



APPENDIX E

EXAMPLE
HEALTH AND
SAFETY PLAN

EXAMPLE HEALTH & SAFETY PLAN (HASP)

[Note: This HASP will modified for the site-specific activities when final approval is given to the Sampling and Analysis Plan]

SITE SPECIFIC HEALTH AND SAFETY PLAN

Approvals		
	Initials	Date
Prepared By	SAW	
Approved By	KBC	

PROJECT INFORMATION

Date(s) of Field Work: _____
Project Name: _____ Project Number: _____
Client: _____ Site Phone: _____
Site Address: PAPA, Sublette Co., WY Site Plan Attached
Scope of Work: _____

Type of Project: Environmental; Geotechnical; Industrial Process; Other: _____
 HAZWOPER Project: Training & Medical Surveillance must conform to 29 CFR 1910.120 & Geomatrix Guidelines.
 Client Specific Requirements (Attached)

KEY CONTACTS

Project Manager: _____ Phone: _____ Cell: _____
Project H&S Manager: _____ Phone: _____ Cell: _____
Site H&S Manager: _____ Phone: _____ Cell: _____
Client Contact: _____ Phone: _____ Cell: _____
Client's Site Contact: _____ Phone: _____ Cell: _____
Corporate Health & Safety Manager: Don Kubik Jr., CIH Phone: _____ Cell: _____
Other: _____

Emergency Medical Facility 1: Pinedale Medical Clinic

Address: 619 E Hennick, Pinedale, WY
Phone Number (general): 307-367-4133 Phone Number (emergency): 911
 Emergency Medical Facility Confirmed Map to the hospital is attached

Emergency Medical Facility 2: Marbleton-Big Piney Clinic

Address: 17 W 3rd, Big Piney, WY
Phone Number (general): 307-276-3306 Phone Number (emergency): 911
 Emergency Medical Facility Confirmed Map to the hospital is attached

Emergency Medical Facility 1:

Address: _____
Phone Number (general): _____ Phone Number (emergency): 911
 Emergency Medical Facility Confirmed Map to the hospital is attached

Police: 911 Fire: 911 Paramedic/Ambulance: 911
Poison Control Center: 1-800-222-1222

EMERGENCY PROCEDURES

Medical Emergencies

1. Remove injured or exposed person(s) from immediate danger if possible.
2. Evacuate other on-site personnel to a safe place in an upwind direction until it is safe for work to resume.
3. If serious injury or life-threatening condition exists, call 911 - Paramedics, fire department, police Hospital emergency room Clearly describe location, injury and conditions to dispatcher/hospital. Designate a person to direct emergency equipment to the injured person(s).
4. Provide first aid if necessary. Remove contaminated clothing only if this can be done without endangering the injured person.
5. Call the project manager and/or project health and safety officer.
6. Immediately implement steps to prevent recurrence of the accident.

Accidental Release of Hazardous Materials or Wastes

1. Evacuate all on-site personnel to a safe place in an upwind direction until the PM or PHSO determines that it is safe for work to resume.
2. Immediately instruct a designated person to contact the PM or PHSO.
3. Contain spill, if it is possible and it can be done safely.
4. Initiate cleanup.

General Emergencies

In the case of fire, flood, explosion, or other hazard, work shall be halted and the local police/ fire department shall be notified by calling 911. All on-site personnel will be immediately evacuated to a safe place.

Emergency Equipment Onsite

First Aid Kit; Fire Extinguisher; Eye Wash; Other: _____

CHEMICAL HAZARDS

CHEMICAL	EXPOSURE LIMITS		LEL (%)	KNOWN/EXPECTED CONCENTRATIONS	HEALTH HAZARDS
	OSHA	ACGIH			
Benzene	1 ppm S 5 ppm	0.5 ppm	1.2	Unknown	Irritant to resp. system; giddiness, headache, nausea, staggered gait
Toluene	200 ppm	50ppm	1.1	Unknown	Irritation eyes, nose; lassitude (weakness, exhaustion), confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, insomnia; paresthesia; dermatitis; liver, kidney damage
Ethyl benzene	100 ppm	100 ppm S125 ppm	0.8	Unknown	Irritation eyes, skin, mucous membrane; headache; dermatitis; narcosis, coma
Xylenes	100 ppm C 200 ppm	100 ppm	0.9	Unknown	Irritation eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis
Naphthalene	10 ppm (50 g/m ³)	10 ppm (50 mg/m ³)	NA	Unknown	Irritation eyes; headache, confusion, excitement, malaise (vague feeling of discomfort); nausea, vomiting, abdominal pain; irritation bladder; profuse sweating; jaundice; hematuria (blood in the urine), renal shutdown; dermatitis, optical neuritis, corneal damage

If not specified, exposure limit is the PEL or the TLV-TWA, Exposure limit preceded by a "S" is a Short Term Exposure Limit and by a "C" is the Ceiling Limit

EXAMPLE JOB SAFETY ANALYSIS (JSA)

[Note: This JSA will modified for the site-specific activities when final approval is given to the Sampling and Analysis Plan]

Project Name:		Project No:		Date:	
Tasks:	1. Vapor Monitoring/Sampling 2. Groundwater Sampling	Task Location:	Pinedale Anticline Production Area Sublette Co., WY		
For this Project and Task, this document is a Certification of Hazard Assessment					
Completed by:	Steve Wright	Reviewed by:	DK		
Notes:					

Task	Hazard	Risk Control Method
Mobilize to site	Driving accidents	<input type="checkbox"/> Vehicle should be in good condition and well maintained <input type="checkbox"/> Check weather forecast, bring tire chains if warranted <input type="checkbox"/> Seat belt will be worn while driving <input type="checkbox"/> Driver will be licensed, trained, and medically fit <input type="checkbox"/> Driver will be rested and alert <input type="checkbox"/> NO CELL PHONE USE WHILE DRIVING <input type="checkbox"/> Route to be planned in advance <input type="checkbox"/> Driver must not be under the influence of alcohol, drugs, or medication that impairs ability to drive <input type="checkbox"/> Park so that first move is forward (i.e. back into space or allow room for driving forward)
Set up work site	Pad traffic	<input type="checkbox"/> If applicable, coordinate with other work at location <input type="checkbox"/> If applicable, notify PIC of work activities and location <input type="checkbox"/> Obey all Ultra traffic rules while on site <input type="checkbox"/> Wear flame resistant clothing as the outer layer, steel toe boots, long sleeves, pants, hardhat, and safety glasses at all times while on the pad
Measure static water level	Explosion Hazard	<input type="checkbox"/> Eliminate all potential ignition sources <input type="checkbox"/> Monitor ambient air in the aboveground work space with a combustible gas indicator <input type="checkbox"/> Seal the top of casing and monitor ambient conditions inside the well casing with a combustible gas indicator <input type="checkbox"/> Work may proceed with concentrations up to 20% of the LEL <input type="checkbox"/> Stop work if concentrations in aboveground work space meets or exceeds 20% of the LEL <input type="checkbox"/> Each location will be explored by hand tool to a depth of approximately 5 feet before power equipment is used.
	Injury from using installation tools (post-pounder, sledge hammer)	<input type="checkbox"/> Wear hard hat, safety glasses, steel toes, hearing protection, and leather gloves during installation <input type="checkbox"/> Use post-pounder to install well points, if possible. <input type="checkbox"/> Operate post-pounder using two people <input type="checkbox"/> Use installation tools from a position of firm footing <input type="checkbox"/> When using post-pounder, do not lift tool higher than the top of the well point on the up-stroke <input type="checkbox"/> Keep fingers, hands, arms, and other body parts clear of impact areas. <input type="checkbox"/> Inspect all hand tools prior to use. If faulty or inappropriate, do not use until repaired or replaced.
	Pinch points	<input type="checkbox"/> Watch for pinch points when assembling / installing well casing

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For this Project and Task, this document is a Certification of Hazard Assessment					
Completed by:		Reviewed by:			
Steve Wright		DK			
Notes:					
Task	Hazard	Risk Control Method			
	Slip, trip, and fall	<input type="checkbox"/> Keep work area clean – including removal of excess cuttings / mud			
Sample vapor/gas inside well casing		<input type="checkbox"/> Keep work areas dry when possible <input type="checkbox"/> Stay aware of footing and do not run			
	Cold stress	<input type="checkbox"/> Wear appropriate clothing for Wyoming fall weather conditions – e.g. insulated coveralls, winter gloves, hard hat liner, etc. <input type="checkbox"/> Seek warmth out of weather (e.g. inside vehicle), if necessary <input type="checkbox"/> Consume adequate amounts of food and beverages			
	Working at heights	<input type="checkbox"/> No work will be conducted at heights greater than 6 feet without fall restraint / arrest safety equipment			
	UV exposure	<input type="checkbox"/> Wear neck to toe clothing and sun block			
	Lifting heavy equipment/materials	<input type="checkbox"/> Do not lift or move heavy equipment without assistance <input type="checkbox"/> Use proper lifting techniques. Lift with arms and legs, keep back straight. <input type="checkbox"/> If possible, use a powered lift truck, drum cart, or other mechanical means.			
Well Point Installation	Underground Utilities	<input type="checkbox"/> Confirm with Shell that no overhead or underground utilities are present in the monitoring well location(s); <input type="checkbox"/> Confirm subsurface utilities with Wyoming One Call – (800) 849-2476			
	Injury from using installation tools (post-pounder, sledge hammer)	<input type="checkbox"/> Wear hard hat, safety glasses, steel toes, hearing protection, and leather gloves during installation <input type="checkbox"/> Use post-pounder to install well points, if possible. <input type="checkbox"/> Operate post-pounder using two people <input type="checkbox"/> Use installation tools from a position of firm footing <input type="checkbox"/> When using post-pounder, do not lift tool higher than the top of the well point on the up-stroke <input type="checkbox"/> Keep fingers, hands, arms, and other body parts clear of impact areas. <input type="checkbox"/> Inspect all hand tools prior to use. If faulty or inappropriate, do not use until repaired or replaced.			
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Completed by:	Steve Wright	Reviewed by:	DK		
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Groundwater Sampling and Aquifer Testing	Handling contaminated groundwater and sample preservatives	<input type="checkbox"/> Coordinate with other work at location <input type="checkbox"/> Wear appropriate PPE (e.g. nitrile gloves, safety glasses) <input type="checkbox"/> Handle sample containers with preservatives with care to avoid spills/breakage of preservatives. <input type="checkbox"/> Have water available to rinse skin in case of accidental contact with preservative.			