## Environmental Health & Safety



#### Top Issues and Resources Available



Research Center Administrators Society, February 22, 2010

Brian Oatman, EH&S Manager, Agriculture & Natural Resources



# Overview of Safety Program

- Policies/Guidelines/Written Programs
- Safety Training
- Audit and Review
- Consultation Services
- Website
- Be Smart About Safety



## **Policies & Guidelines**



- Written Programs to Meet Specific Code Requirements
  - Injury & Illness Prevention Program (IIPP)
  - Hazard Communication
  - Respiratory Protection
  - Confined Space
  - Center/Building Evacuation Plan



## Policies & Guidelines



- Guidelines to Help Interpret Regulations
  - Hazardous Waste Guidelines
  - Pesticide Use & Handling
  - Fire Control & Suppression
  - Firearms
  - Field Work Safety



# Safety Training



- What Training is Needed?
- How to Get Training
- Training Records



# **Safety Training**



### Training Plan and Tracking form



## ANR EMPLOYEE HEALTH AND SAFETY TRAINING PLAN AND TRACKING FORM FIELD EMPLOYEES

Employee: <u>John Doe</u> Position: <u>Aa Tech</u> Date: 2/21/2010

	Refresher Training	Training	Training Dates							
Type of Training	Frequency	Required	Initial	Refresher						
Record Keeping and Tracking for Employee Health and Safety Training	Changes or Annual	Yes	01/04/10							
Good Health and Safety Practices Related to Position Tasks	5 Years	Yes	01/04/10							
Building Evacuation Plan(s)	Changes or 5 Years	Yes Yes	01/04/10							
Injury Illness Prevention Plan (IIPP) Emergency Response Plan	Changes or 5 Years Annual	Yes	01/04/10							
Fire Prevention Plan	5 Years	Yes	01/04/10							
First Aid Kits and Equipment	5 Years	Yes	01/04/10							
Eyewash/Showers	5 Years	Yes	01/04/10							
Good Housekeeping	5 Years	Yes	01/04/10							
Asbestos Notification	Annual	Yes	01/04/10							
Heat Illness Prevention	Changes or 5 Years	Yes	01/04/10							
Lead Paint Awareness and Notification (Residents Only)	New Hazards	Yes								
Material Safety Data Sheets	New Hazard or 5 Years	Yes	01/04/10							
Bending	Changes or 5 Years	Yes	01/04/10							
Computer Workstation	Changes or 5 Years	Yes	01/04/10							
Continous Standing/Sitting	Changes or 5 Years	Yes	01/04/10							
Lifting	Changes or 5 Years	Yes	01/04/10							
Pushing/Pulling	Changes or 5 Years	Yes	01/04/10							
Repetitive Motion	Changes or 5 Years	Yes	01/04/10							
Slip / Trip / Fall	Changes or 5 Years	Yes	01/04/10							
Respiratory Protection	Changes or Annual	Yes								

Field 1 (revised 1/5/2008)



# Safety Training



### Training Resources

- Safety Notes
- Video Library
- Powerpoint Slideshows
- In-Person Training
- Web-Based Training



#### Training Video Request Form

The following training videos are available for loan to any University of California personnel. Requests will also be accepted from other public agencies or non-profit organizations in California.



#### **Safety Note**



#### Safety Note #8

#### **GENERAL TRACTOR SAFETY**



It has been estimated by the National Safety Council that 460 people died from tractor injuries during 1990. Typically, 75% of tractor deaths involve the driver. About 50% of the mortalities are due to tractor overturns and 25% are due to runovers. Videos E-001 and S001 Tractor Accidents are available from the ANR Environmental Health and Safety Library at

- Thoroughly review and understand information provided in the tractor operator's manual with particular attention given to descriptions of safety procedures.
- Always perform a pre-shift tractor inspection, including checking fluid levels, lights and signals, tires, and guards and shields. Inspect tractor for loose hydraulic connections and worn or loose parts such as hitch pins or lug nuts.
- If a tractor fails the pre-shift inspection, notify your supervisor and remove the tractor from service by attaching a red tag that states "DO NOT USE." Complete red tag with
- Annual tractor training is required by California regulations (Title 8, Section 3664 b) and should incorporate both general tractor training and specific training review on the tractor(s) that employees may use.

- Before starting a tractor, look for people or obstructions behind or ahead of the tractor.
- As the tractor begins to move, engage the clutch slowly and evenly avoid jerky starts,
- Never carry passengers on a tractor.
- If the tractor has a roll-over protective structure (ROPS), the seat belt must be used.
- Never attach implements unless the power take-off (PTO) shaft is guarded.
- Always hitch towed loads to the tractor drawbar.
- Avoid operating a tractor within six feet of ditches, holes, depressions, and embankments.
- Reduce speed when turning on roads or at row ends, crossing slopes, or driving on rough,
- Do not operate tractors on slopes too steep for safe operation. Descend slopes in low gear while using the tractor motor as a brake.
- Never adjust or work on implements unless the tractor is shut off and the implement is deenergized.
- When parking, always lower the three point linkage and towed
- Take regular breaks when operating tractors for long periods of time.
- In order, tractor shutdown procedures are: (1) setting the PTO lever in neutral; (2) engaging the parking brake or shifting the transmission lever to the park position; (3) and turning off





## Safety Program Reviews



### Annual Inspections

#### Detailed Checklist

- Safety observations and records (OSHA)
- Fire Code
- Hazardous Materials/Waste (CA Dept of Toxics)
- Sanitation (Public Health)

### Report

- Identify potential violations
- Cite applicable code
- Suggest corrective actions
- Hazard ranking (imminent, serious, moderate, minor)

		PERIODIC WORKSITE INSPECTION CHECKLIS	ST			
		UNIVERSITY OF CALIFORNIA AGRICULTURE AND NATURAL RESOURCES INJURY AND ILLNESS PREVENTION PROGRA				
SITI	E LO	CATION: DATE:				
NAI	ME O	FINSPECTOR:				
		spector: Some topics on this checklist may not apply to many ANR local cation or operations and draw a line though any section that is not applic		Use th	e sectio	ons that ap
RE	CORI	KEEPING				
1.	Me	dically Related Information	Yes	No	N/A	Date
	A.	Cholinesterase testing current?	$\overline{\Box}$	$\overline{\Box}$	$\overline{\Box}$	
		(1) Written agreement on file?	ō	ā	ō	
	В.	Hearing tests current?		Ħ	ñ	
	C.	Injury/Illness reports filled out and submitted on time?	П	П	ñ	
	D.	Organophosphate/Carbamate surveillance current?	ō	ō	ō	
	E.	Animal Handlers questionnaire and medical surveillance current?		Ē		
	F.	Respirator Use questionnaire and fit test current?	П	П	П	
	G.	Other required medically related information:				
2.	Tra A.	nining Records  Records of initial and refresher training are current and on file?  (ie: Employee Health & Safety Training Plan and Tracking form)	Yes	<u>No</u>	<u>N/A</u>	Date Correct
	В.	Pesticide safety training form used and filed?	$\bar{\Box}$	□	$\bar{\Box}$	
	C.	Forklift and Tractor training records current and filed?	ō			
	D.	Animal Handlers training current and filed?				
	E.	Training forms used and kept on file?				
	F.	Personal protective equipment training current?				
	G.	Emergency response/building evacuation protocols?				
	H.	Safety awareness programs in place and training recorded?				
	I.	Other required training:				
3.	Inv	entories/Inspections	Yes	No	N/A	Date Correct
	Α.	Chemical/pesticide inventories current?		П		
		(1) Annual submittal of Hazardous Materials Business Plan?	П	П	ī	
	В.	Hazardous waste inventory current?	ñ	ñ	ñ	
	C.	Fire extinguisher location inventory current?	П	П	ī	
		(1) Annual fire extinguisher service current?	П	П	ñ	
		(2) Monthly fire extinguisher inspections current?	ŏ	ă	ŏ	
	D.	Pressure vessel (stationary/portable tanks and boilers) permits current?				
	E.	Monthly Emergency Eyewash/Shower Unit inspections current?				
	F.	Are all safety and maintenance inspections recorded and filed?	ō			
	G.	Above ground fuel tank inspections and permits current?	П	$\bar{\Box}$	П	



# **Safety Program Reviews**



#### RESEARCH and EXTENSION CENTERS ADMINISTRATIVE OFFICE ENVIRONMENTAL HEALTH and SAFETY PROGRAM REVIEW

#### DESERT RESEARCH and EXTENSION CENTER

DATE OF REVIEW: October 12, 2009

ITEM No: SUBJECT: LOCATION: ATT:	ITEM DESCRIPTION	HAZARD EVALUATION	STATUS (FOR LOCATION USE) (DESCRIPTION OF CORRECTION)
6 MACHINE GUARDS Feed Mill Shop  F1 F2	The table grinder is missing the required safety guards resulting in a potential injury. CCR/8-3577 requires abrasive wheels to be provided with safety guards which shall be of such design and construction as to effectively protect the employee from flying fragments of a bursting wheel. The grinder is out of service until guards are installed. See attached CCR/8-3577 and Safety Note #15.	SERIOUS	
7 COMPRESSED GAS Maintenance Shop G1 G2	The valve to the Argon compressed gas cylinder was left open while not in use, resulting in a potential hazard. CCR/8-4650 requires cylinder valves to be closed when work is finished. Recommend instructing shop personnel on proper compressed gas procedures. See attached CCR/8-4650 and Safety Note # 45 (Basic Gas-Welding Safety).	MODERATE	



# Top Audit Findings



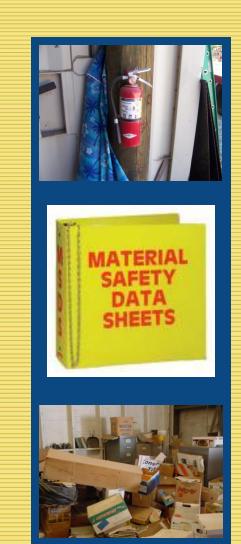
### 1. Fire Extinguishers

- No proper signage
- Missing or out of date tag
- Access blocked

#### 2. Hazard Communication

- Improper labeling of chemicals
- No Material Safety Data Sheet (MSDS)

## 3. Housekeeping





## **Top Audit Findings**



### 4. Aisle & Walkways

- Inadequate clearance
- Obstructed exits

#### 5. Live Loads

Items stored dangerously

## 6. Emergency Evacuation Plans

- Contact information out of date
- Evacuation map incomplete

## 7. Hazardous Waste Mgmt.

Storage of waste beyond time limits









## **Top Audit Findings**



## 8. Electrical Equipment/Cords

- Exposed wiring or shielding
- "Daisy chained" extension cords
- Overloaded power strips

## 9. Labeling of Hazardous Waste

- Failure to label waste
- Missing information on labels

### 10. Missing Machine Guards

Grinders, saws, etc.



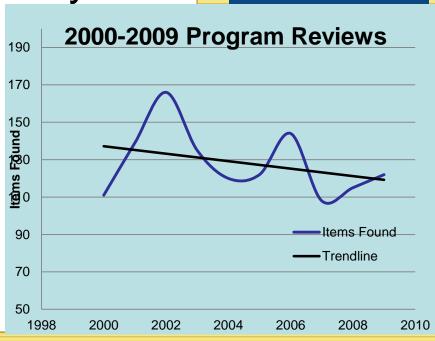


## Safety Program Reviews



#### Results

- Improved compliance (Downward trend of findings)
- Good results on regulatory inspections
  - Nine inspections last year
  - One fine \$100





## Consultation



- Accident Investigation
- Regulatory Compliance
- Environmental Monitoring
- Ergonomics
- Respirator Fit Testing
- New Regulations
- Risk Assessment



# **Program Delivery**



- Safety Coordinators
  - Training
  - Webinars
  - e-mail listserve
- Onsite Visits
- Website

http://safety.ucanr.org



## Safety Coordinator



### **Duties and Responsibilities**

- Ensure that the Injury & Illness Prevention Program (IIPP) requirements are met
- Perform or coordinate annual workplace inspections
- Assist with investigation of work-related injuries
- Be a health and safety resource for coworkers
- Assist with review and assessment of the department's safety program
- Post safety information



## Be Smart About Safety



- Use Workers Compensation funds to invest in prevention
- Projects include:

**Automatic External** 

Defibrillators (AEDs)

Equipment guarding

**Ergonomics** 

Fall protection gear

Fire protective gear

Heat illness prevention

Hydraulic lifts

Ladders/Work platforms

Lighting improvements

Livestock squeeze chute

Radio repeater

Spill containment

**StopSaw** 

**Traffic Barricades** 

Training (first aid/CPR,

Driver Safety, Pesticide,

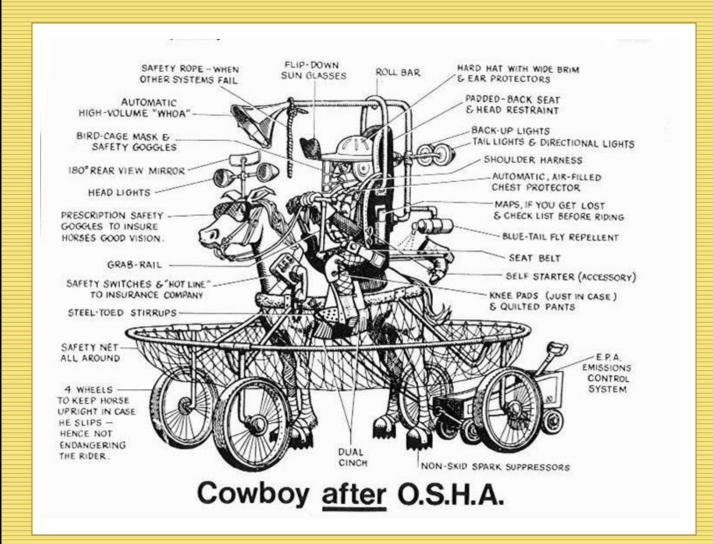
Haz Comm)





## Questions?





Brian Oatman
baoatman@ucdavis.edu
530-752-6024