

APPENDIX D. HEALTH AND SAFETY PLAN

An effective safety program involves a number of aspects: responsibility, compliance, communication, hazard assessments, rates of exposure to hazardous materials and situations, and hazard corrections. ASM has made specific preparations to minimize safety hazards in the field and ensure prompt action in the unlikely event of an emergency. It is ASM's policy that all safety precautions are undertaken in accordance with the requirements of the Office of Safety and Health Administration (OSHA) 29 CFR 1910 and 29 CFR 1926.

D.1 SAFETY HAZARDS IN THE FIELD

Potential health and safety hazards typically encountered by archaeologists include physical, biological, and chemical hazards (Tables D.1, D.2, D.3, and D.4). Prior to any fieldwork, ASM safety personnel will be responsible for identifying potential hazards for a particular project.

Table D.1 Potential Safety Hazards

Physical Hazards	Biological Hazards	Chemical Hazards
Heat/cold stress	Airborne fungi	Toxic chemicals
Sun	Mosquito/insect-borne diseases	Hazardous waste
Construction hazards	Hanta virus	air
Noise	Rabies	soil
Slips, trips, falls	Tetanus	water
Traffic exposures	Poison ivy/sumac	Asbestos
Excavations (cave ins)	Poisonous snakes	Lead
Unsafe buildings/structures	Poisonous insects	Pesticides
Confined spaces		
Heavy lifting		
Tools		

Table D.2 Emergency Contact Information

Contact	Phone
Medical Emergency	911
ASM Affiliates Carlsbad Office	(760) 804-5757
ASM Safety Officer - Mark S. Becker, Ph.D.	(760) 804-5757 (760) 331-7597 (after-hours emergency only)
ASM Principal Investigator - Micah Hale, Ph.C.	(760) 804-5757 (760) 917-3880 (after-hours emergency only)

Table D.3 General Safety Rules and Procedures

- ▶ Practice sun protection by using a hat, sunscreen, and loose, light-colored clothing.
- ▶ Carry at least two quarts of water with you and refill every chance you get.
- ▶ Wear appropriate shoes and use moleskin or foam to keep “hot spots” from turning into blisters.
- ▶ Know the symptoms of temperature stress.

Table D.4 Symptoms of Heat or Cold Stress

Heat Stress	Cold Stress
<ul style="list-style-type: none"> ▶ Rash ▶ Nausea ▶ Cold, clammy skin and inability to sweat ▶ Facial reddening ▶ Confusion, delirium, or lack of coordination ▶ Weakness 	<ul style="list-style-type: none"> ▶ Frostbite ▶ Chilblain (inflammation of extremities followed by spasms and pain) ▶ Hypothermia

Notify your crew chief if you have or notice someone else with these symptoms.

- Avoid dehydration problems by limiting or avoiding alcohol consumption in the evening and coffee during the day.
- Do not wander off during fieldwork or go to isolated areas without notifying your crew chief.
- Snakes like to sun on rocks or sand in the morning and to hide under rocks during the heat of the day. Be alert. In the event of a snakebite, do not treat the bite. Transport the victim to the nearest emergency room. Attempt to identify the snake species.
- Obey all traffic laws and speed limits. Be cautious on dirt roads.
- Use of illegal drugs, either on or off the job during fieldwork, is grounds for immediate dismissal.
- In the event of an emergency, consult your contact phone list (provided prior to the start of fieldwork).
- For emergency service, call 911.
- Be prepared to give your location by UTM coordinates in an emergency.

Each crew member will be given a printed copy of this safety plan, which includes the list of emergency phone numbers (see Table 4.2).

Additionally, the addresses and telephone numbers will be provided for the closest hospital(s) to each segment of the APE, along with maps showing how to get to them.

D.2 SAFETY INDOCTRINATION

Prior to any fieldwork, a safety indoctrination meeting will be held to review potential safety hazards for the region, type of project, and/or weather conditions. All crew chiefs will be aware of potential safety hazards and at least one first-aid-trained person will be included on each field crew. Additionally, all new employees will be required to go through safety training during their orientation.

Field crew will also participate in weekly tailgate safety meetings.

D.3 PRE-EMERGENCY PLANNING

Prior to any fieldwork being undertaken, a pre-emergency plan will be outlined for each field project. For projects located in urban areas where professional emergency responders are readily available, the pre-emergency plan may be as simple as identifying the location of the nearest emergency room. For project work in remote locations, the pre-emergency planning may involve coordination between crew chiefs and project safety personnel, identification of project specific hazards, evacuation routes, response procedures, etc. Depending upon the nature and location of the field project, emergency planning may involve:

- Emergency recognition and planning
- Designation of personnel roles, authority, training, and communication
- Identification of project-specific hazards
- Security and control
- Evacuation routes
- Decontamination
- Emergency medical treatment and first aid
- Emergency alerting and response procedures
- Protective and emergency equipment
- Emergency monitoring equipment
- Task-specific planning

Each vehicle will be equipped with a first aid kit, spare tire and tire inflator, tow rope, water cooler, tool kit, fire extinguisher, shovel, and bucket. Contact information and reporting instructions for ambulance, physician, hospital, fire, police and other persons to contact in an emergency will be provided to each crew member and will be maintained in each vehicle for the life of a project. All field personnel will be trained in the use of hand-held radios during an

emergency and cellular telephones will also be made available for use (in areas where service is available).

D.4 INJURIES ON THE JOB

In the event of an injury or illness, all work will cease until the nature of the injury or illness has been examined by the crew chief or safety personnel. Any injury or illness will be formally reported to the ASM Safety Manager and will be documented on a designated Accident Report Form. Immediate medical attention will be sought in case of bodily injury.

D.5 TRAFFIC AND MOTOR SAFETY

All personnel that drive ASM vehicles will be required to show proof of a valid driver's license. Insurance cards will be included in each vehicle and contact information and procedures in case of an accident or emergency will be provided to crew chiefs. While ASM vehicles are professionally maintained, all drivers will be responsible to check tire inflation, brakes, and fluids before driving them. Each vehicle will be equipped with a first-aid kit and drinking water sufficient for all field crew. Seatbelt use is mandatory.

D.5.1 Reporting Accidents

Any traffic accidents will immediately be reported to the Safety Manager and ASM office manager, Jenny Zahniser. An ASM Vehicle Accident Form will be completed. Should bodily injuries be incurred, emergency medical treatment will immediately be obtained for the injured. Contacting of ASM's insurance provider will be managed by Ms. Zahniser.

D.5.2 Considerations of Criminal Activity in the Region

The project vicinity is near the United States and Mexico international border; an area with a history of known illicit activity, including drug and human trafficking and related violence. While there is no specific cause to indicate that such activities will be encountered in the project area, appropriate measures will be followed to ensure the safety of field personnel. Federal and local authorities, including the US Border Patrol and San Diego County Sheriff's office, will be notified of the presence of field crews and scheduled survey dates and times. In such communications, ASM will secure a point of contact at each agency to directly report criminal activity and to request periodic checks on crew safety through phone contact. The appropriate wireless phone carrier (i.e., the carrier that has the strongest signal in the project area) will be secured to ensure phone contact at all times. In emergency situations, the crew will dial 911.