

SEAN environmental contaminants SOP 1: Operational safety for environmental contaminants field-based operations

Version 1.0

Revision History Log:

Previous Version #	Revision Date	Author	Changes Made	New Version #
-	8/1/2018	C. Sergeant	Initial version	1.0

Overview

Along with general safety guidelines, this SOP describes the available safety and training documentation for conducting safe and successful field operations for all aspects of environmental contaminants monitoring.

Every NPS employee has the right to a safe workplace and the right to refuse unsafe work. A primary goal of the Southeast Alaska Network (SEAN) is to ensure the safety of its staff and partners while conducting inventory and monitoring activities in parks. All activities adhere to the principles of Operational Leadership, wherein participants feel empowered to speak freely about safety concerns and courses of action. An internal website for NPS Operational Leadership is available here: <http://inside.nps.gov/waso/waso.cfm?prg=892&lv=3>. Encountering hazardous situations is inherent in all outdoor activities, and supervisors need to be aware and committed to ensuring that all monitoring staff receive adequate training on National Park Service (NPS) safety procedures, incident reporting, field communications, and emergency response prior to field work. Within the entire scope of environmental contaminants monitoring, there are five general safety categories that vary in importance based on the park and particular monitoring component (Table SOP 1.1).

Four different levels of training and safety related policies that need to be followed in order to conduct a safe and successful environmental contaminants monitoring program: 1) National/NPS level policy, 2) Network or Inventory and Monitoring (I&M) policy, 3) Regional policy, and 4) Park level policy.

For Alaska-based fieldwork, Alaska Region Communication Center (ARCC) staff are available to answer radio or satellite phone calls 24 hours per day, 7 days per week throughout the field season (Figure SOP 1.1). Float or backcountry plans are filed with either park-based dispatch or the ARCC prior to the field mission, which include established check-in times.



Figure SOP 1.1. 2017 quick reference safety card provided annually to NPS staff by the ARCC.

Table SOP 1.1. The four general safety categories related to conducting environmental contaminants monitoring. The principles of Operational Leadership apply across all work activities. The relevant safety documents for each combination of park and monitoring component are denoted by number codes (see table footer for definitions). No aviation needs are envisioned under this monitoring protocol.

Monitoring component	Park	Boating	Intertidal	Backcountry	In-river
Airborne	GLBA	1, 2	3	4	
	KLGO			6	
	SITK				
Freshwater	GLBA	1, 2	3	4	5
	KLGO				7
	SITK				8
Marine	GLBA	1, 2	3		
	KLGO				
	SITK				

¹ GLBA Boating Policy, ² GLBA R/V Fog Lark Safety Plan,

³ GLBA coast walking Job Hazard Analysis, ⁴ GLBA Backcountry Communications Plan,

⁵ GLBA in-river JHA, ⁶ KLGO Backcountry Communications Plan,

⁷ KLGO in-river JHA, ⁸ SITK in-river JHA

Risks inherent to environmental contaminants monitoring

The parks in Alaska are remote and rugged with challenging weather extremes. Protection against sun, rain, wind, and snow is critical. Extra food and survival gear is a must. Protection from biting insects such as mosquitoes and black flies is absolutely necessary. The sampling sites are a mix of remote and local front-country that can be as easy as a 2-minute walk from a visitor center (mussel sampling in SITK) to a two-hour boat ride and backcountry hike (Nunatak Creek Dolly Varden

sampling in GLBA). The cumulative stress of multiple forms of transportation and a long field day is an inherent risk for field staff.

General safety considerations

In addition to these considerations, Job Hazard Analyses and other safety plans specific to each monitoring activity and park (Table 1) are saved on the SEAN website and linked at the end of this SOP.

1. Each year prior to heading into the field, staff involved in environmental contaminants fieldwork will discuss safety, training, and any other field requirements or procedures that contribute to a safe work environment.
2. Specific park hazards, emergency contact information, and procedures should be reviewed with the staff at the start of each field season and before each field trip. All park safety protocols must be reviewed and adhered to. This will take good coordination between SEAN staff and the parks they will be working in.
3. All of the boating safety requirements must be adhered to including all prerequisite training according to the Glacier Bay Boating Policy.
4. Except for mussel sampling in SITK, where one person can safely conduct work within plain sight of the Visitor's Center, the minimum crew size is two people. Working alone is discouraged and is allowed only with advance permission from the SEAN program manager and potentially other park managers.
5. Immediately report any work-related injury to your supervisor. Depending on severity or nature of accident, further reporting may be required. All vessel, aircraft, and motor vehicle related accidents are to also be reported to a Law Enforcement Ranger. Access the Safety Management Information System (SMIS) at <https://www.smis.doi.gov> to report your injury and complete the necessary forms to file for worker's compensation as soon as possible, but no later than 30 days after your injury to qualify for benefits. Reporting of near misses is also encouraged as we want to learn from these events to prevent a future injury from occurring.

Safety Links

National

[NPS Reference Manual 50B](#)

[NPS Travel and Driving Policy](#)

Alaska Region

[ARCC Standard Operating Procedures](#)

[AKR Bear Safety Training Policy](#)

Glacier Bay National Park and Preserve

[Glacier Bay R/V Fog Lark Safety Plan](#)

Glacier Bay coast walking JHA

[Glacier Bay Backcountry Communications Plan](#)

[Glacier Bay Boating Policy](#)

Glacier Bay in-river JHA

Klondike Gold Rush National Park

[Klondike Gold Rush Backcountry Travel and Communications Procedures](#)

Klondike Gold Rush in-river field work

Sitka National Historical Park

Sitka in-river field work