URGE Safety Plan for IRIS/UNAVCO+ Pod

This is a safety plan developed by the IRIS/UNAVCO+ Pod including a code of conduct, training resources, and plans to address field work specific safety issues. Current policies, procedures, and resources are included for both organizations, and aspects to keep or improve for a future geophysical facility are highlighted.

Take away points:

- 2021 GAGE/SAGE Workshop in August will have courses in improving workplace climate (includes bystander intervention training) aimed at a student audience and a staff/faculty audience - all are welcome to sign-up!

Future Geophysical Facility

- **What we want to keep from each, what we want to improve, what we want to add…**

- Interpersonal situations - code-of-conduct, deescalation and bystander intervention training for all staff, comprehensive guidelines vs. more brief policy
- Support “opt-out” for employees who may not feel safe or always send in pairs, train supervisors in recognizing these situations and communications ahead of time
- Meeting location and Future Facility location considerations for staff safety
- Emphasize psychological and environmental safety
- Solid reporting policy (anonymous and otherwise) that encourages reporting minor as well as more significant incidents - work towards a “culture of reporting” and start with encouragement from supervisory roles
  - Tracking the addressing of these reports, and how visible these reports are
  - Centralized reporting to address repeating issues - higher up at societies, NSF?
  - Consequences and follow-up - behavior modification, punitive, etc.
UNAVCO

- Current code(s) of conduct, training resources, field work specific procedures (links or paste in relevant text):

UNAVCO’s code of conduct for events was last updated in May 2019 and is posted here: (for participants in workshops, short courses, etc.)
https://www.unavco.org/community/policies_forms/code-of-conduct/code-of-conduct.html

- Unacceptable Behavior
  - Harassment, intimidation, or discrimination in any form will not be tolerated.
  - Sexist, racist, homophobic, transphobic, or exclusionary jokes are not appropriate.
  - Physical or verbal abuse of any participant or guest will not be tolerated.
  - Other examples of unacceptable behavior include, but are not limited to, verbal comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin, inappropriate use of nudity and/or sexual images in public spaces or in presentations, or threatening or stalking any participant or guest.

From the UNAVCO Employee Handbook 2019

2.0 POLICIES PROHIBITING DISCRIMINATION AND HARASSMENT

2.1 Equal Employment Opportunity

UNAVCO is dedicated to the principles of equal employment opportunity in any term, condition, or privilege of employment. UNAVCO is an equal opportunity employer. UNAVCO prohibits discrimination on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, genetic information or any other legally protected class under state or federal law.

Consistent with this commitment, UNAVCO expressly prohibits any form of unlawful employee harassment, specifically including harassment that is based on legally protected status.

UNAVCO prohibits retaliation against any employee for filing a complaint under this policy or for assisting in a complaint investigation. If an employee believes there has been a violation of UNAVCO’s Equal Employment Opportunity policy, the Complaint Procedure in this section should be followed. If UNAVCO determines that an employee’s behavior is in violation of this policy, disciplinary action will be taken, up to and including termination of employment.

This policy applies to all employees including directors, managers, supervisors, employees, and non-employees such as customers, clients, vendors, consultants, etc.

[Revised December 2014]

2.2 ADA and Religious Accommodation

The Company will make reasonable accommodation for qualified individuals with known disabilities unless doing so would result in an undue hardship to the Company or cause a direct threat to health or safety. Likewise, employees whose work requirements interfere with a religious belief will receive reasonable accommodation(s) unless doing so would result in an undue hardship to the Company or cause a direct threat to health or safety.

Employees needing accommodation are instructed to contact Human Resources.

2.3 Prohibited EEO Harassment

UNAVCO is committed to providing a work environment that is free from unlawful discrimination and harassment and employees are responsible for respecting the rights of their co-workers. UNAVCO prohibits
unlawful harassment because of age 40 and over, race, sex, color, religion, national origin, disability, military status, genetic information, or any other status protected by applicable state or local law. Examples of unlawful harassment may include but are not limited to verbal or physical conduct that has the purpose or effect of substantially interfering with an individual’s work performance or creating an intimidating, hostile, or offensive work environment. Additionally, actions based on an individual’s age 40 and over, race, sex, color, religion, national origin, disability, military status, genetic information, or any other applicable status protected by state or local law will not be tolerated. Prohibited behavior may include but is not limited to the following:

- Written form such as cartoons, e-mails, posters, drawings, or photographs.
- Verbal conduct such as epithets, derogatory comments, slurs, or jokes.
- Physical conduct such as assault, or blocking an individual’s movements.

UNAVCO prohibits sexual harassment and inappropriate sexual behavior in the workplace or while engaged in UNAVCO business. Sexual harassment is a form of discrimination that involves unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature, when:

- Submission to such conduct is made explicitly or implicitly a term or condition of employment.
- Submission to or rejection of such conduct is used as the basis for decisions affecting an individual’s employment.
- Such conduct has the purpose or effect of substantially interfering with an individual’s work performance or creating an intimidating, hostile, or offensive work environment.

Some examples of prohibited conduct include:

- Promising, directly or indirectly, to reward an employee if the employee complies with a sexually oriented request;
- Threatening, directly or indirectly, to retaliate against an employee if the employee refuses to comply with a sexually-oriented request;
- Engaging in sexually suggestive physical contact or touching another employee in a way that is unwelcome;
- Making obscene gestures or using foul language of an offensive and sexual nature;
- Displaying, storing, or transmitting pornographic or sexually oriented materials;
- Making offensive jokes or remarks of a sexual nature;
- Written form, such as cartoons, posters, calendars, notes, letters, email;
- Verbal form, such as comments, jokes, foul or obscene language of a sexual nature, gossiping, or questions about another’s sex life, or repeated unwanted requests for dates; or
- Physical gestures and other nonverbal behavior, such as unwelcome touching, grabbing, fondling, kissing, massaging, and brushing up against another’s body.

UNAVCO prohibits retaliation against any employee for filing a complaint under this policy or for assisting in a complaint investigation. If an employee believes there has been a violation of UNAVCO’s EEO Harassment policy, the Complaint Procedure in this section should be followed. If UNAVCO determines that an employee’s behavior is in violation of this policy, disciplinary action will be taken, up to and including termination of employment.

All employees are expected to conduct themselves in a professional and businesslike manner at all times. All employees are expressly prohibited from inappropriately harassing fellow employees, as well as non-employees such as science community members, customers, clients, vendors, consultants, etc.

[Revised December 2014]

2.4 Discrimination & Harassment Complaint Procedure

If an employee believes there has been a violation of the EEO policy or Harassment policy, including sexual harassment, the employee must make a timely complaint to enable the Company to investigate and correct any behavior that may be in violation of either policy.
Please report the incident to a Human Resources representative or the President, either of whom, will initiate an investigation into the matter and will take appropriate corrective action if indicated. If an employee feels he or she cannot go to either of these individuals with his or her complaint, he or she should report the incident to the Chair of the Board of Directors. Complaints will be kept confidential to the extent practicable and will be investigated. If UNAVCO determines that an employee’s behavior is in violation of the EEO policy or the Harassment policy, appropriate disciplinary action will be taken, up to and including termination of employment. UNAVCO prohibits retaliation against any employee for filing a complaint under this policy or for assisting in a complaint investigation. If retaliation for making a complaint or for participating in an investigation is perceived, please follow the Complaint procedure outlined above. The situation will be promptly investigated.

[Revised December 2014]

2.5 Nepotism

UNAVCO does not allow favoritism or the appearance of favoritism that may arise from the employment of related individuals. Therefore, relatives of UNAVCO employees shall

- Not be employed in positions in any supervisor-subordinate relationship, defined as including all levels of the supervisory line, from the employee to the President;
- Where they would audit, verify, receive, or be entrusted with money handled by relatives;
- Or they would have access to confidential information including payroll and personnel records.

For the purposes of this policy, the following are considered relatives: the employee’s spouse or domestic partner; the employee’s or the spouse’s natural and adopted children, grandchildren, and great-grandchildren; parents, grandparents, and great-grandparents; brothers, sisters, half-brothers, and half-sisters; aunts, uncles, nieces, nephews, first cousins, second cousins; and persons married to them. A violation occurs by knowingly recommending such a hire, accepting such a position, or by either relative withholding information concerning the relationship. When nepotism results from changes in employment status or marriage, or when family relationships between employees are newly discovered, the supervisor is responsible for reporting the relationship to a Human Resources representative. If it is determined that a nepotism violation exists, a remedy may include a transfer or change in the reporting relationship. Where no reasonable remedy is available the President may determine that it is necessary to terminate the employment relationship with one or both of the employees.

[Revised December 2014]

2.6 Employee Relations – Open Communication

The open discussion of ideas, suggestions and concerns is important to the success of UNAVCO and its employees. Employees are encouraged to bring forward recommendations, questions, problems, or any other relevant issues or concerns. The procedure to do so, is as follows:

1. Discuss the situation with your supervisor as soon as practicable (e.g., within three to five days).
2. If a resolution is not reached with your supervisor or if it is inappropriate to go to your supervisor, discuss the situation with your supervisors’ supervisor.
3. If the situation is not resolved, communicate the problem directly to the Human Resource Department and/or a member of senior management.
4. Should further resolution be required, the President makes the final determination.

2.7 Whistleblower Protection

Employees are protected from retaliation for disclosing information which the employee reasonably believes is evidence of:

- A violation of law, rule or regulation,
- Gross mismanagement,
- Gross waste of funds,
- An abuse of authority, or
The UNAVCO safety committee recently released an updated Safety and Health Policy and all employees have been asked to sign an acknowledgement of this policy. The full text is posted on an internal site. The policy does not specifically address issues that can arise in the field regarding race and other identities. Relevant parts of the text include:

- **WORKSITE ANALYSIS**

  UNAVCO management and employees work together to analyze safety and health hazards inherent in each job site and to find means to eliminate those hazards whenever possible, and, otherwise, to protect persons against those hazards.

  Safety takes priority over any work. Employees must stop work if a hazard arises that may cause damage to health, life, property, real property, or any other interest of value and report the hazard to a Project Manager, the facility manager, supervisor, or the Safety Coordinator as soon as reasonably possible. A UNAVCO site analysis, with input from employees, shall identify and correct hazards in work areas. The Safety Coordinator shall review each permanent worksite for potential workplace hazards and procedures on an annual basis.

- **TRAINING**

  At UNAVCO, training is a high priority to promote a safe and healthy workplace. It is HR’s responsibility to ensure employees receive sufficient training opportunities to understand what their safety and health responsibilities are and how to fulfill them.

  It is the responsibility of both the UNAVCO employee and supervisor to identify training needs for particular situations and to request that UNAVCO provide appropriate training, tools, and equipment. UNAVCO management is responsible for ensuring that all training offered is conducted by qualified persons.

  UNAVCO employees are required to attend safety trainings based on assigned work environment and type of work being conducted.

This past November, UNAVCO sponsored a de-escalation training for field engineers and managers. Field engineers can also get approval to take self defense classes, funded by UNAVCO.

UNAVCO utilizes a Professional Employer Organization, TriNet, for some HR services. TriNet functions as a co-employer to UNAVCO employees and has its own set of policies.
IRIS

- Current code(s) of conduct, training resources, field work specific procedures (links or paste in relevant text):

IRIS’s code of conduct was last updated in March 2021 and is posted here: https://www.iris.edu/hq/about_iris/code_of_conduct

The IRIS Employee Handbook (November 2018, 106 p.) covers some aspects of health and safety including Workplace Conduct and Whistleblower Policy, however the health and safety text is quite brief:

“The health and safety of employees and others on Company property are of critical concern to IRIS. The Company intends to comply with all health and safety laws applicable to our business. To this end, we must rely upon employees to ensure that work areas are kept safe and free of hazardous conditions. Employees are required to be conscientious about workplace safety, including proper operating methods, and recognize dangerous conditions or hazards. Any unsafe conditions or potential hazards should be reported to management immediately, even if the problem appears to be corrected. Any suspicion of a concealed danger present on the Company’s premises, or in a product, facility, piece of equipment, process or business practice for which the Company is responsible should be brought to the attention of management immediately.

Periodically, the Company may issue rules and guidelines governing workplace safety and health. The Company may also issue rules and guidelines regarding the handling and disposal of hazardous substances and waste. All employees should familiarize themselves with these rules and guidelines, as strict compliance will be expected.

Any workplace injury, accident, or illness must be reported to the employee’s supervisor as soon as possible, regardless of the severity of the injury or accident.”

IRIS has separate Health and Safety Policies that are relevant to this deliverable including the IRIS PASSCAL subaward, guidance to PASSCAL PIs, and the Alaska Transportable Array Anchorage Operations Center.

PASSCAL Portable Experiments
PASSCAL and IRIS are not in the position of writing and providing a safety plan to Principal Investigators of portable experiments since doing so could open us up to
liability. In nearly all portable experiments that we support, IRIS is not leading the deployment and is not therefore in charge of all aspects—including safety measures. The outline provided here is intended to serve as guidance that PIs can use in crafting their own safety plans:

Outline for Developing an Experiment Code of Conduct and Safety Plan for Portable Experiments: (appendix)

**IRIS Community Wavefield Demonstration Experiment**

In 2016, IRIS led the Community Wavefield Demonstration Experiment in Oklahoma which involved a significant effort to prepare participants for field work ahead of time and keep everyone safe throughout the experiment. The Wavefield Participant Handbook (v. 1.1, June 2016, 9 p.) was developed and distributed to participants. This handbook includes:

- Project Contact Information
- Code of Conduct
- Policies on:
  - Safety
  - Alcohol and Illegal Drug Use
  - Anti-Harassment (complaint procedure, confidentiality, investigative procedure, duties of participants)
  - Private and Public Lands
  - Travel

The Wavefield Participant Handbook is not currently made public due to confidentiality, however sections are available upon request.

**EarthScope Alaska Transportable Array**

The EarthScope Alaska Transportable Array project undertaken from 2013 to 2021 required additional considerations due to the extreme remoteness of the work across Alaska and western Canada. A comprehensive Alaska Transportable Array Health and Safety Plan (v. 5.0, April 2021, 121 p.) was developed and has been updated, including most recently to address issues related to the COVID-19 pandemic. This plan includes:

- Record Keeping and Reporting Requirements
- Health and Safety Audit Program
- Hazard Communication Program
- Accident and Illness Investigation Program
- Hearing Conservation Program
- Personal Protective Equipment Program
- Safety Equipment Program
- Vehicle Safety Program
- Drilling Rig Safety Program
- Charter Aircraft Safety Program (Helicopter, Fixed-Wing)
- Watercraft Safety Program
- Drinking Water Safety Program
- Animal and Firearm Safety Program
- Blood-Borne Pathogens Exposure Control Program
- Health and Safety Qualification for Subcontractors
- Emergency Action/Fire Protections Program
- Hazard-Specific Responses including Scenarios of Damaging Earthquake, Weather Closures, Active Shooter, Terrorism, and Utilities Failure (Natural Gas, Electrical, Information Technology Disruption)

The Alaska Transportable Array Health and Safety Plan is not currently made public due to confidentiality, however sections are available upon request.
Outline for Developing an Experiment Code of Conduct and Safety Plan for Portable Experiments

1. Introduction and Experiment Description
   • What is the purpose of the experiment and the goals of the field effort?
   • What are the roles of the participants in the successful completion of this experiment?
   • Who are the stakeholders?

2. General Code of Conduct
   Define the models of conduct of participants in this experiment. For some this may be a new experience and there will be a lot happening once they get in the field.

   a. Roles and responsibilities of every participant
      i. Expectations for conduct and behavior during experiment
         (See attached example from IRIS Community Wavefield Experiment)
      ii. Technical and physical requirements
      iii. Contact information (emergency contact information for Participants
      iv. Immunizations (location specific)
      v. Personal medications/personal medical supplies
         1. Appropriate for duration with some margin
         2. Make sure you understand import/export limitations on meds
      vi. Suggestions/Packing lists for participants (what to bring, what will be provided)
      vii. Insurance
         1. Evacuation/Rescue insurance
         2. University policies/requirements
         3. Local requirements
         4. May require a safety/ESH plan
      viii. Personal safety/awareness
         1. Make sure entire team is aware of the risks and hazards
         2. Safety is everyone’s responsibility, not just the team leader
      ix. Buddy systems

   b. Roles and responsibilities of Team leaders and PI
      i. Experiment Leadership
      ii. Safety
      iii. Logistics
      iv. Team work assignments
      v. Public interactions
      vi. POC for local authorities
vii. Permitting
   1. Site locations
   2. Active source
   3. Land access (surface and subsurface may be different groups)
      a. private /govt lands

viii. Implementation of evacuation plans, as necessary

c. Policies and procedures
   i. Alcohol/Drug policies
   ii. Anti-harassment policies
   iii. Safety plans (see below)
   iv. Travel policies – evacuation strategies
   v. Expense reimbursement and other administrative requirements
   vi. Experiment specific Policies and Procedures not otherwise covered here.
      1. specific university policies that may need to be followed

3. Communications Protocols

a. Collection and dissemination of contact information
   i. PI/Expedition Leader contact
   ii. Communications “hub” / Communications Coordinator
      1. This may be the Expedition leader or a designated participant who can monitor all team communications and relay messages as necessary
      2. Comm Coordinator must be in a position to access all communications infrastructure
   iii. team leader contacts (as appropriate)
   iv. Local host contacts
   v. Property owners/managers
   vi. Emergency Medical Services (EMS) contacts
   vii. Other pertinent authorities
      1. Embassy - as necessary
      2. Local and state police
   viii. Consider a laminated emergency contact card
      1. Identify prioritized contact numbers for various scenarios
         a. Medical emergencies/Injuries
         b. Accidents
         c. Wildlife encounters
         d. Regular check-in
      2. Distribute to all team members

(See attached example for Alaska)
b. **Communications Infrastructure**
   
i. **Cell phone (coverage map)**
   
   1. Some cell services can be site specific and vendor dependent
   
   ii. **Satellite phones**
   
   iii. **InReach (message capable GPS)**
   
   iv. **Radio Communications VHF/HF/other**
   
   1. Need to be aware of preassigned channels
   
   a. Local communications
   
   b. Emergencies
   
   c. Helo Ops, etc
   
   c. **Regular Field Communications procedures**
   
i. **Departure from and return to Operations Base**
   
   1. Make sure everyone is accounted for and comms equipment is functional
   
   2. Notify Project Lead/Communications Coordinator with each team is “in the field”
   
   3. Clear communications and reconcile headcount upon return from the field.
   
   ii. **Regular update (non-emergency)**
   
   1. While in the field, consider establishing a regular check-in time for each team
   
   2. Describe what basic information is needed (for example)
   
   a. Headcount and personnel status
   
   b. Project status (issues/requirements)
   
   c. Changes in plans
   
   d. Potential comms blackout periods
   
   e. Agreement on next check-in time
   
   d. **Emergency communications plans and contingencies**
   
i. **Who do you call under what circumstances?**
   
   1. Medical emergencies/Injuries
   
   2. Evacuations
   
   3. Accidents
   
   4. Wildlife encounters
   
   5. Fires
   
   ii. **Information to collect and pass to EMS/Communications Coordinator**
   
   1. Name and contact information of reporting group
   
   2. Nature of the emergency
   
   3. Location
   
   4. Number of individuals impacted
   
   5. Description of event and injuries
6. What is being done at this time (ie rendering first aid)
   iii. Calling tree
       1. Access prioritized calling list for the particular emergency situation
       2. If direct communications to calling list is not available, pass this
          information along to the communications coordinator
   iv. Muster plan
       1. When things go wrong and/or communications are out, what do
          you do
       2. Pre-establish a location(s) for field teams to gather that does allow
          communication
       3. How is the muster call initiated?
          a. Loss of communication with comms coordinator
          b. Lack of communication with team after some
             predetermined time.
       4. May require several muster points (known and accessible)
       5. Develop a response for no-shows

4. Experiment Parameters
   a. Define Experiment plan
      i. Experiment Hub/Instrument Center
      ii. Remote Station Locations
          1. Equipment
          2. Transportation – PAX/Equipment
          3. Civil works required
      iii. Public/Private land distribution
          1. Implications for either
   b. Identify deployment timelines
   c. Identify deployment strategies
      i. Team size
      ii. Team member roles

5. Identification of Safety concerns and mitigation strategies -
   SITUATIONAL AWARENESS
   a. Potential Safety Concerns
      i. Environmental (weather, terrain, etc)
         1. Threats
            a. Thermal (extreme heat/cold)
            b. Weather risks (storms, winds)
            c. Flash floods, etc
d. Mountains, glaciers, deserts, etc

ii. Biological
   1. Flora (stinging, poisonous, other hazards)
      a. Threats and mitigation strategies
   2. Fauna
      a. small (bugs, snakes, spiders)
         i. Threats and mitigation strategies
      b. large (lions, tigers, bears – oh my)
         i. Threats and scenarios
         ii. Mitigation strategies
         iii. Education and specialized training
         iv. Specialized equipment (firearms, deterrents, alarms, etc)
      v. Roles and responsibilities/ specialized personnel (guard)
      vi. A whole new realm of incident reporting
      vii. Defense of life and property requirements
   3. Water conditions – drinking water sources/purifiers
   4. Food sources
   5. Seasonality - some threats are dependent on time of year

iii. Human
   1. Political unrest
   2. Indigenous people – cultural sensitivities and/or property protection
   3. Government interactions/Embassy notification

iv. Transportation modes
   1. Vehicles
   2. Training/safety briefings required
   3. PPE/Equipment requirements (helmets, specialized comms, clothing, ditch bags, etc)
   4. Equipment maintenance

v. Other potential hazards
   1. Hazardous materials - DOT/IATA training
      a. Batteries
      b. Instruments - nodes
      c. Fuels
      d. Other HazMat
      e. Consider subcontracting shipping specialist
      f. Import and export concerns
      g. Transportation mode specific
   2. Working conditions specific to experiment
      a. Towers - working at height (ladders, building tops, edge of great chasms -
b. Volcanoes

c. Transportation
   i. Boats
   ii. Snow machine, atv,
   iii. cars/trucks -
   iv. light aircraft  training and ditch protocols

d. Trenching/digging

e. Active Sources (explosives – other energized systems)

f. Caves/confined spaces

b. Mitigation Strategies
   i. Planning for medical emergencies
      1. Is there a safety/medical person for the team(s)
      2. How remote is this work?
         a. Deep field - wilderness first responder/EMTB
         b. Close to civilization - basic first aid
         i. Response time of local EMS
            1. “Wilderness” is >1 hr from advanced
definitive care - depends on skill level of
your team
            2. Consider your situation and how you might
respond to injuries
            3. PI will need to check with local authorities
and EMS to establish communication
protocols for the experiments sites and time
of deployment (could be seasonal or
situational changes
         ii. Communication infrastructure in place
   c. Awareness training for all - specific to site concerns
   d. Timely site conditions - is this an aftershock experiment -
are there temporary changes to EMS responses or
limitations.

ii. General equipment and training requirements / Team certifications
   1. PPE requirements/recommendations
      a. Appropriate clothing - fundamental
      b. Gloves, glasses, boots, headgear - hearing protection
      c. Other appropriate gear - condition/experiment specific
      d. Allotment for participants

   2. Training
      a. Wilderness first aid/first responder
      b. HUET (Helicopter training)
      c. Firearms/deterrents - Bear safety
      d. Snow school
e. BLS (Basic Life Support - CPR) certifications
f. Team Training exercises (applying skills in groups)

3. First aid kits (personal and group/trauma)
4. Ditch bags - survival bags

iii. Any other safety concerns pertinent to this experiment

iv. Professional assistance
   1. Local guides - mountaineers
   2. Hired guards - Bear protection

v. How to find out about hazards
   1. TALK TO THE LOCALS!
   2. University resources
   3. Travel protection plans
   4. Online resources for local hazards,
   5. University/project/program Health & Safety officer
   6. https://travelmaps.state.gov/TSGMap/

6. Incident reporting
   a. Communication Plan for incidents
      i. local responsible party
      ii. EMS notification
      iii. Other authorities
         1. Embassy
         2. Coast Guard
         3. Fish and game
         4. State troopers
         5. Rescue Coordination Centers for various locations
   6.

   iv. PI notification
   v. Wildlife related incidents

b. Evacuation plan to Advanced Medical Care
c. Evacuation plan to US (as appropriate)
d. Documentation required for each incident
   i. Incident description
   ii. Police/EMS report (as appropriate)
   iii. Actions taken
   iv. Follow up

   e. Funding agency/University requirements for incident reporting

7. Information Distribution and Participant sign-off
   a. How do you intend to share this information?
b. Team books/pre-experiment training materials

c. Update - as necessary on regular meetings throughout the experiment

d. Ensure all team members understand and accept the risks

e. Consider sign-off/approval documents for every participant

(See attached examples)

   i. Release of liability for hosts
   ii. Acceptance and agreement to Code of Conduct
   iii. Photo/Video Consent and Release form
Appendix 1 - EMPLOYEE EMERGENCY CONTACT FORM

Name ________________________________________________________________

Department
_____________________________ PI _________________________________

Personal Contact Info:

Home Address ______________________________________________________

City, State, ZIP ______________________________________________________

Home Telephone # _____________________ Cell # _________________________

Emergency Contact Info:

(1) Name __________________________ Relationship _______________________

Address _____________________________________________________________

City, State, ZIP ______________________________________________________

Home Telephone # _____________________ Cell # _________________________

Work Telephone # __________________________ Employer __________________

(2) Name __________________________ Relationship _______________________

Address _____________________________________________________________

City, State, ZIP ______________________________________________________

Home Telephone # _____________________ Cell # _________________________

Work Telephone # __________________________ Employer __________________

Medical Contact Info:

Doctor Name. ___________________________ Phone # ______________________

Dentist Name ___________________________ Phone # ______________________

I have voluntarily provided the above contact information and authorize _____________ and
its representatives to contact any of the above on my behalf in the event of an emergency.

Employee Signature __________________________ Date ________________________
Appendix 2 - Daily Safety Tailgate Form
TAILGATE SAFETY MEETING FORM

Instructions
To be completed by supervisor prior to beginning of new job, when changes in work procedures occur, or when additional hazards are present. Reference related Job Hazard Analysis, Health & Safety Code Handbook direction, and ensure this form is maintained for the record.

LOCATION OF
PROJECT & WORK ACTIVITY: OSHA REGS REFERENCED:

TOPICS/HAZARDS DISCUSSED:


INFORMAL TRAINING CONDUCTED (Name, topics):


NAMES OF EMPLOYEES:
| Field Lead/PI Signature/Date: | ________________________________ |
| Field Lead/PI Printed Name: | ________________________________ |
## Appendix 3 - Ditch Bag Suggestions

<table>
<thead>
<tr>
<th>Ditch Bag Suggestions</th>
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<tbody>
<tr>
<td>For Initial Stabilization</td>
</tr>
<tr>
<td>• Heavy-duty dry bag, with strong lanyard, carabiner</td>
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<tr>
<td>• Flashlights/headlamp/chemical light sticks</td>
</tr>
<tr>
<td>• First-aid kit</td>
</tr>
<tr>
<td>• Mylar emergency blanket</td>
</tr>
<tr>
<td>• Chemical heat packs</td>
</tr>
<tr>
<td>For Rescue</td>
</tr>
<tr>
<td>• inReach (registered)</td>
</tr>
<tr>
<td>• GPS (waterproof)</td>
</tr>
<tr>
<td>• VHF (waterproof), with additional battery</td>
</tr>
<tr>
<td>• Flares, smoke flares, dye markers, reflectors</td>
</tr>
<tr>
<td>• Distress flag</td>
</tr>
<tr>
<td>• Signaling mirror</td>
</tr>
<tr>
<td>• Signaling laser</td>
</tr>
<tr>
<td>• Whistles/horn</td>
</tr>
<tr>
<td>• Reflective tape and flagpole</td>
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<tr>
<td>For Survival</td>
</tr>
<tr>
<td>• Survival manual</td>
</tr>
<tr>
<td>• Emergency shelter</td>
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<tr>
<td>• Emergency sleeping bag</td>
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<tr>
<td>• Rain tarps</td>
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<tr>
<td>• Lighter/fuel stick</td>
</tr>
<tr>
<td>Water purification, funnel, hose, containers</td>
</tr>
<tr>
<td>Resealable bags</td>
</tr>
<tr>
<td>Food supply (3 days emergency food supply)</td>
</tr>
<tr>
<td>Medical kit (including your prescription medications)</td>
</tr>
<tr>
<td>Fishing kit</td>
</tr>
<tr>
<td>Repair kit (duct tape, wire, rope, string)</td>
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<tr>
<td>Spare batteries</td>
</tr>
<tr>
<td>Knives/multitool/sharpening stone/hand saw</td>
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<tr>
<td>Hats, gloves, sunglasses, sunscreen, shirts</td>
</tr>
<tr>
<td>Sewing kit</td>
</tr>
<tr>
<td>Camping towel</td>
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<tr>
<td>Clothespins</td>
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<tr>
<td>Spare socks</td>
</tr>
<tr>
<td>AM/FM radio or small shortwave-radio receiver</td>
</tr>
</tbody>
</table>

| For Navigation |
| Maps |
| Compass |
| Watch |
| Paper and pencils |