

Standard Operating Procedure (SOP) #3

Safety Protocol

Version 2.0 (October 4, 2022)

Change History

New Version #	Revision Date	Author	Changes Made	Reason for Change	Previous Version #
1.01	7/17/2019	Kim Weisenborn	Minor updates to content.	To update outdated external links.	1.0
2.0	10/4/2022	Kathryn Akamine	Major reduction in text.	To reduce repetition in safety documents. To keep information concise and added links to safety documents.	1.01

Only changes in this specific SOP will be logged here. Version numbers increase incrementally by hundredths (e.g., version 1.01, version 1.02) for minor changes. Major revisions should be designated with the next whole number (e.g., version 2.0, 3.0, 4.0). Record the previous version number, date of revision, author of the revision, changes made, and reason for the change along with the new version number.

Purpose

This SOP explains safety documents and procedures that all field crew members should follow when working in the field to ensure optimum safety.

Field Personnel Rules and Regulations

1. Only staff and approved field crew are allowed to assist with field work. Friends, pets and children are prohibited from accompanying field teams. Employees of state and federal agencies on official business connected with the project may accompany people working in the field. The Project Lead should always be consulted if there are uncertainties regarding someone's eligibility to accompany the field crew.
2. Field work will be planned ahead of departure and discussed with a supervisor. On a daily basis, Park personnel will be notified of the itinerary and destination (including plot location where appropriate) of the field crew and the estimated return time. A contact person should be chosen at the Park who will be responsible for notifying a Safety Officer if a field person is injured.
3. Field crew members should not work alone and should never traverse difficult terrain without another crew member. If travel by vehicle alone during working hours is needed, the crew

member will notify a Park contact person or supervisor. Whatever the case, the individual must ensure that someone knows of their location and expected return time. A radio, cellular phone, and/or a satellite texter is required when working off the road or in a remote area.

4. When working in the sun, members of the field crew should wear a hat and a pair of sunglasses to protect themselves from harmful ultraviolet rays. Sunscreen should be applied to exposed skin.
5. Be aware of weather forecasts and changes in the weather and be prepared to alter field work and clothing accordingly.
6. Lift heavy objects properly to avoid hurting your back. Ask for help when lifting heavy objects.
7. In areas concerning safety of field personnel, every crew member should speak up if they have concerns and may refuse to engage in what they believe is an unsafe operation.
8. It is the employee's responsibility to notify the supervisor regarding any health problems that might put the employee at additional risk of injury in the field. Such problems include fever, aches, fatigue, colds or other ill health, as well as allergies and other long-term and chronic health concerns.
9. Any injury incurred on the job will be reported to the supervisor IMMEDIATELY. Failure to report injury may result in the denial of workers compensation claims and/or disciplinary action.
10. Vehicles must be operated safely and consistent with Standard Operating Procedures for Vehicles for the agency whose vehicle is being utilized. A supervisor should be asked for a briefing on the procedures before any field crew members operate the vehicle for the first time.
11. Know the Emergency Action Plan.

Emergency Action Plan

1. The contact person is responsible for making sure that an emergency alert and/or process is initiated if field personnel do not return when scheduled or no radio or cell phone contact is received from the field at the expected call-in time.
2. Thirty minutes after call-in time, an alert is issued. The contact person or another person should stay near the phone in case field personnel call.
3. One hour from call-in time, search procedures should begin. Note: Prior to going into the field, the Field Crew Lead and Park contact person should agree on a time when search procedures should begin, as it may be more appropriate to set an alternate time to begin search procedures.

4. One person should remain near the phone, and one person familiar with the field area should begin tracking the scheduled route.
5. Tracking person should have a radio and/or cell phone and call back to the office every 20 minutes to see if field personnel have made contact.
6. Tracking continues until the person is found or word is received that the field personnel are safe.

Emergency Response Plan

If an emergency arises and a call must be placed to 911, be sure to give the following information: name, location of emergency, type of emergency and type of help required. Notify any supervisory personnel and provide them with the same information. Notify the local park manager for the relevant national park.

Safety Clothing and Equipment

1. Field personnel shall wear sturdy boots that provide ankle support and traction. Sturdy sneakers may be allowed if terrain is not very rugged. Bare feet, other shoes, and slippers are not allowed.
2. Rain gear and outerwear (i.e., sweater or jacket) shall be carried in the field at all times in wet forests or other locations. Rain gear includes rain pants and rain jacket. The combination of clothing must be adequate to keep the worker warm and reasonably dry until returning from the field or reaching field shelters, or for surviving an unplanned overnight stay in the field.
3. Each field person shall carry water with them in suitable containers. Sufficient water shall be carried for unplanned, extended emergency stays overnight in the field.
4. Each field person shall carry a First Aid Kit while in the field. Additionally, each vehicle should carry a fully stocked first aid kit.
5. There shall be at least one individual per field crew with current Standard First Aid and CPR certificates.
6. Each person working in the field should a flashlight or headlamp in their pack.

Communication

Each crew member should read the current Communication Plan and this document should be saved on phone(s) and tablet(s) for reference. Additionally, the “Chain of Command” is updated every season with a list of personnel, cell phone numbers, field phone numbers, and radio call numbers this document should be reviewed to be sure information is correct and save on field phone(s) and

tablet(s) for reference. Both documents can be in the “[PACN Safety files](#)” folder under the corresponding fiscal year in the PACN I&M SharePoint site¹.

Radio and cell phone reception may vary depending on location. Be aware if you will be working in or crossing through a known dead zone. If both radio and cell phone reception is poor or unknown, the crew should carry a satellite texter. See Communication Plan for communication and POC protocols. Review the corresponding Operational Review to see what communication problems occurred and what devices worked best.

Cell Phones

Depending on the Park/Site specific protocol, cell phones may be the preferred device for communication. Crew will have at least two field phones provided and should not need to take their personal phones into the field.

Portable Radios

Depending on the Park/Site specific protocol, portable radios may be the preferred device for communication. Crew will have at least two radios provided. Radios should be prepared by field leads prior to the start of the season and programmed for the specific Park/Site. Crew leads should give the field crew a training on how to use a portable radio prior to field work. Every crew member should be comfortable using a radio in the case scenario that they need to.

Important things to remember when using a portable radio:

- After keying the radio, wait a second before speaking into the radio. This prevents the start of the radio communication from being cut off.
- Be brief and concise when communicating with the radio. This keeps the airwaves clear and saves battery power.
- Speak clearly into the radio’s microphone and press the PTT button firmly while speaking.
- Think about what needs to be relayed before calling on the radio.
- If your transmission is longer than 30 seconds, you must take a “break”, which means you must say “break”, take a breath, listen for any other traffic and then resume your transmission to dispatch if there is no other traffic. The “break” allows for someone else to interrupt the transmission if there is an emergency.
- Securing the Radio Channel: During park emergencies or certain incidents, the dispatch office will “SECURE THE RADIO FREQUENCY.” When this happens, the only traffic on the radio should relate to the ongoing incident. If there is an emergency that happens during an ongoing incident, then use the radio for that. Otherwise, there should be no radio traffic until the original incident is done and then the dispatchers will “RELEASE

¹ PACN I&M SharePoint, <https://doimsp.sharepoint.com/sites/nps-PWR-PACNIM> (accessed 4 October 2022).

THE FREQUENCY TO NORMAL TRAFFIC.” If you have not been listening to the radio, you might not know there is a situation going on in the park. So, when turning on the radio, give a minute of time to listen for any ongoing radio traffic.

- Be careful about carrying your radio in your backpack or wearing it while using the seatbelt in a vehicle. The radio key could be activated by the pressure of your seat belt or something in your backpack that will not allow anyone else to use the radio. Additionally, everyone in the park with a radio on can hear what you might be talking about, or other noises related to what you are doing. Having the radio key activated will keep the system out of use for other traffic, including emergencies.

Satellite Texter

Depending on the Park/Site specific protocol, cell phones and portable radios may not be an option. Crew will have at least one satellite texter provided. Texter should be prepared by field leads prior to the start of the season and programed for the specific Park/Site and the current season’s personnel. Crew leads should give the field crew a training on how to use the satellite texter prior to field work. Every crew member should be comfortable using the satellite texter in the case scenario that they need to.

Safety Documents

Each year prior to the start of the field season, safety documents are created to address relevant safety issues specific to the Park(s) and Site(s) that the crew may encounter. These documents are review as a team by the entire field crew at the start of the season. Files are located in the “[PACN Safety files](#)” folder under the corresponding fiscal year and park in SharePoint.

Communication Plan

The Communication Plan reviews the following topics: Communication procedures prior to field work and on the day of field work, Emergency response Procedures, and Instructions for Point of Contact (POC).

Green Amber Red (GAR)

The GAR is a risk analysis tool that identifies elements to be assessed. Each element is described to better understand possible concerns, uncertainties, and risks. Once each element is understood, mitigations are put in place to best reduce risk. Each element is given an initial score and a final score after mitigation. This is an analysis that should be done at the start of each season and at the start of working in a specific Park/Site, as there may be different scores for different locations.

Job Hazard Analysis (JHA)

The JHA is an accident prevention tool that works by finding hazards and avoiding them or minimizing risk before the job is performed. This document addresses tasks that will be performed and hazards that may be encountered while performing tasks associated with field work. Potential injuries are identified, and abatement actions are offered to reduce risk associated with tasks and

hazards.

Literature Cited

Pacific Cooperative Studies Unit (PCSU) Hawai'i. 2005. Standard operating procedures for field operations, 2005-2006. 10pp.