

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:

LOCATION

Identify work locations at RMA:

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	Hazard potential	Description of potential hazards
<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.

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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 fence line monitoring)

<i>Activity(s)/Location</i>	<i>Contaminant(s)</i>	<i>Method</i>	<i>Frequency</i>
<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)

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

Site Control for Potentially Contaminated Area(s)

<i>Location</i>	<i>Site Control Procedure (discuss important elements such as signs, barricades, briefings, qualifications, required supplies and equipment, sign-in/out logs, etc.)</i>
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 where moving parts are present where they can have their extremities caught.</i>
Personnel decontamination	
Equipment decontamination	
Other: _____	

COMMUNICATIONS

A primary and back-up 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 Fire and Emergency Services		
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> ___ Hazardous Waste ___ Respirator Use ___ Hearing Conservation ___ Other:	<i>Task-specific medical testing:</i>
<i>Location of qualification records and data sheets:</i>	<i>Exempted on-site personnel:</i>

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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>___ 40-hour General Site Worker ___ 8-hour Supervisor ___ 3-day On-the-job ___ 8-hour Refresher ___ Site-Specific Briefing ___ PMC Orientation ___ CRA Access Control Other:</p>	<p><i>Task-specific training requirements:</i></p> <p>___ Hazard communication ___ Task-specific briefing ___ 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 Sheet (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 Fire and Emergency Services	
Complete incident 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 Sample

Project/Task: Slurry Wall/Bench Construction
REVISION NO./ DATE: 0/MAY 8, 1998

Activity	Potential Hazard(s)	Control Measure(s)
General bench construction activities	1. Slips, trips, or falls on walking and working surfaces	<ul style="list-style-type: none"> • Maintain clean work areas by following good housekeeping procedures • Be alert for uneven terrain and steep slopes • Wear slip resistant footwear when walking/working on slippery surfaces • Watch for ice build-up when temperatures dictate, and promptly clear ice and snow from walking and working surfaces
	2. Exposure to high noise from heavy equipment and power tools	<ul style="list-style-type: none"> • HSS will determine the need for hearing protection and conduct monitoring if needed • Hearing protection will be worn while operating or working near heavy equipment • All equipment will be equipped with manufacturer's required mufflers
	3. Eye injury due to flying particulate or liquid splash	<ul style="list-style-type: none"> • Safety glasses with side shields will be worn in all construction work areas • Safety goggles will be worn if there is a potential for chemical splashing • If material gets into employee's eye, the eye should be flushed for 15-minutes at an emergency eye wash station immediately
	4. Back injury from lifting heavy loads	<ul style="list-style-type: none"> • Site personnel will be instructed on proper lifting techniques • Mechanical devices should be used to reduce manual handling of materials • Team lifting should be utilized if mechanical devices are not available • Follow procedures outlined in Section 5.9 of the RMA Health and Safety Guidelines booklet
	5. Fire	<ul style="list-style-type: none"> • Fuel cans will be NFPA approved • Fuel cans will be equipped with pouring spout or a funnel will be used • Smoking and open flames are not permitted in fueling/greasing areas • All heavy equipment will be equipped with a ABC type fire extinguishers which will be inspected monthly and documented • 20-lb. ABC type fire extinguishers will be located within 75 feet of fueling/greasing areas
	6. Hazards from chemicals brought to the site (fuels, greases, solvents, paints, etc.)	<ul style="list-style-type: none"> • Implement hazard communication program for chemicals brought to the site • Material Safety Data Sheets shall be maintained in the project trailer and the Chemical Inventory Report (PMC HASP, Section 18.9) will be submitted to FES as required • All employees shall be trained in Hazard Communication • All containers shall be properly labeled • Appropriate PPE for chemical handling and use shall be provided
	7. Vehicular traffic in work area	<ul style="list-style-type: none"> • Spotters will be used when backing up trucks, heavy equipment and earth moving equipment in congested areas • Orange traffic vests shall be worn in areas of traffic, construction vehicles, and roadways

Activity Hazard Analysis Sample

Project/Task: Slurry Wall/Bench Construction
REVISION NO./ DATE: 0/MAY 8, 1998

Activity	Potential Hazard(s)	Control Measure(s)
General bench construction activities (continued)	8. Temperature extremes	<ul style="list-style-type: none"> • Cold weather gear and frequent warm-up breaks will be implemented for Personnel will be conscious of their own limitations and monitor workload • Crews will take heat stress breaks as necessary • Heat Stress Program and monitoring will go into effect at 70°F in accordance with the Foster Wheeler procedure EHS 4-6
	9. Overhead hazards	<ul style="list-style-type: none"> • Personnel will be required to wear hard hats that meet ANSI Standard Z89.1 in all construction areas, and areas with overhead hazards
	10. Dropped objects	<ul style="list-style-type: none"> • Steel toe boots meeting ANSI Standard Z41 will be worn in all construction areas
Heavy equipment fueling	11. Spills/fire	<ul style="list-style-type: none"> • Spill and absorbent materials will be readily available • Employees will be instructed as to proper fueling techniques • Fuel nozzle and hose will be secured in holder after use • Fuel caps will be secured after fueling operations • Fuel tanks and equipment will be grounded and bonded during fueling operations • Smoking and open flames are not permitted in fueling/greasing areas • 20-lb. ABC type fire extinguishers will be located within 75-ft of fueling/greasing areas
	12. Chemical exposure / eye injury	<ul style="list-style-type: none"> • Skin will be thoroughly rinsed with water if contact with hazardous material occurs • Pressure washing requires the use of chemical goggles or safety glasses with a full-face shield if respiratory protection is not being utilized • Personnel shall wear tyvek or rain suits to prevent contact with contaminated liquids • If material gets in someone's eye, the eye should be flushed for 15-minutes at an emergency eye wash station immediately
Equipment decontamination	13. Pressure washer hazards (burns, contact with high pressure spray)	<ul style="list-style-type: none"> • Only qualified personnel will operate pressure-washing units • Operators will not fix the hand trigger in the open position such that if the wand were left unattended, water would spray from the tip • All pressure washers will be equipped with a deadman switch • Pressure washer shall not be used for personal decontamination (boots, gloves etc.) • Personnel shall not hold anything being decontaminated with their hands or feet • Care shall be taken when setting the parameters (heat and pressure) on the unit. The HSS and Superintendent will assess the need for the use of high temperatures and pressures while operating the unit at the time of the task • The wand shall be of sufficient length to prevent personnel from spraying themselves unless the situation dictates a shorter wand • A safe working radius shall be determined to insure that other personnel will not be sprayed

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