

Agriculture and Natural Resources Environmental Health and Safety (EH&S) Office Annual Report July 1, 2007 – June 30, 2008

Overview

The ANR EH&S program continued to develop during the past year. Significant accomplishments included implementing the UC Be Smart About Safety Program that supported the addition of an Environmental Specialist position at the EH&S office and funding the purchases of equipment and services to assist ANR facilities with improving workplace safety. EH&S also implemented a new project to develop specific safety materials for the California Master Gardener Program. The EH&S website was expanded through the addition of new documents to assist ANR staff.

Safety Notes

Twelve new Safety Notes were developed during the past year to bring the total number of Safety Notes posted on the EH&S web site to 134. New Safety Notes were developed based on changes in regulations and at the request of ANR employees at RECs, CE offices, and Statewide Programs. Examples of the types of topics developed for Safety Notes included fume hood, laboratory, general respiratory, and general cotton harvest safety and driving and cell phone use. Twenty-seven Safety Notes were also translated into Spanish and five additional Safety Note quizzes were derived and posted on the web site.



Be Smart About Safety Program

The Be Smart About Safety (BSAS) program uses funding from UC's Workers Compensation program to invest in projects that will reduce the frequency and severity of injuries and therefore, reduce the overall cost of the workers compensation program. ANR EH&S has used funding from BSAS to hire an EH&S Specialist to focus on accident prevention and training. Other large-scale projects that support many or all ANR units include: training materials including videos and online training, providing Automatic External Defibrillators (AEDs) for remote REC locations, Fire Extinguisher Training equipment, Safe Driving program, Food Safety education, emergency kits for ANR offices, and translating safety training materials into Spanish. EH&S has facilitated providing funds directly to Cooperative Extension (CE), Research and Extension Center (REC) and Statewide Program offices for purchase of safety equipment or training. Forty ANR locations received funds for projects

such as: equipment to aid in the lifting, moving and storing of materials (lifts, handtrucks, carts, storage cabinets; etc.); ladders; scaffolding; office ergonomic improvements (chairs, workstations, footrests); chemical storage cabinets, emergency eyewash/safety shower; and CPR and first aid training.

Site Visits, Program Reviews and Inspections

During the past year, EH&S made visits to seven CE offices, all nine RECs, Hansen Agricultural Center, and several statewide programs and administrative offices. The purpose of these visits was to provide training, conduct ergonomic evaluations, provide assistance with safety issues and evaluate health & safety programs and general conditions. In most cases, issues such as ergonomic concerns could be resolved with training and adjustments to existing equipment (chairs, desks, etc.).

Program Reviews were performed at fifteen of these locations. Program reviews are mock regulatory audits, where EH&S reviews the facility, safety program and training records. A written report is provided that summarizes the findings during the review, presents regulatory citations and guidance documents to support the findings, and offers recommendations for corrective actions. Results of the program reviews identified a total of 247 deficiencies with 172 (or 70%) labeled "moderate" and 75 (or 30%) labeled "serious" deficiencies. No "imminent" hazards were identified. All deficiencies were corrected within their assigned timeframes. EH&S and Risk Services initiated a pilot program to conduct joint reviews at CE offices and RECs. The joint review includes an EH&S program review described above, along with a review of Risk Services topics, including Facility Use Agreements, Certificates of Insurance, managing insurance claims, and background check procedures. Three of these joint reviews were conducted in 2008, with more planned for the next year.

AGRICULTURE and NATURAL RESOURCES ENVIRONMENTAL HEALTH and SAFETY PROGRAM REVIEW			
Yolo County Cooperative Extension			
DATE OF REVIEW: May 21, 2008			
CATEGORY:	ITEM DESCRIPTION	HAZARD EVALUATION	CORRECTION STATUS (FROM COUNTY OFFICE)
Shop Bench Drill Press	The belt pulley system on top of the Delta drill press is missing its protective guard, and the press is not secured to the bench. Both discrepancies may result in a potential accident and injury. CCR 9-4070 requires all moving parts of belt and pulley drives located 7 feet or less above the floor or working level shall be guarded. CCR 9-4286 requires each machine to be mounted to eliminate hazardous vibration at any operating speed while using any tool designed for the machine. The drill press must be taken out of service until mounted and guarded. See attached CCR 9-4070, CCR 9-4286 and a copy of the Drill Press Safety Rules from Delta.	SEVERE	Drill press has been taken out of service. A replacement is being researched for purchase. Installation of the new machine will follow accepted guidelines involving mounting.
Shop Spill Clean-Up	Sorbent spill material in covering a vent oil stain on the floor due to leaking of mower, resulting in a potential environmental and slip/fall hazard. CCR 9-3273 requires floors to be reasonably free of oil and grease. Walkways and materials storage areas in yards shall be maintained free of dangerous debris. CCR 9-3362 requires to the extent that the nature of work allows, workplaces shall be cleaned and maintained in such conditions as will not give rise to harmful exposure. Recommended cleaning up spills when they happen. A drip pan can be placed beneath leaking equipment. See attached CCR 9-3273 and CCR 9-3362.	MODERATE	An oil drip pan has been purchased and placed under equipment to catch drips. Sorbent spill material has been cleaned up.

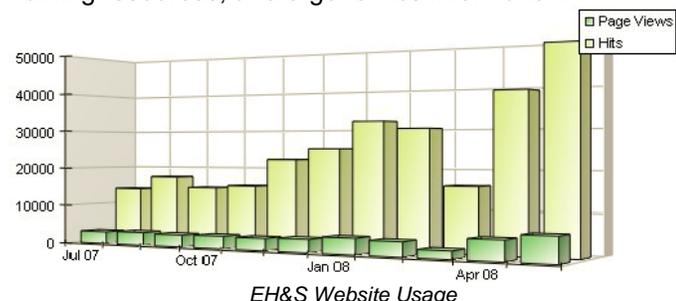
Example of a Program Review Report

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During 2007–2008 13 inspections were performed by 11 different agencies at seven RECs and the REC Administrative Office. Inspections were conducted by three county Certified Unified Program Agencies (CUPAs), two Air Pollution Control Districts, two County Agriculture Commissioner offices, one County Fire Department, UCD Fire Department, California Department of Public Health, and California Integrated Waste Management Board. Four violations were issued and corrective actions were taken to abate the violations within designated timeframes. No fines have been issued as a result of these inspections.

EH&S Website (<http://safety.ucanr.org>)

The EH&S website continues to grow. New Safety Notes, Clover Safe Notes (for 4-H YDP) and Thinking Safe and Green Notes (for the Master Gardener Program) were added, along with revised guidelines, training resources, and ergonomics information.



Use of the website more than tripled this year, increasing from just over 14,000 “hits” per month in July 2007 to about 50,000 “hits” per month in May 2008, with an average of over 25,000 “hits” per month during this period. The trend of website usage has been steadily upward over the past three years. In addition to use by ANR Safety Coordinators and other staff, the EH&S website received hits from all 50 states and over 120 countries. Safety Notes are the most popular feature on the website, accounting for about 20% of the total page views. Safety information in support of the 4-H Youth Development Program has seen increasing traffic from website visitors, accounting for over 12% of page views.

Master Gardeners

During the past year, the EH&S office began developing safety resources for the UC Master Gardener Program. Master Gardener is a statewide program with over 3,600 volunteers in 36 counties that extends UC research-based information about home horticulture and pest management to the public. To support safety and environmental stewardship within the Master Gardener Program, fifteen one-page training tools, entitled Thinking Safe and Green notes were developed at the request of Master Gardener staff and participants. A questionnaire was also circulated and posted electronically for Master Gardener Program Representatives’ to provide information about what types of health and safety

resources need to be included in a Master Gardener Safety Manual that will be developed for the Program.

4-H Youth Development Program (YDP)

This year the EH&S office received two awards for its work with the 4-H Safety Program: the first award was given by UCOP Risk Services for “Innovations in Safety” and the second was an “Award of Recognition” for the Solutions at Work Program from the Campus Safety Health and Environmental Management Association (CSHEMA).



4-H YDP Policy Advisory Committee

The EH&S office continued to provide health and safety support to 4-H YDP. Working with input and review from the 4-H Policy Advisory Committee, EH&S developed materials that can be used to train 4-H members and volunteers to carry out their activities in a safe manner and prevent injuries.

Safety materials included the development of an additional 28 “Clover Safe” notes and 25 attendant activity sheets. A total of 60 Clover Safe notes and 51 activity sheets are now posted on the EH&S web site. A series of 60 Newsletter Items were developed for use by 4-H Program Representatives. Newsletter Items are intended for insertion into local 4-H newsletters and correspond to the detailed Clover Safe notes. Each Newsletter Item consists of one paragraph of information with an attendant picture or other graphic. Information given in the Newsletter Items is intended to interest the reader sufficiently to lead them to read additional health and safety information provided by Clover Safe notes posted on the EH&S web site.

CLOVER SAFE # 1	SAFE CARE AND HANDLING OF RABBITS
 <p style="font-size: small; text-align: center;">Photographs Courtesy of Elkus Youth Ranch</p> <p style="font-size: x-small;">For additional information about how to safely care for and handle rabbits, go to the Clover Safe note at: http://ucanr.org/cloversafe.</p>	<p>Rabbit Characteristics Rabbits belong to the order of mammals called Lagomorpha which also includes hares and pikas. When living in the wild, rabbits spend their time on the ground eating green grasses and leaves and avoiding predators such as hawks and coyotes. Because rabbits are preyed upon by other animals, they have well developed senses of smell, hearing, and long distance sight. Furthermore, rabbits are capable of high speed running and maneuvering to escape predators. Rabbits also are excellent diggers and will burrow out underground homes, called warrens, where they feel protected and prefer to rest and sleep.</p>
Clover Safe Notes are prepared by the UC ANR Office of Environmental Health & Safety, in support of the Statewide 4-H Youth Development Program.	
 	

Example of a Newsletter Item

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EH&S Training

EH&S Office staff have continued to provide training at ANR facilities and offices, including respirator fit testing and training and presentations on EH&S responsibilities, office safety, safe lifting practices, risk management, and slips, trips, and falls. More than 530 persons were trained by ANR EH&S staff, including REC employees, UC departmental staff and students, USDA personnel, 4-H volunteers, and C E employees. Review of written evaluations of EH&S training and presentations indicated attendees have an overall favorable approval rating of 95%.

ANR Guidelines

The Respiratory Protection Program was updated and revised to accommodate changes in regulations, including the new requirement for medical evaluation prior to respirator fit testing. The revisions included a new Guideline, which serves as ANR's written respiratory protection program and an update of the Respiratory Protection Manual for Pesticide Applicators and Handlers. In addition, the manual was translated into Spanish. Both English and Spanish versions of the manual are posted on the EH&S web site. Safety Notes for employees and supervisors were also developed to help explain the new program requirements.

Guidance for Food Safety education was also issued, establishing a goal that at least one employee at each C E office and REC will be trained in a food safety "train the trainer" curriculum and pass this knowledge on to colleagues and volunteers who may be serving food as part of University activities.

EH&S Plans, Forms, and Templates

A variety of checklists have been posted under Plans, Forms, and Templates on the EH&S web site. The checklists provide guidance on performing required inspections and self audits of work spaces and various types of equipment. Moreover, the checklists are formatted to allow online compilation followed by downloading into a user's directory on their personal computer. The suite of checklists includes Forklift Daily Inspection, Tractor Daily Inspection, Eyewash/Safety Shower Monthly Inspection, Fire Extinguisher Monthly inspection, Vehicle/Trailer Inspection, Worksite Inspection, and Program Reviews.

Drinking Water System Compliance

The EH&S drinking water system compliance program continued to provide site-specific water sampling and analyses schedules, spreadsheets for recording required data, quarterly and annual water system reports, and Consumer Confidence Reports for regulated REC water systems.

The Desert REC drinking water system continued to produce levels of disinfection by-products that exceed maximum contaminant levels established by the State of California

and as a result, further testing took place to develop a plan for resolving this issue. EH&S staff derived a Permit Amendment application

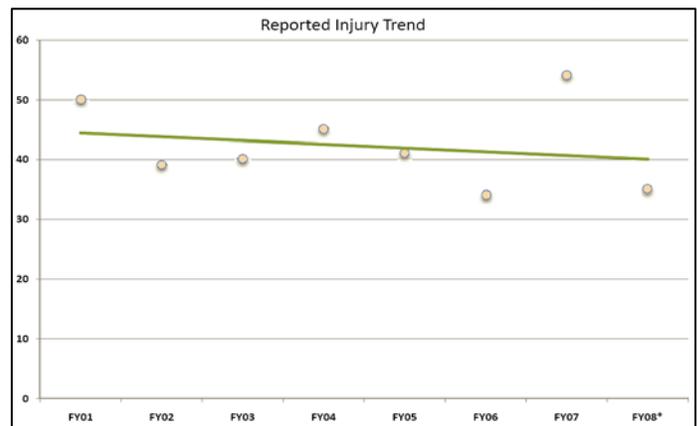


Desert REC Treated Water Storage Cisterns

and submitted it to the regulatory authority for approval. The application includes the replacement of the failing pre-filter and treated water storage cisterns with a new pre-filter and an above ground steel tank, respectively. In addition, the outdated and poorly performing conventional water treatment system is proposed to be replaced by an automated microfiltration unit. This new treatment system will result in a more reliable operation, with lower maintenance, and provide improved water quality to meet ever-increasing drinking water quality standards.

Accident/Injury Investigation and Prevention

With support from UCOP Risk Services and UC Davis Workers Compensation office, EH&S has begun regularly receiving data about work-related injuries involving ANR employees. Now that this information is available, EH&S can provide more timely investigation of



injuries and focus our efforts to preventing the most frequent or costly types and locations of injuries. A preliminary analysis of this data is presented here. Since 2001, ANR's workers compensation data show a slight downward trend from about 45 to 40 reportable injuries per year.

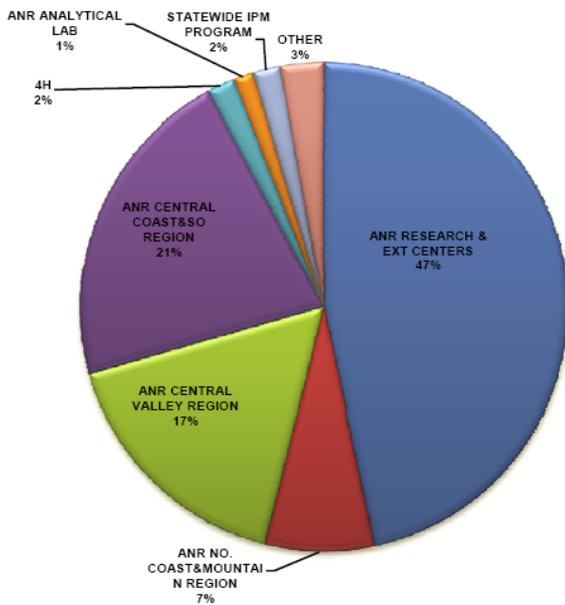
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Data indicate 47% of all reportable injury cases occur with REC employees and 45% occur with CE employees. Reportable injury percentages are revealing since about 18% of ANR employees work at RECs and 65% work at the CE offices. These data suggest the physical labor combined with the farming types of activities performed by employees at RECs results in greater risks for incurring reportable injuries. Accordingly, EH&S shall assist REC employees by initiating programs that supplement existing efforts to reduce the frequency and severity of reportable injuries at RECs.

EH&S Program Five-Year Review

A five-year program review was initiated during January 2008 and will continue throughout the calendar year. The five-year program review will assess whether and to what degree ANR EH&S needs are being met. Questionnaires will be circulated to ANR staff and volunteers to acquire information about the status of the EH&S Program. In addition, ANR staff will be interviewed about the effectiveness of the EH&S Program. Acquired information will be analyzed to identify areas of need and products to serve those needs. A five-year program review document will be compiled that summarizes the analyses and describes the program's future goals and associated benchmarks.

Injury Per Location



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Review of injury types indicates EH&S should focus attention on reducing strain and sprain injuries. This will include analyzing tasks that may present a risk of strain and sprain injuries, providing tools or work aids to prevent injuries, and providing additional training that emphasizes changing employee behaviors to lessen their exposures to sprain and strain injuries. Many of the Be Smart About Safety projects implemented by CE or REC offices included equipment to help with moving and lifting materials, which will help reduce these types of injuries.