

Appendix A

Task-Specific Health and Safety Plan Format Sample

GENERAL

This task-specific health and safety plan (HASP) provides safety-related information and requirements specific to the task and work location(s) described. General requirements contained in the PMC HASP for Rocky Mountain Arsenal (RMA) along with this task-specific HASP will be implemented except where noted. Significant changes to this HASP shall be documented and approved using a field change request or resubmittal of a revised task-specific HASP.

Project Name:		Subcontract Submittal Number:
Task Name:		Revision No.: Date:
Performing Organization(s):		
Duration of Field Activities:		

SCOPE OF WORK

Breakdown and description of work activities:

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LOCATION

Identify work locations at RMA:

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PERSONNEL

<i>Assigned Responsibility</i>	<i>Name and Organization:</i>	<i>Phone Number:</i>
Task Site Supervisor		
Task Health and Safety Supervisor		

WORK PLAN

A work plan has been developed, reviewed, and accepted for use at RMA for the work described.

<i>Work plan title and date:</i>	<i>Reviewed and accepted by:</i>	
	Subcontractor Project Manager:	PMC Project Manager:

TASK HAZARD(S) SUMMARY

The potential health and safety hazards of this task are summarized below. The potential for encountering these hazards is ranked (high, medium, or low) based on the work to be performed and the hazard control measures to be used.

Summary	<i>Hazard potential</i>	<i>Description of potential hazards</i>
<p>___ Safety</p> <p><i>Walking and working surfaces, heavy equipment, traffic, falls, excavations, power and hand tools, materials handling, cranes, hoisting and rigging, hot work, confined spaces, demolition, electrical safety</i></p>	<p>[High, Medium, or Low]</p>	<p>[List each potential hazard]</p>
<p>___ Utilities</p> <p><i>Buried, overhead, or in general work area</i></p>		
<p>___ Chemical</p> <p><i>Identify chemicals of concern here, and attach MSDS if chemical properties are not already included in the PMC HASP, Section 5</i></p>		
<p>___ Physical</p> <p><i>Heat, cold, noise, radiological</i></p>		
<p>___ Biological</p> <p><i>Plants, animals, insects, spiders, infectious waste</i></p>		
<p>___ Chemical Warfare Materiel</p>		
<p>___ Ordnance</p>		
<p>___ Other</p>		

HAZARD CONTROL MEASURES

Safe work practices and control measures to be used for performing this task are identified in several documents. Site-wide hazards and control measures are described in the PMC HASP. Site-wide safety practices are specified in the Project Rules Handbook for the RMA PMC, and the RMA Health and Safety Guidelines.

Task-specific hazard control measures are specified in each Activity Hazard Analysis (AHA). AHAs have been developed for the following activities and are included as Attachment ____.

<i>Activities with an AHA:</i>	

WRITTEN SAFETY PROCEDURES AND PROGRAMS

The following sections of existing safety procedures and programs will be used for this task or site. Copies of applicable procedures and programs are included as Attachment ____.

<i>Reference Procedure or Program</i>	<i>Applicable Section(s)</i>

PERMITS

The following permits are required for work. Applicable completed permits and/or permit forms are included as Attachment ____.

<i>Permit</i>	<i>Notes and comments (reference activities, procedures, and coordination with appropriate organizations):</i>
___ Hot Work	
___ Intrusive Soils Activity	
___ Confined Space	
___ Lockout/Tagout	
___ Other	

PERSONAL PROTECTIVE EQUIPMENT

The following personal protective equipment (PPE) will be used for the identified activities.

<i>Activity</i>	<i>Head/Face</i>	<i>Foot</i>	<i>Hands</i>	<i>Respiratory</i>	<i>Clothing</i>

SAMPLE

The following competent person certifies that a hazard assessment for the identified activities has been performed and the selection of personal protective equipment is based on best available information.

<i>Printed name</i>	<i>Signature</i>	<i>Date</i>

SITE MONITORING

Task-specific monitoring requirements are identified below.

Site Monitoring Strategy and Approach.

The rationale used to determine the site monitoring requirements for this project is discussed below.

Direct Reading Exposure Monitoring (to monitor potential worker exposure)

<i>Activity(s)</i>	<i>Instrument</i>	<i>Action Level(s) and Actions</i>	<i>Frequency</i>
<i>Comments or special instructions:</i>			

Integrated Personal Air Monitoring (full-shift worker exposure sampling and/or analysis)

<i>Activity(s)</i>	<i>Contaminant</i>	<i>Method</i>	<i>Frequency</i>
<i>Comments or special instructions:</i>			

Perimeter or Work Area Monitoring (ambient work area or fenceline monitoring)

Activity(s)/Location	Contaminant(s)	Method	Frequency
<i>Comments or special instructions:</i>			

SITE CONTROL

The PMC HASP, Central Remediation Area Access Control Procedure, and RVO Access Control Procedure govern general site access and control for workers and equipment. Task-specific site control measures are specified below.

Site Control for General Work Area(s)

Location	Site Control Procedure (discuss important elements such as signs, barricades, fencing, briefings, sign-in/out logs, etc.)

Site Control for Potentially Contaminated Area(s)

Location	Site Control Procedure (discuss important elements such as signs, barricades, briefings, qualifications, required supplies and equipment, sign-in/out logs, etc.)
Support Zone	
Contamination Reduction Zone	
Exclusion Zone	

DECONTAMINATION

Required decontamination procedures are described below.

<i>Type of decontamination</i>	<i>Identify activity(s) requiring decontamination, and describe decontamination steps, location, required equipment, and collection and disposal of potentially contaminated liquids and solids. Decontamination methods that should be avoided are using metal hammer/chisel to decontaminate metal equipment parts such as tracks, and personnel breaking the plane of moving parts that can pinch/sever their extremities.</i>
Personnel decontamination	
Equipment decontamination	
Other: _____	

COMMUNICATIONS

A primary and backup means of communications for field crews have been established as described below.

<i>Type of communication</i>	<i>Primary means</i>	<i>Back-up means</i>
Communications with ADCCOM		
Communications with home base		
Communications among field crew members		

MEDICAL SURVEILLANCE AND QUALIFICATION

The following medical surveillance is required for on-site personnel working in the field. Medical surveillance qualification records and a medical data sheet will be kept on-site at RMA.

<i>Required medical surveillance:</i>	<i>Task-specific medical testing:</i>
<input type="checkbox"/> Hazardous Waste <input type="checkbox"/> Respirator Use <input type="checkbox"/> Hearing Conservation <input type="checkbox"/> Other:	
<i>Location of qualification records and data sheets:</i>	<i>Exempted on-site personnel:</i>

TRAINING

The following training is required for on-site personnel working in the field. Copies of training certificates and training records will be kept on-site at RMA.

<p><i>Required worker training:</i></p> <p> <input type="checkbox"/> 40-hour General Site Worker <input type="checkbox"/> 8-hour Supervisor <input type="checkbox"/> 3-day On-the-job <input type="checkbox"/> 8-hour Refresher <input type="checkbox"/> Site-Specific Briefing <input type="checkbox"/> PMC Orientation <input type="checkbox"/> CRA Access Control Other: </p>	<p><i>Task-specific training requirements:</i></p> <p> <input type="checkbox"/> Hazard communication <input type="checkbox"/> Task-specific briefing <input type="checkbox"/> Hearing conservation Other: </p>
<p><i>Location of training records:</i></p>	<p><i>Exempted on-site personnel:</i></p>

HAZARDOUS CHEMICALS

Hazardous chemicals (as defined in 29 CFR 1910.1200) to be brought or used on-site are identified below. This chemical inventory will be maintained up to date by the HSS, and Material Safety Data Sheets (MSDS) shall be maintained at the task or project support facilities and made available for review by site workers, the PMC or RVO.

<i>Chemical Name</i>	<i>Amount</i>	<i>Location</i>	<i>Purpose</i>

REQUIRED FACILITIES AND EQUIPMENT

The following facilities and equipment are required for safe completion of work.

<i>Facility</i>	<i>Type:</i>	<i>Location:</i>
___ Worker Showers/Lockers		
___ Restrooms		
___ Supplementary Illumination		
___ Emergency eyewash/shower		
___ First Aid Supplies		
___ Fire Extinguishers		
___ Hazardous Materials Storage		
___ Spill Containment /Clean-up		
___ Other: _____		

EMERGENCY ACTION AND RESPONSE

Personnel responsible for coordinating emergency situations during site activity are identified below. A site map showing assembly points and directions to the authorized medical facility is attached. Documented rehearsal and critique of this plan is required at least once during the task, or more often as necessary.

<i>Responsibility</i>	<i>Name</i>	<i>Phone Number(s)</i>
Task Emergency Coordinator		
Alternate Emergency Coordinator		
Type/Frequency of Rehearsal		

If an emergency situation develops which requires evacuation of the work area, the following steps shall be implemented.

<i>Evacuation Step</i>	<i>Methods and comments:</i>
Notify affected workers	
Evacuate to safe location	
Assemble and account for workers	
Notify Supervisor/Manager	
Complete event report	

Potential emergency situations and response actions are identified below.

<i>In case of:</i>	<i>Response actions:</i>
Injury or illness	
Chemical exposure	
Fire or explosion	
Adverse weather	
Material spill or release	

APPROVALS

This task-specific HASP has been reviewed and accepted for work at RMA.

<i>Title/Organization</i>	<i>Printed name:</i>	<i>Signature:</i>	<i>Date:</i>
Task Site Supervisor			
Task Health and Safety Supervisor			
PMC Project Manager			
PMC Health and Safety Manager			

ATTACHMENTS

Applicable attachments to the task-specific health and safety plan are identified below.

<i>Attachment Number:</i>	<i>Title:</i>
	<p>Site Map (showing exclusion zones, decontamination facilities, support facilities)</p> <p>Activity Hazard Analysis</p> <p>Safe Work Practices or Procedures</p> <ul style="list-style-type: none"> • Hazard communication program • Respiratory protection program • Lockout/tagout program • Excavation safety procedures <p>Material Safety Data Sheets</p> <p>Emergency Map (showing rally points, location of emergency equipment, and route to designated medical facility)</p> <p>Others (list):</p>

Appendix B

Activity Hazard Analysis Format Sample

Activity Hazard Analysis # 1

Project/Task: General PMC Work Activities – Office and Field Activities

Activity	Potential Hazard(s)	Control Measure(s)
General PMC office, field work, and oversight activities (including IT work and field surveying activities)	Workstation ergonomic hazards	<ul style="list-style-type: none"> • Ensure that workstations are properly designed for the work and that appropriate chairs, tables, keyboard trays, glare screens, and other items are available during the execution of work • Request a workstation ergonomic evaluation from the Health and Safety Dept. for new or remodeled work areas • Maintain “neutral” body postures while performing work, avoid static and repetitive motions, and take frequent breaks as necessary to minimize the potential for musculoskeletal disorders
	Back injury from lifting and moving heavy or awkward loads	<ul style="list-style-type: none"> • No lifting over 50 lbs. per person, or less based on individual ability • Site personnel will be instructed on proper lifting techniques (bend at the legs, keep back straight, head up, lift with your legs) • Use a buddy or mechanical devices (e.g., hand trucks, pallet jacks, etc.) as necessary to reduce manual handling of materials • Do not reach for heavy items above shoulder level; ask for assistance or use a step ladder or stool • Team lifting should be used if mechanical devices are not available • Contact the Construction Coordination Group for assistance with furniture moves
	Bump, pinch, and struck-by hazards	<ul style="list-style-type: none"> • Do not leave file drawers or cabinets open or unattended • When using a paper cutter, ensure that the blade is maintained in a closed position and secured when not in use.
	Fire or trip hazards from electrical appliances or computer cords	<ul style="list-style-type: none"> • If extension cords are used in the work area, ensure that they are in good working condition; remove from service any frayed, cut, or inoperable cord. • Ensure that loose cords do not cross the path of travel. • Verify that electrical appliances are in good working order prior to use. • Verify that electrical appliances are turned off by the end of the work shift. • Do not overload electrical circuits.
	Slips, trips, or falls on walking and working surfaces	<ul style="list-style-type: none"> • Maintain clean work areas by following good housekeeping procedures • Keep office areas and walkways clear of boxes and items that may pose a trip hazard • Be alert for uneven terrain and steep slopes • Wear slip-resistant footwear when walking/working on slippery surfaces • Be alert to potential deterioration of walking and working surfaces and support structures • Watch for ice buildup when temperatures dictate and ensure that ice and snow are cleaned from walking and working surfaces or avoid walking in those areas
	Exposure to high noise from proximity to heavy equipment and power tools	<ul style="list-style-type: none"> • Wear hearing protection while working near heavy equipment and similar high noise producing equipment or tools • High noise producing equipment shall be equipped with mufflers or other noise control devices appropriate to the equipment

Activity Hazard Analysis # 1

Project/Task: General PMC Work Activities – Office and Field Activities

Activity	Potential Hazard(s)	Control Measure(s)
	Heat stress	<ul style="list-style-type: none"> • Acclimatize to hot weather work • Be conscious of your individual tolerance to work in hot weather and monitor yourself and co-workers for signs and symptoms of heat stress • Take breaks as necessary in shady or cool areas and drink plenty of liquids • Heat Stress Program and monitoring will go into effect at 70°F in accordance with TtEC Program EHS 4-6, Temperature Extremes
	Cold stress	<ul style="list-style-type: none"> • Be alert to signs and symptoms of cold stress • Wear cold weather gear (insulated coveralls, hat, gloves) when performing field work during cold weather and take breaks in warm areas as necessary • Implement cold stress prevention and monitoring procedures in accordance with American Conference of Governmental Industrial Hygienists (ACGIH) as necessary for extended cold weather work
	Biological hazards including wildlife, insects, spiders, snakes, and plants	<ul style="list-style-type: none"> • Identify and avoid work in areas where potential biological hazards are present • Report sick, injured or dead wildlife to US Fish and Wildlife Service (USFWS) • Wear PPE (e.g., snake chaps in high grass areas) and insect repellents as necessary
	Hazards from chemicals used on-site (fuels, greases, solvents, paints, etc.)	<ul style="list-style-type: none"> • Implement Hazard Communication Program for chemicals used on-site • Maintain Material Safety Data Sheets in Trailer Z-86 and submit the Chemical Inventory Report (Section 18.9 of the PMC HASP) to RVO as required. • Train all employees using chemicals in Hazard Communication • Store and label all containers properly • Wear appropriate PPE for chemical handling and use
	Dropped objects	<ul style="list-style-type: none"> • Wear steel-toed boots meeting ANSI Standard Z-41 in all construction areas and other work areas where foot hazards may be present
	Overhead hazards	<ul style="list-style-type: none"> • Wear hard hats that meet ANSI Standard Z89.1 in all construction areas, and other areas where overhead hazards may be present
	Discovery of potential MEC or Chemical Warfare Materiel (CWM) hazards	<ul style="list-style-type: none"> • Notify the ROC immediately at X5246 who will in turn notify the PMC Anomaly Response Team • Move back 900 feet from anomaly and wait for PMC Anomaly Response Team to arrive • If working within the boundary of a remediation project, follow precautions specified in the individual THASP • Read and follow CWM safety information and emergency procedures specified in PMC UXO Department procedures UXO-001 and UXO-003 located in the PMC online reference library.

Activity Hazard Analysis # 1

Project/Task: General PMC Work Activities – Office and Field Activities

Activity	Potential Hazard(s)	Control Measure(s)
	Fire from fueling operations	<ul style="list-style-type: none"> • Fuel cans will be NFPA approved, properly labeled, and equipped with a self-closing spout • Use a pouring spout or funnel to dispense fuel from portable containers • Portable generators or equipment must be cool before fueling • Smoking and open flames are not permitted in fueling/greasing areas • All heavy equipment will be equipped with an ABC type fire extinguisher; inspect and document the inspection monthly. • Locate minimum 5-lb., type ABC fire extinguishers in accessible locations between 25 and 75 feet from fueling/greasing areas • Store flammable materials in a flammable storage cabinet or other approved container or location • If possible, equipment should be grounded prior to fueling operations.
	Overhead utility hazards	<ul style="list-style-type: none"> • Be alert to the proximity to overhead power lines, especially when operating vehicles or using tall or long tools and equipment • Establish a safe zone or minimum clearance requirements for work near overhead utilities
	Contact with energized utility or electrical equipment	<ul style="list-style-type: none"> • Complete the intrusive soil activity permit • Obtain utility location data from the PMC Construction Coordination Group and, if necessary, the RVO Geographic Information System (GIS) group • Obtain UXO/MEC and utility locate surveys as necessary • Discuss intrusive activity with the PMC HS Representative to determine whether additional safety requirements are necessary • Follow safety precautions specified for the work • If contact with energized utility or electrical equipment is made, ground personnel shall stay clear, operator should stay in cab unless fire or explosion hazard is present and shall make no contact with anything metal. Personnel shall call 911, if necessary, and eliminate or deactivate the source of the energy (this may include coordination with Construction Coordination department or RVO)
	Eye injury due to flying particulate or liquid splash	<ul style="list-style-type: none"> • Wear approved Safety glasses (ANSI Z-87.1) with side shields in construction work areas and other areas where eye hazards are present • Wear chemical safety goggles if there is a potential for splashing with contaminated liquids • If material gets into employee's eye, immediately flush the eye(s) for 15 minutes at an emergency eye- wash station
	Struck by/against heavy equipment	<ul style="list-style-type: none"> • Establish eye contact with the operator and ensure equipment is in a non-energized state prior to approaching any equipment. • Establish means of communication (radios, hand signals, etc.) prior to commencing work. • Stay clear of equipment path of travel; stay outside the swing radius of bucket (if applicable) and never work/pass below a suspended load. • Wear highly visible traffic vest at all times around heavy equipment
	Vehicular traffic in work area	<ul style="list-style-type: none"> • Use spotters when backing up trucks (heavy equipment and earth moving equipment) in congested areas • Wear reflective orange traffic vests in areas of traffic, construction vehicles, and roadways.

Activity Hazard Analysis # 1

Project/Task: General PMC Work Activities – Office and Field Activities

Activity	Potential Hazard(s)	Control Measure(s)
	Overhead utility hazards	<ul style="list-style-type: none"> • Be alert to the proximity to overhead power lines, especially when operating vehicles or using tall or long tools and equipment • Establish a safe zone or minimum clearance requirements for work near overhead utilities
	Exposure to excavation hazards	<ul style="list-style-type: none"> • All personnel working in an excavation area must complete Excavation Awareness training in accordance with Section 16 of the PMC HASP. • A Competent Person will oversee activities involving trenching/excavation • Personnel will not enter a trench/excavation unless appropriate entry and egress and protective systems are in place, in accordance with Section 16 of the PMC HASP. • Personnel will maintain eye contact at all times with heavy equipment in the area
Company or Government motor vehicle operation	Personal injury and property damage	<ul style="list-style-type: none"> • Do not drive private vehicles into field work sites or the CRA • Carry a valid driver's license and government permit as necessary, and obey all traffic lights, signals, barricades, and warnings • Check proper vehicle operational condition, mirrors, lights, windshield and fuel level prior to operation • Wear seat belts at all times while vehicle is in operation • Secure vehicle and set parking brake when not in use • No smoking in company or government vehicles • Be alert for road closures, detours, and other hazardous road conditions • Be alert for haul road traffic patterns and heavy equipment operations • Employ defensive driving techniques at all times • PMC employees who operate company vehicles will complete the PMC on-line defensive driving training module • Follow "GOAL" Procedures – Get Out And Look • Talking on cellular phones or prolonged radio use is prohibited while operating a Government or company vehicle. • Do not leave parked vehicles with the motor running.

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