

Job Safety Analysis Worksheet		Date:
Title of Job/Operation: <b>Environmental Sampling</b>		Log Number:
Employee Name and Job Title:		Analyst/ Date:
Division/Bureau/Section: Site Investigation		Approved By/ Date:
Personal Protective Equipment Recommended or Required: Hard hat, protective eyewear, steel-toed/shank construction boots, steel-toed/shank chemical resistant boots, ear plugs, protective outerwear, heavy duty gloves and nitrile or latex gloves, safety vest, safety cones, tape or warning signs.		
Sequence of Basic Job Steps	Potential Accidents or Hazards	Recommended Safe Job Procedures
Prepare for site visit  Identify site/activity PPE needs; Check contents of PPE equipment bag for complete inventory.	N/A	Obtain and review site HASP from contractor; familiarize self w/site prior to visit; know contaminants of concern and properties, locations of suspected contaminant areas. Have proper training completed, and identify appropriate PPE needs. Provide itinerary to supervisor, or periodically check in w/office. MAP LOCATION OF NEAREST EMERGENCY MEDICAL FACILITY EQUIPPED TO HANDLE CHEMICAL EXPOSURES!
Carry and load sample coolers and other equipment.	(FS) Trip/fall  (OE) back injury from improper lifting	Use a handcart; use the elevator; employ proper ergonomics; get help from a coworker to carry and load coolers and other equipment.
Proceed to vehicle/Travel to and from site	(SB) Moving vehicles on road or in parking areas  (SB) Traffic hazards	Be attentive when crossing traffic and walking with parking areas. Map route to site; have area map available; follow defensive driving practices. If using State vehicle: Perform quick vehicle inspection for obvious items such as tire inflation, wind shield wipers, sufficient gas to get to destination, observe State guidelines for of a State Vehicle: make certain procedures regarding accidents, injuries, vehicular break downs or roadside emergencies are available in vehicle.
Initial site arrival-  Assess site conditions  Be aware of site security/Secure work area	(E) Weather conditions	Heat- know signs of heat stroke, have fluids available at site, take frequent rest breaks. Sun- keep body protected, wear sunscreen when not sampling, wide brimmed hat or hardhat.

<p>Walk about site</p>	<p>(SB) Traffic</p> <p>Irritated site owner Dangerous surroundings</p> <p>(BIO) Animals(dogs), snakes, stinging insects</p> <p>(CW) Chemical release areas</p> <p>(E) Vapors</p>	<p>Inclement conditions- seek covered, secure shelter. Extreme cold- layered clothing, gloves, hat, etc.</p> <p>Be alert, secure area from through traffic w/safety cones, tape and signs; wear site/activity appropriate PPE.</p> <p>Be courteous and diplomatic. Do not enter site unless accompanied by another inspector or site personnel.</p> <p>Identify areas where biohazards may lurk, plan escape route in advance.</p> <p>Wear site/action appropriate PPE. Be familiar w/site plan, ID areas of contamination. Survey site for areas of discoloration, puddles, dead or stressed vegetation; Stay reasonably clear of such areas.</p> <p>Identify escape route, position self-upwind, and evacuate immediately if/when strong odors or irritation noted.</p>
<p>Collecting sanitary sewer samples;</p> <p>Open/close manhole covers</p> <p>Lifting heavy objects (covers, pumps, sampling equipment, coolers, etc.)</p>	<p>Explosive environment</p> <p>(CBT) Covers falling on fingers and toes</p> <p>(OE) Muscle strain</p> <p>(E) Noxious odors, chemical vapors</p> <p>(BIO) Noxious or stringing insects, pathological hazards</p>	<p>Explosive conditions require use of intrinsically safe equipment at all times. Identify escape route.</p> <p>Wear site/activity appropriate PPE; Use tools instead of fingers for prying off fingers.</p> <p>Use proper ergonomics when lifting heavy objects; use appropriate mechanical assistance and tools when possible to pry and lift off covers.</p> <p>Identify escape route; evacuate immediately if/when strong odors or irritation noted.</p> <p>Identify areas where biohazards may lurk, plan escape route in advance; maintain tetanus booster and hepatitis series.</p>

	(CI) Confined Spaces	Wear site/activity appropriate PPE; use appropriate sample equipment to avoid entering confined spaces- DO NOT ENTER CONFINED SPACE UNLESS PROPERLY TRAINED.
Collecting soil gas samples	(E) Encountering electric and gas utility lines, chemical vapors  (E) Loud noise (OE) Muscle and soft tissue injury (SB) Flying debris while probing	Before probing, have all utilities located; Identify escape route, position self upwind, evacuate immediately if/when strong odors or irritation noted.  Wear site/activity appropriate PPE; use proper ergonomics if driving probes into ground by hand.
Collecting soil samples	(E) Encountering electric and gas utility lines, chemical vapors, contaminated media  (E) Loud noise  (BIO) Stinging insects  (FS) Slip/trip hazards  (OE) Muscle and soft tissue injury	Have all utilities located; Identify escape route, position self upwind, evacuate immediately if/when strong odors or irritation noted; Wear site/activity appropriate PPE/ wear site/activity appropriate PPE; monitor atmosphere with applicable equipment.  Use caution when opening monitor well protective covers, watch for biting insects.  BE ALERT; position pumps and other sampling equipment in an orderly and safe fashion.  Use proper ergonomics when positioning and lifting pumps and bailers.
Icing (reicing) sample coolers, transporting coolers and other equipment back to laboratory	(FS) Slip hazard (OE) Muscle and back injury	Use due care when draining water from coolers, use proper ergonomics when lifting and moving coolers and other equipment.
Site exit	(CW) Contaminated vehicle	Wash hands promptly. Contaminated PPE (Booties, tyvek, and latex gloves) should be disposed on-site. Remove boots and soiled clothing for secure storage in trunk; decontaminate as soon as possible. Update exposure log
Drive home or to next site	(SB) Traffic hazards	FOLLOW "TRAVEL TO SITE" PROCEDURES.

\*Codes for Potential Hazards:

Struck By (SB)		Caught On (CO)		Fall To Below (FB)
Struck Against (SA)		Caught In (CI)		Overexertion
Contacted By (CB)		Caught Between (CBT)		Exposure (E)
Contact With (CW)		Fall - Same Level (FS)		