergency crews use the information to prepare for all types of emergency. This list is used by area and our location as a guidance tool to meet reporting requirements. This report relies on all employees full cooperation and participation when purchasing and using chemicals on this location either in labs or chemical storage areas.

### **Chemical Storage**

**Flammable storage cabinets in labs.** All labs will be limited to 2 liters of individual flammable substance or chemical and will be used in a timely manner. At no time will the capacity of flammable cabinet be exceeded. Otherwise, if your flammable storage cabinet has a 12-gallon capacity limitation, then lab personal will not store more than the equivalent of 12 gallons of flammable substances in this cabinet.

**Acid and Bases storage cabinets in labs.** All labs will be limited to 2 liters of acid or base substances and will be used in a timely manner. At no time will the capacity of the corrosive cabinet be exceeded. If cabinet has a capacity limitation, all lab personal will follow the limitation.

At all times only store the amount of chemical needed for current experiments in labs and in all NPARL (Northern Plains Area Research Lab) buildings. Chemical storage (room #141 of new building) volumes of chemicals will be limited to 5 gallons or less, bulk storage (5 gallons or more) will be stored in Chemical Storage building #8. The chemical storage room will be used as long term storage, so if you are using chemical less than once a month you should store the chemical in chemical storage.

If experiment requires exceeding amounts of chemical allowed in lab environment, need to obtain prior approval by Facilities Coordinator (Robert Evans). Prior approval should be documented in the form of either e-mail or a memo, with copies sent to safety specialist (Jackie Couture). Each individual substance will need to have separate approval documentation either by e-mail or memo, with copies sent to safety specialist (Jackie Couture).

Chemical Labeling. All chemicals need to be properly labeled with hazard communication labels, date received, date opened, expiration date, name of chemical not formula name and owner of chemical. Contact Safety Specialist (Jackie Couture) if need help with labeling properly.

## CHEMICAL PURCHASING/INVENTORY PROCEDURES

- Purchase only needed quantities of chemical
- Chemical users (lab chemicals, pesticides, herbicides, etc.) are responsible to keep the chemical inventory updated.
- Should always label containers with date received, date opened and expiration date if available.
- Label containers with hazard communication stickers.
- Make sure chemicals are compatible in storage area.
- When receiving chemicals make sure to update lab chemical inventory.
- When chemical container is empty; take off of lab or storage chemical inventory. With CISPRO Remove method.
- These need to be updated anytime when receiving a chemical, bringing a chemical from another lab or when chemical container is emptied.
- The chemical inventory program. Just a reminder that only ONE user at a time.
- There are clipboards at the front desk that will require employee's signature to receive key to enter the chemical storage room #141 or the chemical storage building.
- These clipboards are located on right hand side of exit door in each chemical storage room. There is also a sign to help remind people to either add or remove chemical from that chemical storage and chemical inventory program, with their signature on the worksheet.
- **Lack of recording will cause down time (possibly at critical times) due to chemicals having to be reordered.**

**Be a responsible chemical user: Help make the system work.**

### **Hazardous Chemical Waste Reduction as part of EMS Program:**

- Researchers will be educated and reminded to purchase only needed quantities of chemicals.
- We will encourage the replacement of chemicals in use with less hazardous chemicals when possible.
- We will convert from alkyd to latex based paints, where practical.
- We will convert to biodegradable solvents where possible.
- Less solvent and cleanser will be used when rinsing and cleaning equipment where practical.
- We will recycle used hexane and methylene chloride by transfer to North Dakota State University
- Researchers will be encouraged to transfer excess chemicals to other researchers rather than dispose of them as hazardous waste.
- We will reduce pesticide use by mixing only needed quantities or by converting to less hazardous pesticides

## CHEMICAL INVENTORY PROGRAM TIPS

### **1. ADDING NEW CHEMICAL**

2. Click the New tool (it looks like piece of paper on tool bar). Then type chemical name example: Ethyl Alcohol 200 Proof into name field (on identity tab). Click Save tool (it is plus sign on tool bar).
3. Adding more detail information to chemical record. Click identity tab.
4. Type Denatured Alcohol into the Description Field
5. Type in DNA Extractions, cleaning, etc. into Application Field.
6. Click on the Physical Tab
7. Type C<sub>2</sub>H<sub>5</sub>OH into Structural Formula Field.
8. Type clear and colorless flammable liquid
9. Type 46.07 into Molecular Weight
10. Type 173 F into Boiling Point
11. Type 0.7940 into Specific Gravity
12. Type 44.6 into Vapor Pressure
13. Set the State to Liquid
14. Click No Oxidizers in Storage Compatibility box (Ethyl Alcohol react violently with wide range of oxidizing agents (oxidizers)).
15. Click on Hazards Tab
16. Set the Hazard Diamond Fire rating (red) to 3 and check the flammable field.
17. In the Warning box field type: Keep away from ignition sources! You can add the PEL/TLV, specific gravity (if heavier than air), etc.
18. Click on Protective Equipment and click boxes goggles, gloves, clothing and type Handle in adequate ventilation. Safety glasses where no contact with eye is anticipated in the box below.
19. Click on MSDS information and add in the information.

### **20. ADDING CONTAINERS AS FOLLOWS:**

21. Click on Quantity/Location tab
22. Click ADD + button
23. Click the Add..button
24. Click the + next to location.
25. Type your location, example: Bldg#8 RM 3
26. Click OK
27. Set the Size field to 1 pint
28. Skip to Container ID field
29. Enter 02H27BA into the Lot number field.
30. Set the expiration date if available
31. Enter 24 in the Initial Quantity field
32. Enter Jackie Couture in the Responsible field for this example, otherwise when you check one container to your lab place whom ever is responsible for that lab's name. Example: Lab 23 would be Chuck Flynn, Lab 153 Robert Larety, etc..
33. Enter the quantity 1 in field next to duplicated button.
34. Enter date received into Received Date field.
35. Click OK

### **36. CHANGING QUANTITIES AND DISPOSAL FOR CONTAINERS**

37. Click Change Qty ... (you can also double-click the desired container in the list)
38. Type in the amount of what is need to remove
39. Type in date into Date Field
40. Type in your Name into Operator field
41. Type in what chemical was used for (example: DNA Extracting) into Used for Field.
42. Click Add, Remove or Dispose. You would use Remove for empty containers and Dispose for chemical that is not being used and will be disposed of.

### **Printing Inventory Spreadsheets**

43. Go to File – select print –highlight report click.
44. A list of reports will be viewed and select the ChemicalAmountsbylocation.srw  
And click OK.
45. Report window will appear, select the define search tab.
46. Double click on the highlighted box or cell which is located on right side.
47. Edit locates window will appear, select the field properties tab.
48. Go to the is equal to in the first empty box and type your location.  
Example: RM 154
49. Then click OK. Go to preview report tab, then select print and your report will  
Print.

This program is very touchy and you have to have the exact location before your report will print. Example: if you type RM 154 but in program is listed Rm 154, your report will not print out those chemicals listed under Rm 154. When you are updating your chemical inventory you might want to change your locations to be all the same to prevent the confusion in the program itself. Please contact Jackie Couture if assistance is needed.

# Security Policy on Sidney ARS Location

Robert Evans – Site Security Officer  
John Gaskin– Alternate Site Security Officer  
Kevin Dahl – Computer Security  
Dale Spracklin – Alternate Computer Security  
Barbara Flammond – Personal security  
Jackie Couture – Back up of Site/physical Security  
Mark Basta – Physical Security

**Site Security:** unlocked or tampered doors or windows, unlocked vehicles, gates left open over night, damaged fence, verbal threats either by phone, visitor or another employee, etc.

**Computer Security:** The following list contains examples of when you should contact the Location Computer Security POC.....(Kevin).....or the alternate Computer Security POC.....(Dale).....

1. If you see any non-ARS people accessing any computer equipment or resources at the Location
2. If you see any ARS personnel performing unauthorized computer activity, such as illegal activities, or hacking into other computers, or viewing obscene and/or forbidden websites
3. If you notice anything out of the ordinary.....(Like a printer is missing or your computer/laptop is missing.....or your printer cable is disconnected)
4. If you notice anything wrong with any of our websites, such as strange information that shouldn't be there .....(this could be an indication that the webserver was hacked into and needs immediate attention)
5. If you notice your computer is doing strange things.....such as the toilet flushes when you double click an icon.....or your McAfee icon down by your clock turns from red to blue .....indicating that it is disabled.....
6. If McAfee AntiVirus pops up and tells you it has found an infected file.....
7. If you get an email from someone telling you that your computer has sent them a virus....
8. If you receive any threatening or disturbing emails

**Personal Security:** all employees personal information is under lock and key security.

## Sidney ARS Security Tips

Always lock all doors and windows behind you before leaving your building/work area.

Always lock government vehicles when not in use. Personnel vehicle should be locked at employee's discretion to protect personal belongings...

Always wear your ID BADGE before entering building. Keep your ID badge in your possession at all times. To prevent anyone to pose as you at other locations.

All visitors need to sign in at front desk. If person is unknown to you it is always a good idea to ask for a photo ID to prove they are whom they say they are.

All Screen Savers need to have password to prevent unwanted entry or damage to be done to any computer systems.

All personal papers that contain social security numbers, home address, etc. will need to be cross shredded.

Always keep location keys in your possession.

Stay aware of your surroundings

No weapons are allowed on location or in government vehicles.

No dogs or other animals, except seeing eye dogs, other guide dogs and animals used to guide handicapped persons, will not be allowed on property unless used for official purposes.

No parking of personal or government vehicles in front of fire hydrants, entrances, driveways, etc.

No persons entering or while on property will carry or possess explosives, except for official purposes.

## NPARL Security Measures

Buildings, facilities, and offices shall be used only for official business except that they may be used for authorized USDA employee activities. Admittance to any portion may be restricted for security reasons. All ARS (full time, temporary, and volunteer), MSU employees must wear issued photo identification and issued proximity cards. Employees not wearing ID badges may be sent home to get ID badge. Security statement will be in all employees performance plan. All supervisors are required to make sure all employees are wearing their security badge and follow safety and security rules fully.

## Access procedures

Proximity card system in place in the south building and the best lock system are in place in all other buildings and some gates. Padlocks secure Gates and storage areas that do not have a Best Lock. Access to buildings, gates, and storage areas is authorized by the Research Leader who will instruct the Administrative Officer to issue key(s) to employees as required by their job duties. Employees are required to sign documentation listing keys issued to them. The Administrative Officer maintains a record of keys issued; and maintains master keys in a locked key box. It is illegal for locksmiths to reproduce any of the Best System keys. Keys and proximity card for temporary or volunteer employees must be done in written format by their supervisor who must contact administrative officer (Barbara Flammond). Proximity cards will need to be approved by Computer Specialist (Kevin Dahl) and this request must be in written format. Proximity cards can be issued for 24 hours or more. This must be specified in written request the hours needed to be allowed on location, if one time event, etc., with a 24 hour notice. **DO NOT LEND YOUR KEYS OR PROXIMITY CARD TO ANYONE..**At the end of a workday, it is the responsibility of each employee to perform a routine check of their work area to ensure that appliances are turned off, equipment is left in appropriate mode, and cabinets locked as required. It is the responsibility of any employee who has access to the buildings, gates or storage areas during other than official hours to keep doors, and padlocks are locked while they are in the building to prevent unauthorized persons from entering.

## Chemical/Radioactive Storage areas

Chemical storage building and room in south building have controlled access. Employee's signature is required to obtain keys to either the chemical storage room or chemical storage building at the front desk in the south building. Employees are aware of certain chemicals and radioactive permits must be purchased by purchasing agent.

## Biological Permit

Biological permits will be obtained through proper procedure listed below:

Step 1: Fill out appropriate application for permit. For example, to release nonindigenous insects for weed biological control, complete form PPQ 526. Permit applications can be downloaded from APHIS website, [www.aphis.usda.gov](http://www.aphis.usda.gov)

Step 2: Submit copy to Research Leader and Lab Director. If permit involves safety concerns, Lab Director will contact Safety Officer

Step 3: Submit application to Animal Plant and Health Inspection Service (APHIS)

## Security levels – these levels are determined by the Department of Homeland Security (Appendix 1)

Low = Green;  
Guarded = Blue;  
Elevated = Yellow;  
High = Orange;  
Severe = Red.

Each level will require certain security measures. Example: Level green to which is low security required the location would be aware of security and would not require any further security measures. Homeland levels can be found P:/Safety/Security/Security ARSHSAdvisorysystem

## **Location Facility protection plan NPARL statement:**

**When level Orange is activated ARS would require all employees to wear id badges (all time requirement) and would try to minimize meetings that are open to public (higher level security) , all visitors shall leave driver's licenses at front desk to obtain visitor badge and will be escorted by a permanent USDA employee while on ARS location (all time requirement), contractors will be escorted to proper personnel (all time), public meeting will be monitored (higher level security), etc.** Contractors maybe issued contractor badges but will be required to leave drivers license at front desk until work is completed and turn in the contractor badge at the end of each work day, unless working for longer than 2 days, they will then be issued contractor badge but will not be required to turn in badge each night.

**Montana**

Dan McGowan

Acting Homeland Security Advisor

Department of Military Affairs – HAFRC

Montana Disaster and Emergency Services

1900 Williams Street

PO Box 4789

Helena, MT 59604-4789

406-841-3911

[www.discoveringmontana.com/css/default.asp](http://www.discoveringmontana.com/css/default.asp)

USDA, ARS, Homeland Security

5601 Sunnyside Avenue, 2-1110

Beltsville, MD 20705-5146

Phone: 301-504-4831

Fax: 301-504-1488

## APPENDIX #3 HOW TO READ AND INTERPRET AN "MSDS"

(Based on U.S. Department of Labor, OSHA Form No. 1218.0072)

### PRODUCT IDENTIFICATION

**MSDS Number:** A reference number assigned by the manufacturer.

**Product Name:** The commercial name of the product.

**MSDS Date:** The date of issuance.

**24-Hour Emergency Phone Number:** A number where a company representative can be reached at any time for information.

**Manufacturer's Name and Address:** The name and address of the manufacturer.

**CAS Number:** Chemical Abstract Service number.

**Chemical Name:** Lists the specific chemical name(s) of this product.

**Synonyms/Common Names:** Other names the product could be known by.

**Chemical Formula:** Actual chemical make-up of the product.

**DOT Proper Shipping Name:** A name assigned by the Department of Transportation (DOT) to this product and other similar products for storage and transportation purposes.

**DOT Hazard Class:** The group this chemical falls into determined by its hazardous properties. i.e., "Flammable", "Explosive", etc.

**DOT I.D. Number:** The identification number used by DOT for the chemical/product.

### HAZARDOUS INGREDIENTS AND INFORMATION

**Hazardous Components:** This section contains information regarding the Exposure Limits of this product. Exposure limits are the permissible exposure concentrations of the hazardous components of this manufacturer's product.

### PHYSICAL AND CHEMICAL CHARACTERISTICS

**Boiling Point:** The temperature at which a liquid changes to a vapor state.

**Vapor Pressure:** The pressure exerted by a vapor above a liquid in a closed container.

**Vapor Density:** The weight of a vapor or gas compared to the weight of an equal volume of air.

**Solubility in Water:** The percentage of the material that will dissolve in H<sub>2</sub>O under normal conditions.

**Specific Gravity:** The weight of a material compared to the weight of an equal volume of H<sub>2</sub>O under normal conditions.

**Evaporation Rate:** The rate at which a chemical will evaporate compared to the evaporation rate of butyl acetate.

**Appearance and Odor:** The odor, consistency, physical state at room temperature and other physical characteristics described in common terms.

**Freezing (Melting) Point:** The highest temperature at which a liquid becomes solid or a gas becomes liquid.

**% Volatiles by Weight:** The percent of a liquid that will evaporate at 70 degrees Fahrenheit.

**pH:** Expresses the acidity or alkalinity of the product. The pH scale runs from 0 - 14, with 0 being highly acidic and 14 being highly alkaline.

#### **FIRE AND EXPLOSION HAZARD DATA**

**Flashpoint:** The minimum temperature at which a liquid gives off sufficient vapor to form an ignitable mixture with an ignition source present.

**Autoignition Temperature:** The lowest temperature at which a gas or vapor-air mixture will ignite without a spark or flame.

**Flammable Limits:** The range of a gas or vapor concentration in air that is needed for it to ignite and maintain/sustain combustion.

**Extinguishing Media:** The appropriate agent to use in extinguishing a fire involving this product.

**Special Firefighting Procedures:** Appropriate equipment and methods to be used in fire situations.

**Unusual Fire and Explosion Hazards:** Special hazards or conditions that may lead to fire or explosion of this product.

#### **REACTIVITY DATA**

**Incompatibility:** Other chemicals that can cause dangerous or unwanted reactions if mixed with this product.

**Hazardous Decomposition or By-products:** A description of chemical changes that can occur on exposure to heat, change in temperature, aging, etc., and the hazardous by-products that could be produced.

**Hazardous Polymerization:** Where two or more molecules (monomers) come together to form a larger molecule (polymer). Typically, this will result in the release of large amounts of energy.

## HEALTH HAZARD DATA

**Health Hazard:** The potential health hazards resulting from low, high, short-term and long-term exposure to this product.

## ROUTES OF EXPOSURE OR ENTRY

**Inhalation:** Breathing-in of the substance.

**Skin Contact:** Exposure by coming in contact with your skin.

**Skin Absorption:** Exposure by contact with the skin and absorbing the product into your bloodstream.

**Eye Contact:** Splashing into or otherwise bringing your eyes in contact with the product.

**Ingestion:** Taking the product by mouth, swallowing.

## EFFECTS OF OVEREXPOSURE

**Acute:** Immediate, severe, physiological effects of overexposure.

**Chronic:** Long-term physiological effects of overexposure.

**Carcinogenicity:** The potential of this product to cause cancer. **NTP** - National Toxicity Program. **IARC** - International Agency for Research on Cancer

**Medical Conditions Aggravated by Exposure:** A list of the conditions that can be worsened or changed by exposure to this product such as emphysema, dermatitis, asthma, etc.

**Emergency Procedures:** Treatment recommendations for immediate use after contact with this material based on routes of exposure and severity of symptoms.

## PRECAUTIONS FOR SAFE HANDLING AND USE

This section provides information needed in case of accidents, spills and leaks of this product. It gives specific procedures to follow for clean-up and protection of the environment.

This section also details the proper disposal and storage procedures for this product.

**Single Word:** A word used in labeling to warn of the hazardous nature of this product such as "Danger", "Poisonous", "Flammable", etc.

**Statement of Hazards:** A brief description of the hazardous characteristics of this product.

**Precautionary Statements:** Comments on Specific cautions to be used when working with or around this product. Specifies dangerous conditions to avoid.

## **CONTROL MEASURES**

This section provides details for specific ventilation requirements for areas where this product is used or stored.

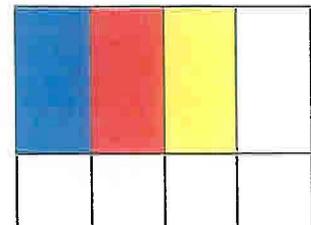
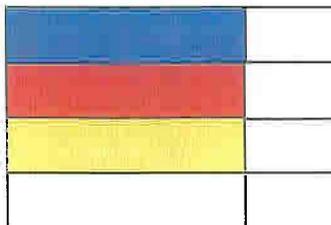
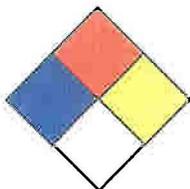
This section also gives requirements for specific personal protective equipment to be used by all personnel when working with this product. Equipment specifications are based on the hazardous properties of this product and will include recommendations for respiratory protection, eye protection, gloves, protective clothing, and work procedures to ensure safe handling of this product.

# Hazardous Material Code Identification

NFPA 704, 1996 Edition

Identification of Health Hazard Color Code: BLUE		Identification of Flammability Color Code: RED		Identification of Reactivity Stability Color Code: YELLOW	
Type of Possible Injury		Susceptibility of Materials to Burning		Susceptibility to Release of Energy	
Signal		Signal		Signal	
4	Materials that, under emergency conditions, can be lethal.	4	Materials which will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature, or which are readily dispersed in air and which will burn readily.	4	Materials that in themselves are readily capable of detonation or of explosive decomposition or explosive reaction at normal temperature and pressures, are shock sensitive and react explosively with water.
3	Materials that, under emergency conditions, can cause serious or permanent injury.	3	Liquids and solids that can be ignited under almost all ambient temperature conditions.	3	Materials that in themselves are capable of detonation or explosive reaction but require a strong initiating source or which must be heated under confinement before initiation, are shock sensitive or which react explosively with water.
2	Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.	2	Materials that must be moderately heated or exposed to relatively high ambient temperature before ignition can occur.	2	Materials that readily undergo violent chemical change at elevated temperatures and pressures. Also materials which may react violently with water or which may form potentially explosive mixtures with water.
1	Materials that, under emergency conditions, can cause significant irritation.	1	Material that must be preheated before ignition can occur.	1	Materials that in themselves are normally stable, but which can become unstable at elevated temperatures and pressures or which may react vigorously with water. Also materials that change or decompose with exposure to air, light or moisture.
0	Materials that, under emergency conditions, would offer no hazard.	0	Materials that will not burn.	0	Materials that in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water.
<b>SPECIAL (WHITE)</b>					
<b>W</b>	<b>REACTS VIOLENTLY OR IN A DANGEROUS MANNER WITH WATER.</b>				
<b>D</b>	<b>REQUIRES SPECIAL DISPOSAL</b>				
<b>OX</b>	<b>SUBSTANCE YIELDS OXYGEN TO SUPPORT COMBUSTION. REACTS TO OXIDIZE FUELS OR COMBUSTIBLES.</b>				
<b>COR</b>	<b>ACID, ALKALI OR OTHER MATERIALS THAT WILL CAUSE SEVERE DAMAGE TO LIVING TISSUE.</b>				
<b>R</b>	<b>MATERIALS POSSESSING RADIOACTIVITY HAZARDS.</b>				

The identification systems are focused on the hazards of the materials under fire or spill conditions. This system is used only for the storage of chemicals and may be set up in a number of different designs. The color and number codes are as described above. The hazard number ratings will be either inserted into, or placed next to or below the corresponding colored box. Examples of the various identification systems that may be seen on bottles, drums or other containers are shown below:



1. Standard Operating Procedure Title: **Entering Labs**

2. Author(s): Jackie Couture

a. Date Developed: September 19, 2002

b. Date Reviewed: Reviewed by: Jackie Couture

3. Regulation to comply: OSHA 1910.1450

4. Who will perform the procedures:(List of names) All Employees

5. Procedures to be followed:

a. Step 1: If there is a sign on lab door stating, "Do not Enter", please either knock on lab door or call the lab extension. Before entering lab. This procedure may help prevent any employee that enters the lab from being exposed to a hazardous chemical or spreading of any type of biological organisms through out the entire labs. The lab extension will provide on the sign that will be placed on lab door by the lab personal. It is lab personnel responsibility to place the sign where visible and when performing a lab experiment that requires low traffic. At the same time it is the responsibility of the employee wanting to enter the lab to look for the sign and take the precaution of knocking on door or calling lab extension.

b. Step 2: Any maintenance, paperwork or computer work that needs to be done with lab personal should be done in this order. (1) Paper work you should call lab extension set up time and different location if possible. (2) If need to repairs are need in the lab, call the lab personnel and set a time and date to perform repairs. Now in emergency situations, the lab personnel is responsible to tell the maintenance what they were working with and will offer proper personal protective equipment to protect the maintenance worker. (3) If lab personal gives the okay for employees to enter lab they must be prepared to offer proper personal protective equipment to the employee if necessary. (4) It is the responsibility of the person entering the lab to wear the personal protective equipment that is offered and ask if they need to wear the equipment to perform their task. Lab personal do know the proper personal protective equipment that is needed for most lab procedures and if unknown you can contact Jackie Couture at Extension #122.

Note: Steps involving hazards will have a warning or caution note explaining the nature of the hazards and the precautions to be taken.

**Emergency response procedures:**

c. The supervisor assigning the work will make sure that a person qualified to render first aid is made part of the team.

d. In the event of an injury, or loss of consciousness, the senior person present will use the cell phone to contact Sidney Health Center (406) 488-2100 or dial 911 for Ambulance and medical consultation as to actions to be taken prior to arrival of the ambulance.

6. Approval: This SOP is approved by the **Location Facilities Coordinator** and **Safety Specialist:**

a. Name: Robert Evans

Name: Jackie Couture

b. Title: Facilities Coordinator

Title: Safety Specialist

c. Date:

Date:

d. Signature:

Signature:

## Taking Workplace Chemicals Seriously

Millions of workers are exposed (or potentially exposed) to chemical hazards in their workplace. OSHA's hazard communication standard (a.k.a. the right-to-know law) says that employees have the right to know about chemical hazards in their workplaces. This standard includes specific requirements that chemical manufacturers and employers have to follow to communicate this information to you.

The hazard communication standard was really designed for your protection. Knowing about its provisions is a good way for anyone who works with hazardous chemicals to protect him or herself from their hazards.

### **What is in the standard?**

The areas covered by the hazard communication standard include:

- A hazard assessment
- Written program
- Labels and labeling
- Material safety data sheets
- Employee training

Find out about specific elements to your company's hazard communication program by reading the written program, locating the material safety data sheets, and learning how to read hazard labels.

### **What are hazardous substances?**

A toxic or hazardous substance regulated under this standard is any substance that has the capacity to produce personal injury or illness to man through ingestion, inhalation, or absorption through any body surface.

This regulation is concerned with two main hazard categories: health hazards and physical hazards.

### ***Health hazard***

A chemical for which there is statistically significant evidence based on at least one study that acute or chronic health effects may occur upon exposure.

Types of Health Hazards:

- Acutely toxic
- Chronically toxic
- Carcinogenic
- Mutagenic
- Teratogenic
- Sensitizing Agent
- Corrosive
- Irritant

### ***Physical hazard***

A chemical for which there is valid evidence that it is a combustible liquid, compressed gas, explosive, flammable, organic peroxide, oxidizer, pyrophoric, or unstable (reactive) or water-reactive, is known as a physical hazard.

### **Hazard labels**

Your employer may keep original labels on containers or label the hazardous substances in your facility with one of many labeling systems. Two of the most common of these systems are National Fire Protection Association (NFPA) labels and Hazardous Materials Identification System (HMIS) labels. NFPA labels are diamond shaped. HMIS labels list hazard warnings in a series of bars.

Both systems color code hazards in the following way:

Blue—health

Red—flammability

Yellow—reactivity

White—special hazard (NFPA only)

PPE – personal protective equipment (HMIS only)

Your employer will explain the system(s) used in your workplace, and how to interpret them.

### **Routes of entry**

There are many ways that you can come into contact with, or be exposed to hazardous substances at work. Problems occur when these hazardous substances find their way into your body. There are three common routes of entry into the human system: skin contact, ingestion, or inhalation.

#### ***Skin contact***

Liquids might get on the skin accidentally, through a spill, or intentionally, through a job process. Some chemicals will cause an external reaction, a burn or an irritation. Certain chemicals will penetrate the skin and enter the system, possibly with severe results.

#### ***Ingestion***

Another way that exposure occurs is through swallowing. A chemical that cannot penetrate the skin is often introduced into the body when you touch your mouth with contaminated fingers. Drinking and eating in high risk areas increases the chance of inadvertently swallowing a toxic material.

#### ***Inhalation***

Breathing in toxic dust or vapors is the exposure method most difficult to control. That is because you may inhale a harmful substance without being aware of it. It is hard to take precautions if you do not realize a situation is occurring.

The way contact is made can determine whether or not the substance has an effect. Certain nickel compounds can cause serious health effects if inhaled, but are relatively harmless if swallowed. Ammonia, however, can irritate the eyes and skin and can also have harmful effects if swallowed.

Learning about chemical hazards at your workplace is important for all workers. It is the first step to preventing exposure to and possible occupational illness from workplace chemicals.