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MANUAL REVISION INSTRUCTIONS (MRI) Date Prepared: April 26, 1995

TO: DEBRA A ISOM H6-08 Document No.: WHC-CM-7-7 Level: 3 Title: Environmental Investigations and Site Characterization Release No.: 94 Page 1 of 1

- 0176 INSTRUCTIONS 1. Remove and/or insert indicated sections into manual as shown below. 2. Update the Revision Record at the front of the manual. 3. Route a copy of the implementation notice to all users of this copy of the manual. 4. Sign this form and return it to Unclassified Document Control.

Table with 7 columns: Section Numbers and Titles, Pages, REV, Date, Pages, REV, Date. Rows include Table of Contents, EII 1.1, Hazardous Waste Site Entry Requirements, Rev 3, Change 1, and EII 6.10, Decommissioning Wells, Rev 3, Change 1 (Page 3).

If you have any questions about this release contact: Jean Feaster, 372-2340



Approved for Distribution: [Signature] UDC Initials Date: 5-1-95 I have entered this release into the manual per the above instructions. Signature: Debra A. Isom Date

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IMPLEMENTATION NOTICE

WHC-CM-7-7, *Environmental Investigations and Site Characterization Manual*

Release No. 94

Section: EII 1.1, Hazardous Waste Site Entry Requirements, Rev 3, Change 1

Change 1 reflects use of an equivalent form to the Hazardous Waste Worker Status Report. In addition, the procedure has been reformatted to current CM standards and the designated reviewing organization section added.

Section: EII 6.10, Decommissioning Wells, Rev 3, Change 1

Change 1 eliminates work orders and additional cost in surveying requirements.

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ICA = instruction change authorization, (P) = permanent (blue sheet), (T) = one time (goldenrod sheet)

Hazardous Waste Site Entry Requirements**1.0 PURPOSE**

This Environmental Investigations Instruction (EII) provides the minimum requirements for obtaining entry into a hazardous waste site. These requirements are in accordance with WHC-CM-4-3, Volume 4.

2.0 SCOPE

This EII applies to all personnel (e.g., Westinghouse Hanford Company [WHC], Kaiser Engineers Hanford Company [KEH], Pacific Northwest Laboratory [PNL], contractors, visitors) who enter hazardous waste sites. This EII relates specifically to RCRA and CERCLA field activities but may be used for other investigations and programs if applicable.

3.0 RESPONSIBILITIES**4.1 Cognizant Manager**

The cognizant manager is responsible for:

1. Assigning only qualified/trained personnel to work on hazardous waste sites.
2. Implementing this EII for all personnel.
3. Verifying that all training and medical requirements, as specified by the applicable site-specific health and safety plan and Radiation Work Permit (RWP), are current by completing a Hazardous Waste Worker Status Report *or equivalent form*, (form A-6000-984, available on Siteforms *may be used*), in accordance with the following instructions:
 - a. Each field shall be filled in with an expiration date, unless the training is an initial-training-only requirement (example - 24-hour on-the-job training. The date of completion will be entered for these initial-training-only courses.)
 - b. Determinations of expiration dates shall be made following the course outline (e.g., yearly retrain, bi-yearly retrain).
 - c. Fields for which training is not complete or not applicable shall be left blank or filled in as "N/A" (not applicable).
 - d. The "First Expiration Date" field will be used as a single date designating the nearest expiration date of a basic training or medical requirement.
 - e. The "First Expiration Date" field shall be left blank if any of the basic training has not been completed or is delinquent.
 - f. Bioassay requirements and additional training requirements are not included in the "First Expiration Date" field. Additional training and bioassay requirements will be reviewed on an as-required basis.

Hazardous Waste Site Entry Requirements

4. Updating Hazardous Waste Worker Status Reports for personnel who have reported work restrictions or changes in their medical status.

3.2 Field Team Leader

The Field Team Leader (FTL) is responsible for:

1. Field team operations and safety.
2. Ensuring that all personnel who enter the hazardous waste site have evidence of training and medical clearance by reviewing the Hazardous Waste Worker Status Reports or have documentation obtained through the Facility Compliance group for visiting regulatory personnel.

3.3 Health And Safety Officer

The Health and Safety Officer is responsible for assigning site control responsibilities during preparation of site safety plans.

3.4 Site Safety Officer

The Site Safety Officer (SSO) has primary responsibility for safety at the hazardous waste site and is also responsible for ensuring that all personnel who enter the hazardous waste site have evidence of training and medical clearance by reviewing the Hazardous Waste Worker Status Reports or have documentation obtained through the Facility Compliance group for visiting regulatory personnel.

3.5 Environmental Training

Environmental Training is responsible for providing the required training to hazardous waste worker personnel in all aspects of hazardous waste site operations, as required in 29 CFR 1910.120(e)(1 through 4). Other contractors are responsible for providing equivalent training for their employees, as required in 29 CFR 1910.120(e)(1 through 4).

3.6 Training Records Group

The Training Records group is responsible for maintaining a soft reporting system for employees to indicate training that has been completed; this system will be the auditable record of training completed. All contractors will maintain a similar auditable record system for their employees.

3.7 Hazardous Waste Site Worker

Personnel assigned or scheduled by the cognizant manager or designee to work in a hazardous waste site are responsible for the following:

1. Reporting for the necessary company-scheduled physical and participating in the company medical surveillance program.

Hazardous Waste Site Entry Requirements

2. Notifying their manager of any work restrictions and/or current medications.
3. Obtaining a documented mask fit.
4. Completing the mandatory formal training required by this EII.
5. Before entering a waste site, being properly dressed for the particular hazard (e.g., radiological, chemical) commensurate with the site-specific health and safety plan and RWP.

4.0 REQUIREMENTS**4.1 Medical Clearance And Surveillance****4.1.1 WHC and other onsite contractors**

Before entering a hazardous waste site, all personnel shall participate in a hazardous waste worker medical surveillance program. Evidence of medical clearance will be included on the Hazardous Waste Worker Status Report. Each contractor will maintain an auditable record of required medical clearance and bioassays.

4.1.2 Offsite contractors and subcontractors

All offsite contracting personnel shall be medically cleared and on a medical surveillance program with their employer. Offsite contractors shall provide evidence of medical clearance by completing the Hazardous Waste Worker Status Report for personnel requiring access to a hazardous waste site and shall maintain an auditable record of this clearance.

4.2 Training

1. The level of training provided shall be consistent with the employee's job function and responsibilities, as determined by the cognizant manager, and must meet the minimum level of training required by the site-specific health and safety plan.
2. Personnel may be designated for additional training such as 8-hour supervisor training, first aid training, or asbestos training, as outlined in the site-specific health and safety plan.
3. Onsite emergency response personnel, as designated by the site-specific health and safety plan, shall be trained in SCBA (self-contained breathing apparatus) and CPR/first aid.

4.3 Visiting Personnel At Hazardous Waste Sites

Visiting personnel at hazardous waste sites will vary in their involvement in field activities. The following requirements apply to all visiting personnel, regardless of what contractor or subcontractor they represent.

Hazardous Waste Site Entry Requirements**4.3.1 Visiting personnel outside a hazardous waste site**

No formalized training is required for personnel outside a hazardous waste site. If the person must enter a radiation zone in order to reach the perimeter of the hazardous waste site, the Radiation Worker Training requirement applies, and the person shall be escorted by a field team member. The site-specific health and safety plan and RWP will dictate the clothing and respiratory protection requirements (if any) and any supplemental dosimetry that might be required.

4.3.2 Visiting personnel within a hazardous waste site

All visiting personnel entering a hazardous waste site shall provide the completed Hazardous Waste Worker Status Report to the FTL and/or SSO. In addition, the visitor must read the site-specific health and safety plan and attend all mandatory safety meetings. A bioassay may be required on a case-by-case basis as required by the RWP. A visitor who has not completed the field experience training must be escorted by a Hazardous Waste Worker Supervisor.

If an equipment malfunction occurs inside a hazardous waste site where maintenance personnel require emergency access to avoid costly downtime, the following requirements apply:

1. Hazardous waste worker entry requirements will be waived if the zone can be secured to ensure that the maintenance personnel will not be exposed or potentially exposed to chemical, radiological, or industrial safety hazards (e.g., shutting down all equipment, sealing the borehole).
2. Personnel requesting emergency access SHALL NOT be exempt from Radiation Worker Training and related medical clearance requirements if the zone is in a designated radiological area.
3. Personnel requesting emergency access shall be accompanied by the FTL or SSO at all times while in the hazardous waste site.
4. This emergency access must be authorized by the cognizant Health and Safety Officer.

4.4 Site Control

Access to a hazardous waste site is controlled by the FTL and/or SSO, as specified in the site-specific health and safety plan. All personnel who enter the confines of the hazardous waste site must show evidence of training and medical clearance on a completed Hazardous Waste Worker Status Report and coordinate the visit through one of these representatives. All personnel must be briefed on the site-specific health and safety plan, and the briefing must be documented on a course completion roster for course #000057 (Facility Orientation). In addition, all personnel must sign in the SSO's logbook and be logged in daily by the SSO when entering the control zone.

Hazardous Waste Site Entry Requirements

5.0 RECORDS

Record processing and disposition is in accordance with the following table:

NAME, Filing Unit Title or Description	Record Type*	Retention Period	Disposal Authority	Cut-off and Retirement Instructions
Facility Orientation course completion roster	R	Review annually	GRS 1.18	Transmit record copy to Training Records; copy maintained by FTL and/or SSO.
Employee medical status reports	NR	Until no longer needed	Nonrecord	Maintained by cognizant WHC manager until information is outdated or no longer needed.
WHC Hazardous Waste Worker Status Report(s)	NR	Until no longer needed	Nonrecord	Maintained by cognizant WHC manager and made available for site entry when needed. Discard when no longer needed.

* R = Other Record Material; NR = Nonrecord

6.0 DESIGNATED REVIEWING ORGANIZATION

The organization listed below reviews all but minor changes to this document. Comments from other reviewers are welcome, but are resolved at the process owner's option.

Designated Reviewing Organization CMPOC

Hanford Technical Services, process owner *STS/HTS*

7.0 FORM

Hazardous Waste Worker Status Report (A-6000-984, Siteform)

8.0 REFERENCES

29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response."

WHC-CM-4-3, *Industrial Safety Manual*, Volume 4, *Health and Safety Programs for Hazardous Waste Operations*.

9.0 BIBLIOGRAPHY

DOE 5480.10, "Contractor Industrial Hygiene Program."

Letter, C. J. Geier, WHC, to E. A. Bracken, RL, "Hanford Site Entry Protocol for Regulatory Agency Personnel," 91568630, September 17, 1991.

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Decommissioning Wells

4.2.3 Pressure grouting

Seal material (bentonite, bentonite/cement, neat cement slurries) shall be placed by pressure grouting to within approximately 3 feet of ground surface.

Pressure grouting means to apply pressure to force the grout into the formation through the perforations in the casing. The FTL/DE will determine packer placement and acceptable grouting pressure based on field conditions. For example, the formation may take grout and not attain pressure buildup beyond hydrostatic pressure.

4.2.4 Surface protection

Remove surface pads and posts (if present). Cut off any remaining casing at least 3 feet (0.91m) below ground surface. Top off well with grout, allowing grout to spread out in excavation to create a grout cap. Scribe well identification number into the grout cap or use brass survey marker if available. Backfill the excavation with native soil and compact.

4.3 Location of Decommissioned Wells

Document location of all decommissioned groundwater wells to enable return if required. Use existing surveys for *horizontal and vertical coordinates*, if available. Horizontal coordinates are to be reported in Hanford plant coordinates and/or Washington State (south zone-NAD83) Lambert coordinates for each decommissioned well. *A global positioning system (GPS) may be used to obtain latitude, longitude, and altitude coordinates if no other data is available.*

4.4 Waste Management and Minimization

1. Minimize production of solid waste.
2. Dispose of nonradioactive nonhazardous solid waste in accordance with WHC-CM-7-5, Section 7.3.
3. Manage waste generated from well decommissioning in accordance with EII 4.2 or EII 4.3 of this manual as applicable.
4. Well casing is to be perforated as required and grouted in place unless casing removal has been identified as a requirement for remediation in the evaluation process of EII 6.6.

4.5 Control of Work

Control of work refers to the administrative authority for beginning, planning, scheduling, performing, documenting and evaluating work activities. Requirements for control of work applicable to activities covered by this EII are specified in Section 6.0.

4.6 Equipment

1. Equipment required for decommissioning of wells are those downhole tools normally found associated with drilling industry rigs.

Decommissioning Wells

2. Equipment used for this activity does not require calibration.

4.7 Material

Material used in abandonment activities shall meet the minimum requirements of WAC 173-160-415.

4.8 Training and Qualification

1. Training and qualification shall be documented and records shall be maintained as required by EII 1.7.
2. All decommissioning work is to be done by, or under the direct supervision of, an individual possessing a valid Washington State Water Well Construction Operator License.

4.9 Safety Requirements

Appropriate safety documentation shall be prepared and approved before activities may begin. All personnel shall be trained in the applicable safety requirements.

All activities associated with hazardous waste sites and Radiologically Controlled Areas (RCA) must comply with the applicable site-specific safety requirements for access control; monitoring of radiation and environmental hazards; and personal protective equipment.

Those requirements may include a Hazardous Work Permit, site-specific safety plan and Radiation Work Permits (RWP).

4.10 Evaluation Checklist

An evaluation checklist package for wells requiring abandonment must be prepared according to EII 6.6 and approved before starting decommissioning activities.

4.11 Equipment Decontamination

Decontamination/cleaning of drill rig and down-hole equipment is not required when decommissioning groundwater supply wells or oil and gas wells that are not located in hazardous or potentially hazardous areas. Decontamination/cleaning shall meet the minimum requirements of EII 5.4.

4.12 Start Card

1. The Notice of Intent to begin well construction, "start card" must be filed with the Washington Start Department of Ecology (Ecology) in accordance with WAC-173-160-055, "Well Construction Notification (start card). Start cards are to be filed with the Kennewick Office of Ecology at least 72 hours before commencement of work.