



Standard Operating Procedures

Environmental Hazards

When working in the field, environmental hazards are everywhere. These may include weather conditions; flora such as plants with potential dermatological or respiratory effects (poison ivy/oak/sumac or Brazilian peppertree) or plants with thorns or nettles; fauna such as snakes, bees/wasps, jellyfish, and stingrays; waterborne bacteria such as *Vibrio spp.*; or terrain that is uneven, hidden beneath tall grass or water, or containing sharp objects such as oyster shell. However, simply being aware of the potential presence of these hazards is the first step to avoiding them!

Know Your Site

Become familiar with the layout of your monitoring site. It is recommended that you visit your site at least once prior to collecting your very first sample in order to familiarize yourself with where you should park, if and where any restrooms or drinking water is located, find any potential hazards, so that you can arrive prepared in the future with the proper gear and equipment to deal with them, if necessary.

Weather

It is imperative that every person participating in water quality testing is prepared for all weather conditions, whether heat, humidity, cold, wet, high winds, or fog. The following are general guidelines to prepare for and deal with weather conditions:

- If you have questions at any point while out in the field, do not hesitate to call Sarah Gossett at 281-332-3381 x217.
- Be aware of any preventative measures to be taken as precautions to changing weather conditions. This includes proper clothing, sunscreen, adequate supplies of drinking water, and access to proper shelter, among other things.
- If you feel that conditions are unsafe for any reason, weather included, move to a safe place until conditions improve.

Rain can be a safety hazard, especially when coupled with lightning, strong winds, etc. Follow the guidelines below to better prepare for sampling during a rain event:

- **DO sample in the rain**
 - Keep the sampling bucket and equipment out of the rain as much as possible by conducting the tests under a structure.
 - If a small amount of rain falls into the sampling bucket while walking to the location where the sample will be tested, that should not harm the sample, but do keep the sample bucket out of the rain while testing.

- **DO NOT sample with lightning nearby**
 - “Nearby lightning” consists of actually seeing lightning from the general sampling area or using a warning system such as Spark (through the Weather Bug smartphone app – shows lightning strikes within the last 30 minutes and indicates at what distance the nearest strike occurred).
 - If there is lightning nearby, seek shelter on land (hard-top vehicle or building with walls and a roof).
 - Only resume sampling if 15 minutes has passed with no more visible lightning strikes or there are no lightning strikes within 10 or 15 miles of your location.

- **DO NOT sample during a weather ‘warning’**
 - A *severe thunderstorm* warning means that a severe thunderstorm is occurring or is imminent based on Doppler radar information.
 - A *severe thunderstorm* watch means the potential exists for a storm that may produce hail (3/4 inch or larger) or damaging winds (over 58 mph) to develop, so be wary. This may or may not become a severe thunderstorm warning.
 - If a *tornado, tropical storm, hurricane, or extreme wind* warning is announced for the area and time that sampling will occur, then do not go out into the field.

Canceling a sampling event

- Cancelling a sampling event is YOUR decision. Do not sample if you feel the conditions are and will continue to be unsafe for any reason, weather included.
- If you are a certified Bacteria Sampler and have decided to cancel your sampling, contact Sarah Gossett (281-332-3381 x217) to notify her and anyone else who is scheduled to run the lab that day.

In Case of Emergency

- If an emergency situation arises, take care of your physical wellbeing first! Contact 911 and/or your emergency contact person.
- If a non-life threatening accident occurs and you are monitoring at a business (such as a marina or restaurant) contact Sarah Gossett (281-332-3381 x217) to make sure the information gets relayed to the proper staff member at the business.