Onsite Safety and Risk Reviews

Risk & Safety Services’ goal is to have an onsite review of all Research & Extension Centers (RECs) every year and to review Cooperative Extension (CE) offices every five years. This equates to nine RECs per year and 10 to 12 CE offices per year. In FY 2015/16, every REC was reviewed and 13 CE locations were reviewed. During this fiscal year, the cycle of visiting all CE locations was completed. The chart to the right presents the locations reviewed in FY 2015/16.

At the conclusion of each safety review at RECs or UCCE locations, a report is provided to the Safety Coordinator and Center or County Director, detailing the compliance findings (with photographs), citing applicable regulations or policies, and recommending corrective actions. The findings are also ranked for severity of hazard as “serious,” “moderate,” or “minor,” depending on the risk of injury. Serious items are those that are likely to cause serious injury or environmental release if not corrected; moderate findings are those that may cause injury or other regulatory violation; and minor issues are recommendations for best practices to improve safety. The REC or UCCE safety coordinator is requested to respond to Risk & Safety Services to confirm that the compliance issues have been corrected.

The five most frequent findings from safety reviews at the REC and CE locations in 2015/16 were:

- Electrical Safety – damaged electrical cords, overloaded circuits, unsafe wiring, unlabeled circuits.
- Fire Prevention/Safety – failure to conduct fire extinguisher inspections (monthly/annual), blocked/inaccessible fire extinguishers or equipment, other conditions that create a fire hazard.
- Material Storage – unsafe storage of materials, unsecured materials stored on top of shelves, etc.
- Safety Equipment – improperly maintained or inaccessible safety equipment, such as first aid kits, eyewashes, fumehoods, etc.
- Workplace Postings/Signage – incomplete or missing postings or signage required by code.
Based on past reviews and discussion with REC Directors, additional attention will be paid to the following compliance issues at RECs during 2016-17:

- **Use of forklifts**: including training, maintenance of equipment, and use of lift platforms.
- **Laboratory safety**: develop standard for basic laboratory requirements, review of chemical inventories, and training for personnel who work in labs.
- **Biosafety and biosecurity**: as part of a UC systemwide directive, a survey was conducted to verify that no RECs are working with select agents or toxins. However, the survey indicated other use of biological materials that may require additional authorizations or laboratory controls.
- **Animal care**: participation and leadership in animal care and use committees at four RECs and developing zoonotic disease exposure control plans.

### Regulatory Inspections

ANR facilities may be inspected by a variety of state or local agencies for compliance with safety or environmental regulations. Typically, there are about 5 to 10 such inspections per year at REC facilities. Inspections at county CE offices have been infrequent, but the regulatory requirements still apply. Agencies performing inspections at ANR facilities include local fire departments, County Environmental Health, County Ag Commissioners, Air Quality Management Districts, Regional Water Quality Control Boards, Integrated Waste Management Board, Department of Toxic Substances Control (DTSC), Cal/OSHA, and US Environmental Protection Agency.

This chart summarizes regulatory inspections at RECs by various state and local agencies. Risk & Safety Services has supported RECs to correct violations or other findings.
### Safety and Environmental Regulatory Inspections and Actions July 2015 to June 2016

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Agency</th>
<th>ANR Location</th>
<th>Issue</th>
<th>Violations or Deficiencies</th>
<th>Fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul-15</td>
<td>Fresno Dept. of Public Health</td>
<td>WSREC</td>
<td>CUPA Inspection: Spill Prevention Control Countermeasures Plan (SPCC), Hazardous Materials, Hazardous Waste</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Aug-15</td>
<td>UC Davis Fire Dept.</td>
<td>SFREC</td>
<td>Fire-Life Safety Inspection Signage on diesel and gasoline tanks, storage of oxygen &amp; acetylene in shop, hazardous materials storage in lab, dorm occupancy, fire alarms.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sep-15</td>
<td>Imperial County CUPA</td>
<td>DREC</td>
<td>CERS - online review of Haz Matl. Business Plan. At agency request, EH&amp;S provided Haz Waste Generator Number. Report Approved</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Oct-15</td>
<td>Yuba County Health Department, Drinking Water Division</td>
<td>SFREC</td>
<td>Yuba County Environmental Health Department Small Water System Inspection Report</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Nov-15</td>
<td>Siskiyou County Hazardous Materials Management Group</td>
<td>IREC</td>
<td>CUPA Annual Inspection. HMAP is current and no violations observed</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dec-15</td>
<td>Mendocino County CUPA</td>
<td>Hopland REC</td>
<td>CUPA Inspection: Spill Prevention Control Countermeasures Plan (SPCC), Hazardous Materials, Hazardous Waste. Completed minor updates to inventory and facility information.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Jan-16</td>
<td>Cal-OSHA</td>
<td>Desert REC</td>
<td>Pressure Vessel (Boiler) inspection. New permit issued.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Jan-16</td>
<td>Cal-OSHA</td>
<td>Desert REC</td>
<td>Pressure Vessel (Boiler) inspection. New permit issued.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Feb-16</td>
<td>Orange County Environmental Health Division</td>
<td>South Coast REC</td>
<td>CUPA Program - Agency Notified SCREC that they are Exempt and will no longer need to submit inventory</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Mar-16</td>
<td>State Water Resources Control Board Division of Drinking Water</td>
<td>Desert REC</td>
<td>Drinking water system. Inspection of enhanced treatment installation. Waiting for test results to confirm compliance with drinking water standards for TTHM. Compliant sample results in Dec. 2015, Mar., Jun. 2016.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Apr-16</td>
<td>State Water Resources Control Board Division of Drinking Water</td>
<td>Elkus Ranch</td>
<td>Sanitary Survey of drinking water system. Identified multiple areas of non-compliance, including flow metering, backwash procedures, turbidity records, chlorine injection, debris on tank. Report required correction with compliance deadlines of May 30, July 30, and Dec. 30. Elkus has been planning to install new drinking water system and had not addressed some of these maintenance issues. Corrections are being made and new system planned for installation by Dec. 30, 2016. Interim deadlines met.</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Grant Review

ANR Contracts and Grants office refers grant proposals to Risk & Safety Services for review based on the Principal Investigator’s responses to a 12-question compliance checklist within ANR’s online Grant Tracking System.

A total of 46 projects were reviewed for safety or environmental compliance issues, based on the GTS questionnaire.

The chart presents the types of projects or issues that were reviewed by Risk & Safety Services.

iJET Travel Registrations and Alerts

UC has contracted with iJET to provide travel security information and urgent response services. UC business travelers are encouraged to register their trips to out of state or foreign destinations, in order to receive travel insurance and trip security/safety information. In this fiscal year, a total of 35 travelers registered for 36 trips in 34 countries outside the United States. Including US travel, there were a total of 156 trips registered. A total of 335 alerts were sent by iJET to these travelers, including 171 “Informational,” 151 “Warning,” and 13 “Critical.”

In addition to the alerts, the travel registration data was used by Risk & Safety Services on multiple occasions to contact travelers who were visiting areas where serious incidents occurred to verify their safety.

This summary reports only the travel that has been registered with iJET. Reservations made through UC’s Connexxus travel portal are automatically loaded to iJET. Other travel must be registered directly by the traveler.

### iJET Alert Levels

- **Critical** alerts describe situations that will impact a traveler’s itinerary or business operations.
- **Warning** alerts describe situations that may impact a trip or business operations.
- **Informational** alerts create awareness of situations that do not require immediate action.
Website Visits and Page Views

Google Analytics provides measurements of “Users” and “Page Views.” Users is a measure of the number of distinct people accessing the website. Page Views is a measure of the pages that a user looked at on the website. The table summarizes the Users and Page Views over the past year. Compared to the prior year, website Page Views have decreased slightly by 4%.

<table>
<thead>
<tr>
<th>Date</th>
<th>Users</th>
<th>Page Views</th>
<th>Users</th>
<th>Page Views</th>
<th>Users</th>
<th>Page Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>July-Sept. 2015</td>
<td>1,847</td>
<td>10,786</td>
<td>615</td>
<td>3,101</td>
<td>2,462</td>
<td>13,887</td>
</tr>
<tr>
<td>Oct.-Dec. 2015</td>
<td>1,585</td>
<td>9,159</td>
<td>432</td>
<td>2,353</td>
<td>2,017</td>
<td>11,512</td>
</tr>
<tr>
<td>Jan.-Mar. 2016</td>
<td>1,862</td>
<td>13,022</td>
<td>623</td>
<td>2,918</td>
<td>2,485</td>
<td>15,940</td>
</tr>
<tr>
<td>April-June 2016</td>
<td>2,197</td>
<td>12,054</td>
<td>642</td>
<td>2,297</td>
<td>2,839</td>
<td>14,351</td>
</tr>
<tr>
<td>FY 2015-16</td>
<td>7,491</td>
<td>45,021</td>
<td>2,312</td>
<td>10,669</td>
<td>9,803</td>
<td>55,690</td>
</tr>
<tr>
<td>Avg. per month</td>
<td>624</td>
<td>3,752</td>
<td>193</td>
<td>889</td>
<td>817</td>
<td>4,641</td>
</tr>
</tbody>
</table>

Accident/Injury Investigations

Investigating worksite incidents— an accident, injury, illness, or close call— provides UC ANR the opportunity to identify hazards in operations or potential shortcomings in safety and health programs, as well as identify and implement the corrective actions necessary to prevent future incidents.

Incident investigations are often conducted by the supervisor, but to be most effective, these investigations also include EH&S, managers and employees working together, since each bring different knowledge, understanding and perspectives to the investigation. In conducting an incident investigation, EH&S staff look beyond the immediate causes of an incident. It is far too easy, and often misleading, to conclude that carelessness or failure to follow a procedure alone was the cause of an incident. To do so fails to discover the underlying or root causes of the incident, and therefore fails to identify the systemic changes and measures needed to prevent future incidents.

Incident investigations are conducted to meet a regulatory compliance need (8 CCR 3203) as well as to identify actions that can be implemented to prevent future injuries and reduce workers compensation costs. During 2015/2016, EH&S staff conducted and/or participated in the investigation of 41 reported employee injuries. Of that total, 33 injuries resulted in Workers Compensation claims, accounting for 71 lost work days and approximately $132,000 in expense. The number of Workers Comp cases was an 8% decrease from the previous year, while the expense fell by 40%.

The most frequent types of injuries were acute pain (32%), strains or sprains (27%), and abrasion (10%). The most common causes of injuries were struck by an object (32%), followed by slip/trip/falls (27%), material handling (17%) and repetitive motion (10%). Injuries occurred most frequently at UCCE locations (68%), followed by RECs (24%), and administrative offices (3%).

Ergonomics Program

Risk and Safety Services provides the following items to support ergonomic safety for the ANR workforce:

- Educational materials (safety notes and written guidance) available from EHS website.
- Online training and assessments through a system-wide vendor (Cardinus software).
- In-person assessments.
- Instructor-led training sessions for groups.
- Catalogs of recommended equipment.
Employees may request in-person assessments or submit questions regarding ergonomics through an online survey, through email request, or by calling an EHS specialist. Supervisors can request assessment, training, or EHS outreach on behalf of employees. Assessment of ergonomic hazards may also be requested by a medical provider or performed as follow-up action for a report of workplace injury or incident. While the majority of ergonomic hazard assessment and training is aimed at computer users, other areas of outreach may include animal handling, material handling (lifting and loading), or use of hand tool, vehicles, and personal protective equipment. Any of the EHS specialists may perform computer workstation evaluations or other ergonomic assessments according to availability and expertise.

During the 2015/16 fiscal year, approximately 118 employees received ergonomic program services in the form of online trainings and assessments, onsite assessments, phone/email consultations, and ergonomic coaching sessions.

The three columns in the table represent the number and type of documented EHS activities provided. Individual employees may have received any one or all three of the services during the year (online training, assessment and in-person follow-up). Generally, employees who completed the online training module also completed the assessment module at the same time and each employee accessed each service once per year.

Roughly 75% of employee clients received an in-person follow-up or on-site visit in response to their website survey request for assistance or completion of online assessment. About 1/3 received both online and in-person EHS services.

Recommendations by EHS to procure equipment or furniture to reduce the risk of ergonomic-related employee injuries. During FY15/16 the following actions were taken to facilitate equipment selection and procurement in Davis and at remote sites:

1. Catalogs of recommended ergonomic equipment were revised and posted on EHS website.
2. Guidance on proper use and application of sit-stand workstations was developed.
3. Purchased loaner equipment for trial use by employees (specialty keyboards, mouse, footrest and monitor risers).
4. Arranged for UC ANR employees to visit ergonomic equipment showrooms at some UC campuses.
5. Chair rental information was obtained from UC furniture program and will be passed on to employees/supervisors as an alternative to purchasing.
Respirator Fit Testing

Risk & Safety Services performs respirator fit testing and training for employees who are required to wear a respirator due to potential inhalation hazards in their work. The fit test is a quantitative test that verifies the employee has a proper fit and seal when wearing the respirator. Employees must be medically cleared (by UCD Occupational Health Services or a local occupational health clinic) in order to be tested. The ANR respiratory protection program served approximately 98 respirator users located throughout the state (13 UCCE county offices and 9 RECs) in FY 15-16. A core group of approximately 70 ongoing respirator users remained active in the program through FY 15-16. Nineteen ANR employees left the program and 28 new participants joined the program in 2016. Two individuals discontinued active respirator use based on results of medical evaluation (failure to obtain clearance based on questionnaire alone) and consultation with supervisor.

**Participant Turnover FY 15 -16**

<table>
<thead>
<tr>
<th>Status</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-going Participants</td>
<td>70</td>
</tr>
<tr>
<td>Inactive Status</td>
<td>19</td>
</tr>
<tr>
<td>New Participants</td>
<td>28</td>
</tr>
</tbody>
</table>

Significant progress was made in verifying and documenting the respiratory hazards faced by respirator users as well as other health stressors that may increase hazards of respirator use. The majority of ANR respirator use is for protection from pesticides, with some respirators in use for dust, paint/lacquer, and biohazards in animal care. Some respirator users report respirator use for more than one type of hazard. The types of respiratory exposure hazards are summarized in the graph.

In 2016, medical clearance was verified for 95% of respirator users. This is a significant improvement from the previous year when 30 employees (36% of respirator users) could not provide documentation of their previous medical clearance and the majority of users (61/84 or 73%) had not completed a medical evaluation within the past year. The majority of active respirator users (82/97 or 85%) received a medical evaluation and were cleared for respirator use in 2016. Individuals who were lacking documentation for their medical clearance were removed from the active roster. The employees and their supervisors were notified in writing that they are no longer authorized to use a respirator at ANR.

**Incident Reports and Insurance Claims**

During 2015/16, a total of 55 Incident Reports were received, however only 6 of those resulted in claims to the University’s insurance program. Those claims included: four property claims (three thefts and one damage to a building, for a total of $23,299), two auto liability or physical damage claims for a total of $2,365, and two general liability/bodily injury claims (which resulted in no payment). Of the remaining incident reports, 9 were for auto incidents involving leased, UCD Fleet, County, or personal vehicles, so the claim was managed by the owner/insurer for those vehicles. The other 38 reports included incidents that did not result in any loss or claim, or injuries to youth or adult volunteers participating in the 4-H or Master Gardener programs, which are covered by an accident/illness policy from The Hartford.
Certificates of Insurance

In 2015/16, Risk Services received 480 requests for Certificates of Insurance. Most of these requests required review and amendment of facility use agreements and/or other contracts. In a few cases, UC’s generic certificate of insurance was acceptable to the other party, but in most of these cases, the other party requested to be named as “additional insured,” so a customized certificate of insurance was prepared. In addition, there were a few instances where specialized certificates were required, i.e. insurance coverage for molestation, errors & omissions, and insurance in excess of UC’s self-insurance retentions.

Fingerprinting/Background Reviews

During 2015/16, ANR completed the transition of review of criminal record information for volunteers from UCCE County offices to centralized review by Risk & Safety Services. Additionally, new procedures were implemented with ANR Human Resources for background checks on new employees. When reports are received from the California Department of Justice (DOJ) concerning a volunteer’s criminal record, the information is compared to a “Barrier Offense List” to determine the appropriate action. Barrier Offenses include any felony, violent crimes, or crimes of abuse against children or animals. Volunteers who are arrested for Barrier Offenses must be suspended from participation in their volunteer program, pending the outcome of the arrest, while a conviction for a Barrier Offense results in termination of the volunteer. When notified of an arrest or conviction for crimes other than barrier offenses, the UCCE office is notified and the County Director, in consultation with Risk & Safety Services, determines the appropriate response, based on the nature of the crime and the volunteer’s role.

In FY 2015/16, Risk & Safety Services reviewed 2,725 criminal records reports for volunteers and 227 background/criminal records reports for employees. A total of 111 subsequent arrest notices (SAN) were received for volunteers or employees. The chart below summarizes the outcomes of these arrest notices.

Detailed annual summaries of the ergonomics program, respiratory protection program, injury investigations, and onsite program reviews have been prepared and are available on request.