**Instructions**

This appendix provides a template for a HASP, including the required minimum elements and example formatting/structure. The template will assist OSCs and other EPA emergency responders (e.g., Removal Managers) in developing a HASP for their own site activities where there is not another HASP and/or reviewing HASPs prepared by others.

**HASP Template**

|  |  |  |
| --- | --- | --- |
| **HASP Prepared by:** | **Signature:** | **Date:** |
|  |  |  |

**A. SITE INFORMATION: ROLES AND RESPONSIBILITIES**

|  |
| --- |
| **Site Name:** |
| **Site Address:** |
| **Date of Activities:** |
| **Site Description Including History:** |
| **Scope of Work:** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Site Roles/Responsibilities** | | | |
| **Site Role/Responsibility:** | **Employer:** | **Name:** | **Title:** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**B. SITE TASKS AND DESCRIPTIONS**

Identify the individual tasks or activities that are required to complete the scope of work. A JHA (Section C) must be completed for each task listed below.

|  |  |  |
| --- | --- | --- |
| **Site Tasks and Descriptions** | | |
| **Task Number:** | **Task Titles:** | **Task Descriptions:** |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

**C. EVALUATION AND HAZARD CONTROL**

Site hazards and controls are documented in JHAs for each task identified in the site work plan. These JHAs are attached to the HASP (see Attachment #1).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **JHA** | | | | |
| **JHA Number:** | **Name of Task:** | **Location Where Task Is Performed:** | | |
|  |  |  | | |
| **Task Description:** | | | | |
| **Step 1:** | | **Step 3:** | | |
| **Step 2:** | | **Step 4:** | | |
| **Estimated Duration of Task:** | | **Date JHA Conducted/Updated:** | | |
| **Biological Hazards** | | | | |
| **Biological Hazard:** | **Characteristics:** | **Concentration:** | | **Exposure Potential During Task:** |
|  | Infectious/pathogenic/ toxic | N/A | | High    Medium  Low |
| **Chemical Hazards** | | | | |
| **Chemical Hazard:** | **Characteristics:** | | **State/Concentration:** | **Exposure Potential During Task:** |
|  | Flammable/ignitable    Corrosive  Poison/acutely toxic  Air-/water-reactive  Carcinogenic  Explosive/shock Sensitive  Volatile | | Gas/vapor  Solid  Liquid | High    Medium  Low |
| Chemical Evaluation Sheets or SDSs are located in Attachment 2 for known chemical hazards. | | | | |
| **Physical Hazards** | | | | |
| **Physical Hazard (Check Applicable Hazards):** | | | | **Exposure Potential During Task** |
| Overhead    Below grade    Slip/trip/fall    Burn    Puncture    Cut    Splash    Noise    Heat stress    Cold stress    Excavation/trench    Electrocution    Traffic\*\*    Other | | | | High    Medium  Low |
| Ionizing radiation    Alpha particles    Beta particles   Gamma rays    Neutrons | | | | High    Medium  Low |
| Confined space (hazards associated with PRCS entries will be addressed in a separate document) | | | | High    Medium  Low    N/A |
| **Control Measures** | | | | |
| **Engineering Controls:** (list engineering controls necessary for this task) | | | | |
| **Work Practices:** (describe those work practices specific to this task [e.g., medical monitoring]) | | | | |
| **PPE:** (list PPE necessary for this task) | | | | |
| **Workers/Site Role:** | **PPE Level:** | **Modifications Allowed:** | | |
|  |  |  | | |

*\*\* If traffic is identified as a hazard, provide a Traffic Control Plan (place holder provided on next page).*

**[Insert Traffic Control Plan if applicable.] D. PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Designated levels of personal protection for the applicable tasks and work areas are based on JHAs.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Designated Levels of Personal Protection** | | | | | | |
| **Task Number:** | **Work Area (e.g., EZ, CRZ, other):** | **Job Function:** | **Level of Protection:** | | | |
|  |  |  | A | B | C | D |
|  |  |  | A | B | C | D |
|  |  |  | A | B | C | D |
|  |  |  | A | B | C | D |
|  |  |  | A | B | C | D |

|  |  |
| --- | --- |
| **Levels of PPE** | |
| **Level of Protection:** | **Specific Equipment (e.g., Clothing Materials, Respirator Type, Cartridges):** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

|  |
| --- |
| **Criteria for Upgrading or Downgrading Levels of Personal Protection:** |
| All decisions to downgrade PPE must be accompanied by air monitoring results. The Safety Officer must be advised of onsite decisions to downgrade. See Section H, Environmental and Personal Monitoring. |

**E. SITE CONTROL**

|  |
| --- |
| **Work Practices and Control Measures** |
| **Procedures for Restricting Access to the exclusion zone (EZ) and contamination reduction zone (CRZ):** |
|  |
| **Work Shift Schedules:** |
|  |
| **Other Safe Work Practices:** |
| The buddy system must be maintained on a line-of-sight basis |

|  |  |  |
| --- | --- | --- |
| **Communications Equipment** | | |
| **Communications Equipment:** | **Location/Person:** | **Channels and Phone Numbers:** |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |
| --- | --- |
| **Standard Hand Signals** | |
| **Hand Signal:** | **Meaning:** |
| Thumbs up | I’m OK/I agree |
| Thumbs down | I don’t agree |
| Hands across throat | Out of air/trouble breathing |
| Grab hand/arm | Come with me |
| Hands on head | I need assistance |

**[Insert site map(s)/sketch(es) showing the site location and site layout including work zones, topography, and site size.]**

**F. EMERGENCY RESPONSE PLAN**

|  |
| --- |
| **Emergency Response Procedures** |
| **Accident Reporting/Investigation:** |
| Accidents involving injuries requiring professional medical attention must be reported within one hour of occurrence to the Safety Officer.  -First aid cases not involving professional medical attention must be reported within 24 hours after occurrence.  -Incidents involving property damage must be reported within 24 hours of occurrence.  -After hours illnesses must be reported within 24 hours (i.e. flu, rashes)  (See the Injury, Illness, and Exposure Reporting chapter) |
| **Additional Emergency Response Procedures:** |
|  |
| **Procedures for Response Critique and Follow-up:** |
| Conduct hot wash with all responding agencies. |

**Emergency Equipment/Facilities and Emergency Contact Information**

List emergency equipment to be maintained at the site along with emergency contact and alerting information.

|  |  |  |
| --- | --- | --- |
| **Safety Equipment** | | |
| **Equipment:** | **Number of Items:** | **Location On Site:** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |
| --- | --- |
| **Emergency Contact Information** | |
| **Emergency Assistance Organization:** | **Telephone Number:** |
|  |  |
|  |  |
|  |  |
|  |  |

|  |  |  |
| --- | --- | --- |
| **Emergency Alerting and Response Procedures** | | |
| **Emergency Equipment:** | **Alerting Noise:** | **Meaning:** |
|  |  |  |
|  |  |  |
| At least two emergency exit routes must be identified and communicated (verbal and/or written) to workers on site. See site map or sketch.  Audio alarms must be perceptible above ambient noise. If visible (light) alarms are used, they must be distinguishable from ambient light levels and sources.  Upon discovering an emergency situation, personnel notify the Safety Officer, who will evaluate available information and initiate an appropriate response. Site workers are alerted to emergencies through the use of the onsite evacuation signal/alarm. | | |
| **Emergency Recognition and Prevention** | | |
| Daily safety meetings must be held at the start of each shift to ensure that all personnel understand site conditions and operating procedures, to ensure that PPE is being used correctly, and to address worker health and safety concerns. | | |

**[Insert map showing evacuation routes, safe distances, and places of refuge.]**

**[Insert map to hospital]**

**G. DECONTAMINATION**

|  |  |
| --- | --- |
| **Decontamination Procedures** | |
| **Personnel (Level A, B, C) Decontamination Procedures:** | |
| These are the minimum acceptable requirements for a wet decon:  Station 1: Equipment Drop  Deposit equipment used on site (tools, sampling devices and monitoring instruments, radios, etc.) on plastic drop cloths. These items must be decontaminated or discarded as waste prior to removal from the exclusion zone.  Station 2: Outer Boot and Outer Glove Wash and Rinse  Scrub outer boots, outer gloves and/or splash suit with decontamination solution or detergent water. Rinse off using water.  Station 3: Outer Boot and Glove Removal  Remove outer boots (if disposable) and gloves. If outer boots are disposable, deposit in container with plastic liner. If non-disposable, store in a clean dry place.  Station 4: Tank Change (Level B)  If person leaves exclusion zone to change air tank, this is the last step in the decontamination procedure. Air tank is exchanged, new outer gloves and boot covers donned, joints taped, and person returns to hot zone.  Station 5: Outer Garment Removal  If applicable, remove SCBA backpack and remain on air as long as possible. Remove chemical resistant outer garments and deposit in container lined with plastic. Decontaminate or dispose of splash suits as necessary.  Station 6: Respiratory Protection Removal  Remove hardhat, face piece, and if applicable, deposit SCBA on a clean surface. Air-purifying respirator cartridges will be discarded as appropriate. Wash and rinse respirator at least daily. Wipe off and store respiratory gear in a clean, dry location.  Station 7: Inner Glove Removal  Remove inner gloves. Deposit in container for disposal.  Station 8: Field Wash  Thoroughly wash hands and face with soap and water. Shower as soon as possible.  If it is determined that emergency response personnel or persons involved with the incident need further medical attention, transportation must be arranged by the OSC. | |
| **Emergency Decontamination Procedures:** | |
|  | |
| **Heavy Equipment Decontamination Procedures:** | |
|  | |
| **Sampling Equipment Decontamination Procedures:** | |
| Decontamination of equipment must be performed by using portable wash tubs, sprayers, and disposable scrub brushes. Any equipment that cannot be thoroughly decontaminated along with the contents from the wash tub must be considered hazardous and must be stored and disposed of appropriately. Monitoring Equipment If monitoring equipment becomes contaminated, it may require special cleaning techniques. Methods for decontamination must be obtained from the equipment’s manufacturer. Hand Tools Hand tools must be cleaned as appropriate by chemical or physical means. At the end of the incident, if the hand tools cannot be decontaminated, they must be disposed of as hazardous waste. | |
| **Decontamination Waste Disposal Procedures:** | |
| Decontamination waste must be segregated, characterized, and disposed of with similar appropriate waste streams generated by the response. | |
| **Decontamination Equipment:** | **Location Stored On Site:** |
| Plastic sheeting | Table, chairs, and tent (if possible) |
| Kiddie swimming pools | 5-gallon pails and scrub brushes |
| Pump (hand or electric) | Water sprayer |
| Decontamination solution (determined in SDS) | Sorbent materials (towels, boom, kitty litter) |

**H. ENVIRONMENTAL AND PERSONAL MONITORING**

|  |  |  |  |
| --- | --- | --- | --- |
| **AIR MONITORING SUMMARY** (common site air requirements) | | | |
| **Instrument Type:** | **Contaminant:** | **Frequency:** | **Action Level/Comments:** |
| Combustible Gas Indicator | Explosive/ flammable atmospheres | As needed | <10% proceed with caution; >10% evacuate area and re-evaluate |
| Oxygen Meter | Oxygen | Confined space work | < 19.5% or > 23.5% oxygen, evacuate area and re-evaluate |
| Photo ionization detector/flame ionization detector | Organic vapors and gases, CO | Periodic during container handling | Unidentified contaminants  Background units - Level D  > Background – TBD - Level C  > TBD - Level B |
| Detector Tubes | Benzene, cyanide,  total hydrocarbons, etc.  (Tubes are chemical-specific and used for verification of photo ionization detector readings.) | As necessary to further evaluate photo ionization detector/flame ionization detector readings | TBD on site according to PEL |
| Other: MiniRam | Dust particulates  Respirable dust | During dusty conditions resulting from site operations | > 7.5 mg/m3, Level C  > 2.5 mg/m3 respirable dust, Level C |
| **AIR MONITORING SUMMARY** (site-specific air requirements) | | | |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |
| --- |
| **Personal Monitoring Procedures** |
| **Personal Monitoring Instruments and Procedures:** |
|  |
| **Heat/Cold Stress Monitoring:** |
| BP cuff and thermometer to monitor vital signs. Follow Physical Stress Management Program chapter guidelines. |
| **Monitoring Instrument Maintenance and Calibration Methods:** |
| Per manufacturer’s recommendations |
| **Storage of Monitoring Records:** |
| Keep records in a secure location |

**I. PERMIT-REQUIRED CONFINED SPACE (PRCS) ENTRY PROCEDURES (IF APPLICABLE) (See Attachment #3)**

|  |  |  |
| --- | --- | --- |
| **Permit-Required Confined Spaces** | | |
| **Type of PRCS:** | **Location On Site:** | **Comments:** |
|  |  |  |
|  |  |  |

**J. SPILL PREVENTION AND RESPONSE**

|  |  |
| --- | --- |
| **Spill Prevention Controls and Response Procedures** | |
| **Potential for Spills and Prevention Controls:** | |
|  | |
| **Procedures for Handling Drums and Other Containers:** | |
|  | |
| **Post-Spill Response Procedures:** | |
|  | |
| **Spill Response Materials:** | **Location Stored On Site:** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| **Disposal Procedures:** | |
|  | |

**K. TRAINING**

|  |  |  |  |
| --- | --- | --- | --- |
| **Emergency Responder Core Training** | | | |
| **Health and Safety** | | | |
| Medical surveillance | | First aid (29 CFR 1910.120) | |
| Fit test | | Radiation safety (EPA Order 1440) | |
| 40-hour HAZWOPER training (165.5 or equivalent) or 24-hour HAZWOPER if appropriate | | Radiation safety refresher (EPA Order 1440) | |
| 8-hour HAZWOPER refresher | | Radiation safety/badge training (4 hours) | |
| 8-hour HAZWOPER supervisor | | Defensive driving (EPA Order 1440.2) | |
| Bloodborne pathogens (1910.1030) | | Asbestos awareness (EPA Order 1440) | |
| CPR | |  | |
| **Site-Specific Training** | |
|  | |
|  | |
|  | |

|  |  |  |
| --- | --- | --- |
| **Pre-Entry Briefings (Attendees at each site safety briefing must sign an attendance sheet)** | | |
| **Date and Time:** | **Topic Addressed:** | **Led By:** |
| Daily | Daily Safety Message (see sign in sheets) | Safety Officer |
|  |  |  |
|  |  |  |

**L. MEDICAL SURVEILLANCE**

**Medical Requirements:** OSCs must be in a Medical Surveillance Program in accordance with 29 CFR 1910 and 29 CFR 1926. A medical examination must have been completed within a 12-month period prior to on-site activity and repeated annually.   
  
**Episodic Examinations**   
Following any accidental or suspected uncontrolled exposure to site contaminants, employees should be scheduled for a special medical examination. In the event of such suspected exposure, an injury report must be completed and sent to the SHEMP Manager (or another designated person) within 24 hours.   
  
**Fit Test Requirements:** OSCs entering any area requiring the use or potential use of any respirator must have had a quantitative fit test with a fit factor of 1,000, administered in accordance with OSHA 29 CFR 1910.134 or ANSI within the last 12 months.

**Thermoluminescent Dosimeter (TLD) Requirements:** OSCs must be in a TLD program. TLDs must be worn at all oil and hazardous waste sites and all sites where there is a potential for exposure to ionizing radiation   
  
For additional information see the Medical Surveillance Program chapter for medical surveillance requirements.

**M. EMPLOYEE EMERGENCY NOTIFICATION PROCEDURES**

Emergency notification procedures that do not already exist in the emergency response plan in the HASP are provided below.

|  |  |  |
| --- | --- | --- |
| **Emergency Notification Procedures** | | |
| **Employer:** | **Contacts:** | **Telephone Numbers:** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**N. EPA SOPs**

EPA has developed SOPs for specific work tasks and emergency responder’s health and safety. SOPs containing specific information regarding tasks anticipated at removal sites are linked below.

<http://www.epaosc.org/_HealthSafetyManual/manual-index.htm>

<http://intranet.epa.gov/oeca/oc/campd/inspector/health/1440_1.pdf>

<http://intranet.epa.gov/ohr/rmpolicy/ads/orders/1440_2.pdf>

<http://intranet.epa.gov/shemd/content/epa_1460_1_508.pdf>

<http://intranet.epa.gov/shemd/content/epa_4800_1.pdf>

<http://intranet.epa.gov/oswer/workforce/health_and_security/hsSopDoc.pdf>

**ATTACHMENT #1**

Site JHAs

**ATTACHMENT #2**

SDS

**ATTACHMENT #3**

**Confined Space Entry Permit**

Date and time issued: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date and time expires: \_\_\_\_\_\_\_\_

Job site/Space I.D.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Job supervisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Equipment to be worked on: \_\_\_\_\_\_\_\_\_\_ Work to be performed: \_\_\_\_\_\_\_\_\_

Stand-by personnel: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Atmospheric checks: Time \_\_\_\_\_\_\_\_

Oxygen \_\_\_\_\_\_\_\_%

Explosive \_\_\_\_\_\_\_\_% L.F.L.

Toxic \_\_\_\_\_\_\_\_PPM

2. Tester's signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Source isolation (No Entry): N/A Yes No

Pumps or lines blinded, ( ) ( ) ( )

disconnected, or blocked ( ) ( ) ( )

4. Ventilation modification: N/A Yes No

Mechanical ( ) ( ) ( )

Natural ventilation only ( ) ( ) ( )

5. Atmospheric check after isolation and ventilation:

Oxygen \_\_\_\_\_\_\_\_\_\_% > 19.5 %

Explosive \_\_\_\_\_\_\_% L.F.L < 10 %

Toxic \_\_\_\_\_\_\_\_\_\_\_PPM < 10 PPM H(2)S

Time: \_\_\_\_\_\_\_\_\_\_\_\_ Testers signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Communication procedures: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. Rescue procedures: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Entry, standby, and back up persons: Yes No

Successfully completed required training? ( ) ( )

Is it current? ( ) ( )

9. Equipment: N/A Yes No

Direct reading gas monitor tested: ( ) ( ) ( )

Safety harnesses and lifelines

for entry and standby persons: ( ) ( ) ( )

Hoisting equipment: ( ) ( ) ( )

Powered communications: ( ) ( ) ( )

SCBA's for entry and standby

persons: ( ) ( ) ( )

Protective clothing: ( ) ( ) ( )

All electric equipment listed

Class I, Division I, Group D

and non-sparking tools: ( ) ( ) ( )

10. Periodic atmospheric tests:

Oxygen \_\_\_\_% Time \_\_\_\_ Oxygen \_\_\_\_% Time \_\_\_\_

Oxygen \_\_\_\_% Time \_\_\_\_ Oxygen \_\_\_\_% Time \_\_\_\_

Explosive \_\_\_\_% Time \_\_\_\_ Explosive \_\_\_\_% Time \_\_\_\_

Explosive \_\_\_\_% Time \_\_\_\_ Explosive \_\_\_\_% Time \_\_\_\_

Toxic \_\_\_\_% Time \_\_\_\_ Toxic \_\_\_\_% Time \_\_\_\_

Toxic \_\_\_\_% Time \_\_\_\_ Toxic \_\_\_\_% Time \_\_\_\_

We have reviewed the work authorized by this permit and the

information contained here-in. Written instructions and safety

procedures have been received and are understood. Entry cannot be

approved if any squares are marked in the "No" column. This permit

is not valid unless all appropriate items are completed.

Permit prepared by: (Supervisor)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Approved by: (Unit Supervisor)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reviewed by (Confined Space Operations Personnel):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (printed name) (signature)

This permit must be kept at the job site. Return the job site copy to the Safety Office following job completion.

**HASP Sign-off**

By signing below, I am indicating that I have read and acknowledge the contents of the HASP prepared for the XXX Site.

|  |  |  |
| --- | --- | --- |
| **Name:** | **Signature:** | **Date:** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |