

## ADMINISTRATIVE DOCUMENT PROCESSING AND APPROVAL

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Document Action: *(check one)*     New     Revision     Cancellation

**RESPONSIBLE CONTACTS:**

Name	Phone
Author: Jason T. Stewart	509-303-8646
Manager: Randy Hermann	509-373-0478


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Document Revision Summary:  
 NOTE: Provide a brief description of summary of the changes for the document listed  
 Reformatted the document to be consistent with the other D4ES Health and Safety Plans.

**REVIEWERS:**

Name <i>(print first and last)</i>	Organization

Author:  <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <u>Jason T. Stewart</u>  <i>Print First and Last Name</i> </div> <div style="width: 45%;"> <i>Stewart, Jason T</i>  <i>Signature / Date</i> </div> </div> <p style="font-size: small; margin-top: -10px;">Digitally signed by Stewart, Jason T Date: 2025.08.26 13:49:30 -07'00'</p>	RELEASE/ISSUE  <div style="border: 2px solid red; padding: 10px; text-align: center;"> <p><b>DATE:</b> <b>Oct 23, 2025</b></p>  </div>
Responsible Manager:  <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <u>Randy Hermann</u>  <i>Print First and Last Name</i> </div> <div style="width: 45%;"> <i>Hermann, Randy M</i>  <i>Signature / Date</i> </div> </div> <p style="font-size: small; margin-top: -10px;">Digitally signed by Hermann, Randy M Date: 2025.08.26 14:03:23 -07'00'</p>	
Other: Enter Title/Position  N/A <hr/> <i>Print First and Last Name</i>	

## ^Information Clearance

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**From:** Stewart, Jason T  
**Sent:** Tuesday, October 21, 2025 10:43 AM  
**To:** ^Information Clearance  
**Subject:** RE: ATTN: CPCC-01126, Rev.1 Ready to Review

**Categories:** Dorcas

I approve as presented. Thank-you! Does it now get sent to Randy Hermann for his review and approval?

Thank-you,

**Jason T. Stewart**  
*CPCCo D4ES OS&IH Manager*  
Cell: 509.303.8646  
[Jason\\_T\\_Stewart@rl.gov](mailto:Jason_T_Stewart@rl.gov)

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**From:** ^Information Clearance <InformationClearance@rl.gov>  
**Sent:** Tuesday, October 21, 2025 8:29 AM  
**To:** Stewart, Jason T <jason\_t\_stewart@rl.gov>  
**Subject:** RE: ATTN: CPCC-01126, Rev.1 Ready to Review

Hello Jason,

You're the owner/author of this workflow and the helpdesk can assist you with a reset. However, to facilitate this workflow, you could send us your email approval instead.

Thank you,

*Kosgei Dorcas J*  
Information Clearance  
OSC Technical Solutions, llc  
Critical Subcontractor to HMIS  
509.366.6589.



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**From:** Stewart, Jason T <[jason\\_t\\_stewart@rl.gov](mailto:jason_t_stewart@rl.gov)>  
**Sent:** Tuesday, October 21, 2025 7:50 AM  
**To:** ^Information Clearance <[InformationClearance@rl.gov](mailto:InformationClearance@rl.gov)>  
**Subject:** FW: ATTN: CPCC-01126, Rev.1 Ready to Review

Kosgei,

This has sat stagnant now for over a month. Is there a special password for IDMS? Its not allowing me to use my Hanford password or my pin. Assuming that I'm the one who is the Manager to approve and not Randy Hermann. Its not very clear.

Thank-you,

**Jason T. Stewart**

**CPCCo D4ES OS&IH Manager**

Cell: 509.303.8646

[Jason\\_T\\_Stewart@rl.gov](mailto:Jason_T_Stewart@rl.gov)

---

**From:** Hermann, Randy M <[randy\\_m\\_hermann@rl.gov](mailto:randy_m_hermann@rl.gov)>

**Sent:** Monday, October 20, 2025 12:31 PM

**To:** Stewart, Jason T <[jason\\_t\\_stewart@rl.gov](mailto:jason_t_stewart@rl.gov)>

**Subject:** RE: ATTN: CPCC-01126, Rev.1 Ready to Review

I have no assignments in IDMS. Are you sure I was added to the work flow?

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**From:** Stewart, Jason T <[jason\\_t\\_stewart@rl.gov](mailto:jason_t_stewart@rl.gov)>

**Sent:** Monday, September 22, 2025 11:58 AM

**To:** Hermann, Randy M <[randy\\_m\\_hermann@rl.gov](mailto:randy_m_hermann@rl.gov)>

**Subject:** FW: ATTN: CPCC-01126, Rev.1 Ready to Review

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Thank-you,

**Jason T. Stewart**

**CPCCo D4ES OS&IH Manager**

Cell: 509.303.8646

[Jason\\_T\\_Stewart@rl.gov](mailto:Jason_T_Stewart@rl.gov)

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**From:** ^Information Clearance <[InformationClearance@rl.gov](mailto:InformationClearance@rl.gov)>  
**Sent:** Monday, September 15, 2025 3:44 PM  
**To:** Hermann, Randy M <[randy\\_m\\_hermann@rl.gov](mailto:randy_m_hermann@rl.gov)>; Conlon, Benjamin A <[benjamin\\_a\\_conlon@rl.gov](mailto:benjamin_a_conlon@rl.gov)>; McKenna, Mark <[mark\\_mckenna@rl.gov](mailto:mark_mckenna@rl.gov)>; Jamerson, JR <[jr\\_jamerson@rl.gov](mailto:jr_jamerson@rl.gov)>; Stewart, Jason T <[jason\\_t\\_stewart@rl.gov](mailto:jason_t_stewart@rl.gov)>  
**Cc:** ^Information Clearance <[InformationClearance@rl.gov](mailto:InformationClearance@rl.gov)>  
**Subject:** ATTN: CPCC-01126, Rev.1 Ready to Review

Good Afternoon,

An IDMS clearance workflow has been started for your public release approval of CPCC-01126, Rev. 1.

The manager will need to approve first in IDMS Personal and Assignments, before the workflow will route to the reviewers, and then to the owner/author to review for any comment incorporation and to “send on” to clearance for completion.

The IDMS electronic clearance record link will be returned to the owner. Also, please make sure your IDMS e-mail notifications are turned on by following the instructions on page 4 of 20 of the attached *IDMS Clearance Workflow User Guide* so that you receive an e-mail once the workflow is with you for review. Once you receive an e-mail, please follow the corresponding attached instruction to complete your task.

Please let me know if you have any questions.

**\*Author: Please note you can send updated files that address reviewer requested edits to ^Information Clearance for replacement in the IDMS Clearance workflow.**

Thank you,

***Kosgei Dorcas J***

Information Clearance

509.366.6589 (cell)

Critical Subcontractor to HMIS



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**From:** [RMAPAdmin@rl.gov](mailto:RMAPAdmin@rl.gov) <[RMAPAdmin@rl.gov](mailto:RMAPAdmin@rl.gov)>  
**Sent:** Monday, September 15, 2025 2:17 PM  
**To:** ^Information Clearance <[InformationClearance@rl.gov](mailto:InformationClearance@rl.gov)>  
**Subject:** CPCC-01126 Ready to Review

CPCC-01126 has been submitted in CDM and is ready for your review.

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<b>H. Information Owner/Author/Requestor</b> <u>Stewart, Jason T Approved via E-Mail.</u> (Print and Sign)	<b>Responsible Manager</b> <u>Hermann, Randy M Approved. IDMS data file att.</u> (Print and Sign)
Approval by Direct Report to President (Speech/Articles Only) _____ (Print and Sign)	
<b>I. Reviewers</b>	<b>Signature</b>
Yes Print General Counsel <input checked="" type="checkbox"/> <u>Conlon, Ben A</u> Office of External Affairs <input checked="" type="checkbox"/> <u>McKenna, Mark</u> DOE <input type="checkbox"/> Other <input checked="" type="checkbox"/> <u>Jamerson, J.R.</u> Other <input checked="" type="checkbox"/> Other <input type="checkbox"/>	Signature <u>Approved. IDMS data file att.</u> <u>Approved. IDMS data file att.</u> _____ <u>Approved. IDMS data file att.</u> _____ _____
Public Y/N (If N, complete J) <input checked="" type="radio"/> Y / N <input checked="" type="radio"/> Y / N Y / N <input checked="" type="radio"/> Y / N Y / N Y / N	
<b>J. Comments</b>	<b>Information Clearance Approval</b> <div style="border: 1px solid green; padding: 5px; text-align: center; color: green; font-weight: bold;">       APPROVED  <small>By Dorcas Kosgei at 3:08 pm, Oct 21, 2025</small> </div> <div style="border: 1px solid blue; padding: 5px; text-align: center; color: blue; font-weight: bold; margin-top: 5px;">       Approved for Public Release;        Further Dissemination Unlimited     </div>

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  performer-id="388353335" username="h3839633">
    <comments>Please approve CPCC-01126, Rev.1, for public release. Thank you, Dorcas Kosgei,
    Information Clearance. </comments>
  </task>
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  </task>
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    <comments>No comment Jason Stewart, Owner's email approval on 10/21/2025 is in workflow att.
    Dorcas Kosgei, Information Clearance</comments>
  </task>
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  authentication="true"> </task>
</workflow>
```

# 300 Area Health and Safety Plan

Prepared for the U.S. Department of Energy  
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy  
under Contract 89303320DEM000030



**P.O. Box 1464**  
**Richland, Washington 99352**

# 300 Area Health and Safety Plan

J. Stewart

Central Plateau Cleanup Company LLC (CPCCo)

Date Published  
September 2025

Prepared for the U.S. Department of Energy  
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy  
under Contract 89303320DEM000030

 **CPCCo**  
Central Plateau  
Cleanup Company  
**P.O. Box 1464**  
**Richland, Washington 99352**

**APPROVED**

*By Dorcas Kosgei at 3:09 pm, Oct 21, 2025*

Release Approval

Date

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**Contents**

**1.0 INTRODUCTION.....1**

**2.0 PURPOSE.....1**

    2.1 HAZWOPER APPLICABILITY TO D4 END STATES 300A .....2

**3.0 SAFETY AND HEALTH HAZARD ANALYSIS .....2**

**4.0 HAZWOPER TRAINING REQUIREMENTS.....3**

    4.1 RADIOLOGICAL WORKER TRAINING .....4

**5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE) .....4**

**6.0 MEDICAL SURVEILLANCE .....4**

**7.0 MONITORING/SAMPLING .....5**

**8.0 SITE CONTROL.....5**

**9.0 DECONTAMINATION .....5**

**10.0 EMERGENCY RESPONSE/SPILL RESPONSE .....5**

    10.1 DIFFERENTIAL PRESSURE (DP) ALARM .....6

**11.0 CONFINED SPACES .....6**

**12.0 WASTE MATERIALS.....6**

**13.0 FIRE SAFETY AND COMBUSTIBLE CONTROLS.....7**

**14.0 REFERENCES.....7**

**Appendix**

**13.0 APPENDIX A: D4 END STATES 300 AREA GENERAL HAZARDS ..... 10**

## 1.0 INTRODUCTION

The D4 End States 300 Area (D4ES-300A) Project is a project developed to cover task-specific activities located in the 300 Area of the Hanford Site as defined in the Central Plateau Cleanup Contract with the U.S. Department of Energy (DOE). Within the D4ES-300A Project scope is the disposition of the 324 Building, which is one of the last remaining buildings in the Hanford Site's 300 Area. The 300 Area produced fuel rods and supported research and development. During demolition preparations in 2010, highly radioactive soil was discovered beneath the 324 Building's B Cell, placing demolition on hold. The 324 Building is composed of several facilities to support the Radiochemical Engineering Complex (REC). The REC was designed to conduct high-level radiological research to support fuel rod production. B Cell is one of five cells located inside of the REC (Airlock and A, B, C, and D Cells).

The project scope covers work performed in the 300 Area but also includes the utilization of a mockup of the B Cell and the Airlock for equipment performance validation, training, and proficiency development for operations planned for the 324 Building. The mockup will be maintained and operated throughout the project to support refresher training, contingency development, and response planning, and provide spare equipment during operations for any unplanned occurrences or challenges. The mockup is located at 2325 Horn Rapids Road in Richland, Washington, on the east side of the Framatome facility.

The primary focus of the D4ES-300A Project is the deactivation of the 324 Building.

## 2.0 PURPOSE

The primary purpose of this document is to identify how D4ES-300A meets the required elements of a site-specific health and safety plan (HASP) as required by 29 CFR 1910.120(b)(4)(ii), "Hazardous Waste Operations and Emergency Response" (HAZWOPER).

A HASP is a component of the Written Safety and Health Program that is required by the Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.120. Written Safety and Health Program requirements are met by Central Plateau Cleanup Company's (CPCCo's) company-level Health and Safety Program as described in CPCC-MP-SH-32219, *10 CFR 851 CPCCo Worker Safety and Health Program Description*.

The required elements of a HASP (per 29 CFR 1910.120(b)(4)(ii)) are as follows:

- A safety and health hazard analysis identifying hazards and their mitigations
- Employee training assignments
- Personal protective equipment (PPE) to be used by employees for tasks and operations
- Medical surveillance requirements
- Frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques
- Site control measures
- Decontamination procedures
- Emergency response plan, including necessary PPE and other equipment

- Confined space entry procedures
- Spill containment measures.

This document (hereinafter referred to as the HASP) identifies how D4ES-300A meets each of the above-required elements.

## **2.1 HAZWOPER APPLICABILITY TO D4 END STATES 300A**

HAZWOPER activities at D4ES-300A are those deactivation and decommissioning (D&D) and maintenance work activities that have the potential of exposing personnel (via contact and/or inhalation) to the radiological and chemical contaminants stemming from the process systems of 324 Building. Processes that involve the removal, characterization, and treatment of waste are considered HAZWOPER. This would include the characterization and remediation of hazardous waste sites (e.g., landfills, burial grounds, trenches, and contaminated soils). This HASP applies to each phase of D4ES 300A HAZWOPER activities.

Non-HAZWOPER work activities are those that do not occur at a hazardous waste site and do not potentially expose personnel (via contact and/or inhalation) to hazardous contaminants. Thus, those activities that are conducted in offices, warehouses, and shops are not considered HAZWOPER.

D4ES-300A does not consider the following activities as HAZWOPER work:

- Shipment of materials (supplies, chemicals, etc.) that are delivered to project sites or facilities where there is no access made into radiological and/or chemical contamination areas
- Construction activities that involve excavating through areas void of radiological and/or chemical contaminants
- Construction/remodeling activities that do not expose personnel to the radiological and/or chemical contaminants of the hazardous waste site
- Maintenance activities conducted on non-waste systems (e.g., heating, ventilation, air conditioning [HVAC], ventilation, lighting) that do not expose personnel to the radiological and/or chemical contaminants of the hazardous waste site
- Demolition of buildings or structures that are void of radiological and/or chemical contaminants associated with their process systems

## **3.0 SAFETY AND HEALTH HAZARD ANALYSIS**

All D4ES-300 Area field activities are conducted via either a work package, a procedure, or a statement of work (SOW). Work package documents are developed in accordance with CPCC-PRO-WKM-12115, *Work Management*. Procedures are developed in accordance with CPCC-PRO-MS-589, *Central Plateau Cleanup Company Procedures*. SOWs are developed in accordance with CPCC-PRO-AC-40480, *Acquisition Planning*, and CPCC-PRO-SH-40078, *Contractor Safety Process*. Each of these processes requires a hazard analysis.

Project hazards are identified and evaluated per the Job Hazard Analysis (JHA) Process dictated in CPCC-PRO-WKM-079, *Job Hazard Analysis*. Typical JHAs that the Project utilizes include General Industrial Hazard Analyses (GHAs); Craft-Specific Hazard Analyses (CHAs); and Job Safety Analyses (JSAs).

D4ES-300A documents their hazard assessment of industrial hygiene hazards via Industrial Hygiene Exposure Assessments. These hazard assessments are generated following the process outlined in CPCC-PRO-SH-17916, *Industrial Hygiene Exposure Assessments*. Controls from these exposure assessments are incorporated into JHAs, work packages, and procedures as appropriate.

D4ES-300A documents their radiological hazard assessments on Radiological Hazard Screening Forms and ALARA Management Worksheets (AMWs). This process is outlined in various procedures: CPCC-PRO-RP-40109, *Radiological Work Planning*, and CPCC-PRO-RP-54262, *Sentinel Radiological Work Permits*. Controls for these identified exposures are incorporated into procedures/work documents and radiological work permits (RWPs).

D4ES-300A documents are screened for compliance with facility safety basis requirements per CPCC-PRO-NS-062, *Unreviewed Safety Question Process*.

Appendix A contains a list of general hazards and their mitigations that can be encountered at D4ES-300 Area. These hazards have been evaluated by Health & Safety and are considered "General" in nature meaning they are easily recognizable and mitigated by employee's fundamental knowledge and training. General hazards are not typically included in work packages or procedures unless particular emphasis is needed.

#### **4.0 HAZWOPER TRAINING REQUIREMENTS**

Workers and supervisors who regularly engage in the activity of hazardous substance removal, or other hazardous waste related activities that may expose personnel to hazardous substances or health hazards, are required to have 40-hour training and 3 days of documented field experience. Health and safety professionals with onsite responsibilities for health and safety guidance also need this training.

Work activities conducted for D4ES-300A that require personnel to wear respiratory protection for the radiological and/or chemical contaminants of the hazardous waste site require 40-hour HAZWOPER training.

Twenty-four hour HAZWOPER training and 1 day of documented field experience are required for workers who occasionally enter the hazardous waste activity area for a specific limited task and are unlikely to be exposed to hazardous substances greater than occupational exposure limits. The areas where these workers will work must be characterized/evaluated to ensure no health hazards exist, no respiratory protection is required due to the radiological/chemical contaminants of the process system(s), and no possibility exists for an emergency arising that would require them to don respiratory protection in response to the emergency event.

It is also required for onsite managers and supervisors who are responsible for directing workers that are 40- or 24-hour HAZWOPER trained to complete the 8-hour manager/supervisor HAZWOPER training.

Visitors are not required to have HAZWOPER training. D4ES-300A requires that visitors must be escorted by D4ES-300A personnel while on site. Visitors may be escorted into areas where anti-contamination clothing is required. Visitors without 40-hour HAZWOPER training may not be escorted into areas where respiratory protection is required. Visitors shall be briefed on the general hazards listed in Appendix A.

HAZWOPER training needs are based on potential exposures to hazardous waste. Industrial Hygiene is responsible for evaluating work activities and determining HAZWOPER training needs.

#### **4.1 Radiological Worker Training**

DOE has developed core radiological safety training materials providing information that is broadly applicable to all DOE activities, but that do not address site-specific information. These materials have been augmented with site-specific information that is applicable to work conducted by CPCCo and its subcontractors and will be used to provide radiological safety training to employees. Guidance procedures have been developed to determine the appropriate level of training necessary to meet applicable requirements.

The D4ES-300A Project has 324 Building specific training that is required for entry after receiving the Rad Worker I and II Training. Required training includes 324 Contamination Area (CA)/High Contamination Area (HCA) Training and may also require Airlock Entrant and DOFF Attendant Training; 324 CA/HCA Training is a one-time training, while the Airlock Entrant/DOFF Attendant and DOFF Attendant Training is biennial and annual unless proficiency is proven by multiple entries. Required 324 Building specific training is determined by job position/title.

#### **5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

D4ES-300A evaluates safety and health hazards via the JHA process dictated in CPCC-PRO-WKM-079, *Job Hazard Analysis*. This includes the determination of required PPE to safely perform work activities. PPE requirements are incorporated in hazard analyses (GHA, CHA, JHA), work packages, and procedures as appropriate.

General PPE requirements are outlined in CPCC-STD-SH-40518, *Personal Protection*, and in program-specific procedures such as those relating to respiratory protection, fall protection, hearing protection, radioactive contamination, and electrical safety. Minimum PPE requirements for D4ES-300A work activities are identified in D4ES-300A's general hazards (see Appendix A).

#### **6.0 MEDICAL SURVEILLANCE**

The D4ES-300A Project uses the Employee Job Task Analysis (EJTA) system to identify medical surveillance requirements for employees based on job requirements, hazards, exposures, and overall risk associated with assigned work scope. This process is detailed in CPCC-PRO-SH-52755, *Employee Job Task Analysis*.

Medical surveillance requirements identified by Industrial Hygiene in the Industrial Hygiene Exposure Assessments as required by CPCC-PRO-SH-17916, *Industrial Hygiene Exposure Assessments*, are verified and assigned to the employee's EJTA.

Work activities conducted under an RWP within a Radiological Buffer Area (RBA), Radioactive Material Area (RMA), Contamination Area (CA), High Contamination Area (HCA), and/or Airborne Radioactivity Area (ARA) at D4ES-300A will require a Hanford Site standard dosimeter and bioassay examination(s). Personnel are required to electronically check in via the Radiological Access Control (RAC) system prior to conducting work or accessing an area that requires an RWP.

## 7.0 MONITORING/SAMPLING

The frequency and types of air monitoring and sampling that is completed for D4ES-300A is detailed in industrial hygiene exposure assessments and industrial hygiene sampling plans. Industrial hygiene monitoring, reporting, and records management are dictated by CPCC-PRO-SH-409, *Industrial Hygiene Monitoring, Reporting and Records Management*.

Radiological monitoring performed by D4ES-300A is identified in radiation protection technical evaluations and includes contamination, dose rates, and air sampling surveys. The performance of radiological monitoring and/or sampling is conducted in accordance with instrument-specific implementing procedures. Records generated from the radiological monitoring program are managed in accordance with CPCC-PRO-IRM-10588, *Records Management Processes*.

## 8.0 Site Control

The D4ES-300A Project evaluates safety and health hazards via the JHA process dictated in CPCC-PRO-WKM-079. This includes the determination of required site control tactics, which limits access to potential exposures. Site control requirements (e.g., use of postings and boundaries) are incorporated in the Project's Hazard Analysis (JHAs, GHAs, CHAs), work packages, and procedures, as appropriate.

- All personnel who perform D4ES-300A work activities are required to read and sign the current revision of this HASP.
- All personnel who perform D4ES-300A work activities are required to complete the 324-computer based training (CBT) facility emergency hazards identification checklist (FEHIC).
- Visitors are required to check in with the shift office and receive a briefing which includes a review of D4ES-300A's general hazards identified in Appendix A.
- When exiting an RBA established for contamination control, personnel must have a hand and foot survey. Hand-carried items must be surveyed by a radiological control technician (RCT).

## 9.0 DECONTAMINATION

The D4ES-300A Project evaluates safety and health hazards via the JHA process in accordance with CPCC-PRO-WKM-079, *Job Hazard Analysis*, including determination of decontamination requirements. Decontamination requirements are incorporated into work packages and procedures as appropriate.

## 10.0 EMERGENCY RESPONSE/SPILL RESPONSE

General purpose trailers/facilities at D4ES-300A utilize Facility Emergency Response Information Boards to communicate emergency response information to facility occupants. Facility Emergency Response Information Boards are maintained per CPCC-STD-EM-54889, *Emergency Preparedness Program Requirements*.

Hazardous facilities at D4ES-300A are listed in CPCC-EM-67961, *D4 End States Building Emergency Plan for 324 Buildings & Associated Facilities*.

All work teams are required to have a means of communication in accordance with the Building Emergency Plan.

To report upset events that exhibit an emergency condition (e.g., fire, spills, life-threatening injuries), it is recommended that personnel make the emergency call to 911 and then notify the Shift Operations Manager (SOM). The SOM can initiate facility protective actions, request facility medical responders, and will make a follow up call to the Hanford Patrol Operations Center. The D4ES-300A SOM can be contacted at (509)373-1355. If contacting the Hanford Patrol Operations Center or Hanford Fire Department (Emergency Medical Services), call 911 from a land line or (509)373-0911 from a cell phone.

It should be noted that the D4ES-300A Shift Office is not staffed 24 hours a day, 7 days a week. It is staffed Monday through Thursday during normal work hours, at a minimum, and will be staffed whenever high-hazard work activities are occurring. If the work to be performed is not considered routine, posing more than minimal hazards, or could generate an Alert, Site Area Emergency, or General Emergency, or could affect a facility Emergency Action Level (EAL), then the work is determined to be high hazard.

Radiological/chemical hazard event response is governed by CPCC-PRO-EM-40325, *Radiological/Chemical Hazard Event Response*.

Reporting, investigating, and managing health, safety, and property/vehicle events are governed by CPCC-PRO-SH-077, *Reporting, Investigating, and Managing Health and Safety Events*, CPCC-PRO-EM-058, *Event Initial Investigation and Critique Meeting Process*, and CPCC-PRO-EM-060, *Reporting Occurrences and Processing Operations Information*.

### **10.1 Differential Pressure (dP) Alarm**

The REC is equipped with low dP alarms to indicate ventilation problems, in particular, a possible low flow or pressurization that could cause a release of airborne contamination. If the dP alarm alarms in the REC cells or REC gallery, respond as follows:

- Notify others in the immediate area.
- Immediately leave the area and go to the step-off pad.
- Notify the Shift Office Manager (SOM) or designee.

### **11.0 CONFINED SPACES**

All confined space work that is completed at D4ES-300A is done in accordance with DOE-0360, *Hanford Site Confined Space Procedure (HSCSP)*. Industrial Hygiene maintains an inventory of D4ES-300A confined spaces. Confined space controls that are needed to perform work safely are incorporated into the Project's Hazard Analysis (JHAs, GHAs, CHAs), work packages, and procedures as appropriate.

### **12.0 WASTE MATERIALS**

There are many restrictions on the waste materials generated at D4ES-300 Area. Radioactive, hazardous, mixed, and transuranic waste must all be properly segregated, packaged, labeled, and shipped according to stringent regulatory requirements. Discarding waste materials in an unapproved manner may result in a violation of environmental regulations, which may have a severe impact on the facility, as well as the contractor and the individual.

Waste is always packaged and disposed of per a Waste Planning Checklist as per CPCC-PRO-WM-52692, *Waste Planning, Packaging and Labeling*. The Waste Planning Checklist is completed as part of the work planning process and is incorporated into work packages and procedures as appropriate.

### 13.0 Fire Safety and Combustible Controls

CPCCo's Fire Protection Program is governed by CPCC-STD-FP-40404, *Fire Protection Program*. D4ES-300A fire protection documents include Fire Hazard Analyses, Facility Fire Protection Assessments, and Hanford Fire Marshal Permits. Fire Hazard Analyses and Facility Fire Protection Assessments are conducted per CPCC-PRO-FP-40420, *Fire Protection Analyses*. Fire Marshal Permits are issued per CPCC-PRO-FP-40422, *Fire Marshal Permit Interfaces*. Combustible control and other fire protection control requirements are incorporated into the Project's Hazard Analysis (JHAs, GHAs, CHAs), work packages, and procedures as appropriate.

- Two means of egress/escape must be available to workers in all areas in which they work. The two means of egress/escape should be remotely located from each other. Do not store cylinders in stairwells, exit passageways, or any other place where they will interfere with personnel egress or traffic flow.
- Only approved containers and tanks shall be used for storage and handling of flammable and combustible liquids (NFPA 30, *Flammable and Combustible Liquids Code*).
- All flammable/combustible liquids must be stored at an approved location (e.g., flammable liquid storage cabinet).
- Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in a listed disposal container, and disposed of daily.
- During an evacuation, employees shall proceed to the assigned staging area using the nearest evacuation exits.

All personnel entering the 324 Facility are required to hang their 324 accountability badge on the Accountability Board.

1. 324 Accountability badges must contain individual's first and last name, and their Hanford Identification (HID) number.
2. Name and HID number must be legible and visible.
3. Badges must be hung in a manner such that the name and HID number are visible and legible so in case of an event/emergency, a photograph can be taken of the board and accountability can be completed.
4. Ensure badge is removed from the Accountability Board when exiting the 324 Facility.

### 14.0 REFERENCES

29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response," *Code of Federal Regulations*.

ANSI/ISEA-105, *American National Standard for Hand Protection Classification*, American National Standards Institute/International Safety Equipment Association.

CPCC-MP-SH-32219, *10 CFR 851 CPCCo Worker Safety and Health Program Description*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-AC-40480, *Acquisition Planning*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-EM-058, *Event Initial Investigation and Critique Meeting Process*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-EM-060, *Reporting Occurrences and Processing Operations Information*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-EM-40325, *Radiological/Chemical Hazard Event Response*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-EM-67961, *D4 End States Building Emergency Plan for 324 Buildings & Associated Facilities*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-FP-40420, *Fire Protection Analysis*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-FP-40422, *Fire Marshal Permit Interfaces*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-IRM-10588, *Records Management Processes*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-MS-589, *Central Plateau Cleanup Company Procedures*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-NS-062, *Unreviewed Safety Question Process*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-RP-40109, *Radiological Work Planning*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-RP-54262, *Sentinel Radiological Work Permits*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-SH-077, *Reporting, Investigating, and Managing Health and Safety Events*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-SH-121, *Heat Stress Control*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-SH-409, *Industrial Hygiene Monitoring, Reporting and Records Management*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-SH-17916, *Industrial Hygiene Exposure Assessments*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-SH-28034, *Adverse Weather*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-SH-40078, *Contractor Safety Process*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-SH-52755, *Employee Job Task Analysis*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-WKM-079, *Job Hazard Analysis*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-WKM-12115, *Work Management*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-PRO-WM-52692, *Waste Planning, Packaging and Labeling*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-STD-EM-54889, *Emergency Preparedness Program Requirements*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-STD-FP-40404, *Fire Protection Program*, Central Plateau Cleanup Company, Richland, Washington.

CPCC-STD-SH-40518, *Personal Protection*, Central Plateau Cleanup Company, Richland, Washington.

DOE-0346, *Hanford Site Fall Protection Program (HSFPP)*, U.S. Department of Energy, Richland, Washington.

DOE-0355, *Hanford Standardized HAZWOPER Training Program Description*, U.S. Department of Energy, Richland, Washington.

DOE-0359, *Hanford Site Electrical Safety Program*, U.S. Department of Energy, Richland, Washington.

DOE-0360, *Hanford Site Confined Space Procedure (HSCSP)*, U.S. Department of Energy, Richland, Washington.

D12-12-001, Policy Clarification: *Do HAZWOPER Requirements (including the training requirements in 1910.120(e)(1)(i)) Apply to DOE Waste Sites with Only Radioactive Wastes*, Occupational Safety and Health Administration, Washington, D.C.

NFPA 30, *Flammable and Combustible Liquids Code*, National Fire Protection Association, Quincy, Massachusetts.

**13.0 APPENDIX A: D4 END STATES 300 AREA GENERAL HAZARDS**

Hazard/Activity	Mitigation	Control
<p>PPE for performing work (general work areas/ demolition areas/ construction areas/ contamination areas)</p>	<p>PPE</p>	<p>Minimum PPE that is required includes:</p> <ul style="list-style-type: none"> <li>• Long pants.</li> <li>• Shirts with sleeves that cover the shoulders.</li> <li>• Safety glasses with side protection when performing work (any work outside of an office setting or anything beyond administrative work inside of an office setting). Safety glasses with side protection are required in demolition/contamination areas (see Eye Injury section below).</li> <li>• Substantial footwear is the minimum requirement for all field work (any work outside of an office setting or anything beyond administrative work inside of an office setting). Substantial footwear must be made of sturdy construction (leather or equally firm material) that fully encloses the foot with a semi-rigid non-slip (slip-resistant) sole that has a well-defined traction pattern. Athletic shoes are not considered substantial footwear.</li> <li>• Protective footwear, also known as safety-toe footwear, is made of sturdy construction (leather or equally firm material) that fully encloses the foot with a semi-rigid non-slip (slip-resistant) sole that has a well-defined traction pattern and has a protective (metal or composite) toe is required in Demolition/Construction Areas.</li> <li>• High-visibility shirt, vest, or jacket is required in demolition/construction areas and for work activities taking place near roadways. If anti-contamination clothing is required high-visibility shirt, vest or jacket is not required. Reflective high-visibility clothing is required during hours of darkness.</li> </ul>
<p>Transitioning to and from radiological work areas</p>	<p>Allowance for wearing modesty shorts and shirts without sleeves</p>	<p>Personnel are allowed to wear modesty shorts and shirts without sleeves when transitioning to and from radiological work areas that require anti-contamination clothing.</p> <p>This allowance does not preclude personnel from wearing a highly visible shirt or vest.</p> <p>Personnel are not allowed to perform field work while in only modesty clothing.</p>
<p>Eye injury</p>	<p>Safety glasses</p>	<ul style="list-style-type: none"> <li>• Safety glasses with side protection are required when performing any/all work excluding administrative office work, or any documented exclusion areas by the OS&amp;IH organization.</li> <li>• Safety glasses worn indoors must have clear lenses or lenses rated for indoor/outdoor use. Dark tinted safety lenses designed to provide brightness and UV protection from the sun are not allowed for indoor use or low light conditions.</li> </ul>

Hazard/Activity	Mitigation	Control
Dust from windy conditions (≥20 mph)	Dust goggles	Dust goggles are required for all outdoor activities whenever winds are sustained at 20 mph or greater.
Heat stress	<ul style="list-style-type: none"> <li>• Work/rest regimens</li> <li>• Buddy system</li> <li>• Provide fluids/water</li> </ul>	<p>Industrial Hygiene should be contacted to determine work activity level and clothing adjustment factors to establish work/rest regimens. Field work supervision is responsible for implementing work/rest regimens in accordance with CPCC-PRO-SH-121, <i>Heat Stress Control</i>.</p> <p>Heat stress conditions should be considered whenever personnel are wearing:</p> <ul style="list-style-type: none"> <li>• Level D PPE and predicted ambient temperatures are ≥85°F outdoors and ≥90°F indoors</li> <li>• When personnel will be wearing additional layers of clothing (e.g., Quantumwear®, Tyvek®, or OREX®)</li> <li>• Ambient temperatures are ≥70°F; and when personnel are wearing impermeable clothing (e.g., Quantumwear-C) at any temperature.</li> </ul> <p>The Buddy System shall be used and fluids/water provided whenever heat stress conditions exist. Rest breaks can be taken in the work area while personnel are wearing anti-contamination clothing provided; they are removed from heat stress conditions while they are resting.</p> <p>Physiological monitoring shall be conducted in accordance with CPCC-PRO-SH-121, <i>Heat Stress Control</i>.</p>
Cold stress	Appropriate cold weather clothing	<p>Personnel shall dress appropriately for working in cold conditions to avoid cold-related illnesses or injury. Warming stations (temporary shelters or vehicle) shall be provided and use encouraged when cold stress conditions exist.</p> <ul style="list-style-type: none"> <li>• Cold stress conditions should be considered whenever wind chill temperatures are ≤20°F.</li> <li>• When temperatures are at approximately 10°F wind chill implement the buddy system, reduced work rate, and fluids/water provided, whenever cold stress conditions exist.</li> <li>• When temperatures are at approximately 0°F wind chill, don mittens/gloves.</li> </ul>
Illumination	Appropriate lighting	<p>When there are deficits in illumination and lighting is not permanently provided, temporary power and lighting equipment shall be utilized to safely perform work activities. Anytime there is no established emergency lighting, flashlights must be used or staged for available use. IH should be contacted if assistance is needed in determining illumination requirements.</p>

Hazard/Activity	Mitigation	Control
Abrasion, laceration, cut, or puncture hazards to the hands	Cut/puncture-resistant gloves	<p>Cut/puncture-resistant gloves are required whenever abrasion, laceration, cut, or puncture hazards are associated with the task.</p> <p>ANSI/ISEA-105, <i>American National Standard for Hand Protection Classification</i>, or BS EN388 criteria shall be used when assessing cut-resistant qualities of a glove. Cut-resistant gloves shall have a minimum rating of 4 unless otherwise evaluated and approved/prescribed by the OS&amp;IH organization.</p> <p>Deenergize power tools (remove battery/unplug) before making adjustments, changing accessories, transporting, or storing tools.</p>
Scrapes to the hands	Work gloves	<p>Work gloves are required when there is a potential for scrapes to the hands. Work gloves as a minimum are required for material handling activities such as handling piping, conduit, wood, etc.; moving furniture, boxes, etc.; and delivering supplies, equipment, etc.</p>
Foot injury when arriving to work and transitioning between trailers	General footwear	<p>The minimum requirement for footwear when arriving at work is general footwear.</p> <p>General footwear provides minimal foot protection and is only authorized for work activities that do not have specific foot hazards identified, such as administrative tasks. Areas where general footwear is permitted include administrative areas and improved walking surfaces such as parking lots and sidewalks. General footwear must fully enclose the foot.</p> <p>Company-provided traction devices must be used with general footwear during adverse weather conditions of snow or ice.</p> <p><b>NOTE:</b> Footwear that DOES NOT meet this requirement includes moccasins, flip-flops, slippers, sandals, high-heeled shoes (2 in. or greater and heel thickness must match sole thickness), and open-toed shoes.</p>
Work environments	Substantial footwear	<p>Substantial footwear is the minimum required for all work environments, excluding those area described in the general footwear section. Substantial footwear is made of sturdy construction (leather or equally firm material) that fully encloses the foot and has a semi-rigid non-slip sole and well-defined traction pattern. Athletic shoes are not considered substantial footwear.</p>

Hazard/Activity	Mitigation	Control
Foot injury due to falling or rolling objects	Safety-rated footwear/protective footwear	<p><b>Protective footwear</b> (safety-toe footwear) is required when there is a potential danger of foot injury due to the hazards of falling or rolling objects during the routine handling of hard-edged/solid objects near or above waist level that weigh more than 15 pounds and have the potential for falling onto feet.</p> <p>Protective footwear, also known as safety-toe footwear, is made of sturdy construction (leather or equally firm material) that fully encloses the foot with a semi-rigid non-slip (slip-resistant) sole that has a well-defined traction pattern and has a protective (metal or composite) toe. Protective footwear is required in Demolition/Construction Work Areas.</p>
Injury due to slip, trip, or fall during adverse weather conditions	Footwear traction devices	<p>The following footwear shall be utilized at a minimum where snow or ice is present on walking-working surfaces:</p> <ul style="list-style-type: none"> <li>• Traction devices must be used over general footwear.</li> <li>• Substantial or protective footwear without the use of traction devices is acceptable to access office areas or work locations.</li> <li>• Traction devices are required over all footwear while performing work in areas that have not been cleared of snow or ice.</li> </ul>
High noise	Personnel shall wear hearing protection (earplugs or muffs) with an NRR equal to or greater than 23 dBs as a minimum	<p>Personnel shall wear hearing protection when working in high noise (85 dBs or greater) work areas. Hearing protection is required for all workers within 25 ft of activities involving pneumatic tool operations, power equipment operations, air compressors, drills, hammer drills, saws, grinders, etc. (unless IH has evaluated and set a new distance per a work activity/location).</p> <p>Personnel are required to wear hearing protection when noise levels are suspected of being high, until evaluated by Industrial Hygiene.</p> <p>Personnel should request evaluation by IH when unevaluated noisy conditions are encountered.</p>
Biological hazards	Personnel will stay aware of their environment and watch out for snakes, insects, rodents, etc. that might impact their safety	Evaluation and the safe decontamination and/or cleanup of biological material (excreta, carcasses, nests, etc.) will be performed under the project work package for biological hazard decontamination.

Hazard/Activity	Mitigation	Control
Chemical hazards associated with chemical product use	Safe use of chemical products	<ul style="list-style-type: none"> <li>• Chemical products will be used in well-ventilated areas or staged downwind from workers if used outdoors.</li> <li>• IH will be contacted prior to using chemical products, especially in a confined/enclosed work area.</li> <li>• Chemical products shall be used in such a way that skin and eye contact is avoided.                             <ul style="list-style-type: none"> <li>– Minimum PPE for chemical product use is latex/nitrile gloves and safety glasses with side protection.</li> <li>– Chemical goggles with a face shield are required if a spray/splash hazard exists (not required when full-face or PAPR hood respiratory protection equipment is utilized).</li> </ul> </li> <li>• Chemical products shall be sprayed in a controlled manner and personnel shall avoid overspray.</li> <li>• Chemicals shall not be sprayed in the direction of respirator inlets.</li> <li>• Workers may upgrade to organic vapor (OV) cartridges to preclude odors when respirators are worn. (This upgrade must be specified in an approved respiratory protection form.)</li> </ul>
Head injury due to falling or flying objects, or electrical shock or burns	Protective head gear (hard hat)	Personnel shall wear hard hats when working in areas where there is a potential for head injury due to falling or flying objects, or electrical shock or burns.
Fall hazards	Work from protected work platforms	<p>An FPWP is required when conducting work where employees are exposed to an unprotected fall hazard of 4 ft or more (general industry), 6 ft or more (construction), any height above dangerous equipment, or as specified within DOE-0346.</p> <p>Work from approved scaffolds or rolling ladders do NOT require an FPWP. Contact Industrial Safety to initiate an FPWP when required.</p>
Potential crush hazard associated with material handling activities	Personnel will watch their position in association with their work so they do not position themselves where they can be caught between and/or pinched.	<p>The FWS will ensure that work areas are controlled using boundaries or spotters as needed to ensure personnel are kept away from material handling activities and the swing/travel pathways of equipment.</p> <p>Personnel will not enter areas where they could be caught between a moving object and a stationary barrier. Equipment will be placed in a safe configuration when personnel need to access equipment work areas.</p> <p>Personnel are not allowed under a suspended load.</p> <p>Equipment operators will walk-down travel paths and work area to identify impacts and obstructions.</p> <p>Clear travel paths will be established prior to placing equipment in motion.</p>

Hazard/Activity	Mitigation	Control
Overhead electrical hazard	Implement overhead electrical controls when working near overhead power lines	<p>Work activities conducted in proximity to overhead power lines shall implement controls in accordance with DOE-0359, <i>Hanford Site Electrical Safety Program</i>.</p> <p>Work is considered beyond skill-based for the following:</p> <ul style="list-style-type: none"> <li>• Potential to be working within 20 ft of energized lines.</li> <li>• Within the specific Limited Approach Boundary (LAB).</li> </ul>
Ergonomic/lifting hazards/vibration	Proper lifting/breaks/job rotation	<p>Personnel are restricted to a lifting limit of greater than 55 pounds. Mechanical lifting devices shall be used as much as possible to prevent injury to personnel. Mechanical lifting devices or multiple person lifts are required for loads greater than 55 pounds and for awkward loads.</p> <p>Personnel shall take breaks as needed and rotate tasks to prevent fatigue and strain injuries.</p> <p>Knee pads or kneeling pads will be used for work activities requiring prolonged kneeling.</p> <p>Utilize tools with anti-vibration technology; anti-vibration gloves and worker job rotation shall be utilized to reduce hand/arm vibration.</p>
Vehicle/heavy equipment	Controlled work areas/high-visibility clothing	<p>The field work supervisor will ensure that areas are controlled using boundaries as needed to ensure personnel are kept away from material handling activities and the swing/travel pathways of equipment. Equipment will be placed in a safe configuration when personnel need to access equipment work areas.</p> <p>High-visibility shirt, vest, or jacket (anti-contamination clothing is considered equivalent) is required when working in areas with vehicle and/or heavy equipment traffic.</p>

Hazard/Activity	Mitigation	Control
Adverse weather	<ul style="list-style-type: none"> <li>• Suspension of work activities during adverse weather conditions</li> </ul>	<p>The field work supervisor will monitor the weather conditions throughout the performance of work in accordance with procedure CPCC-PRO-SH-28034, <i>Adverse Weather</i>.</p> <ul style="list-style-type: none"> <li>• The OS&amp;IH organization shall evaluate work activities for the safe continuation of work when sustained winds exceed 15 mph.</li> <li>• Work on roofs and elevated surfaces (e.g., scaffolds, ladders) will be suspended at wind speeds of 25 mph and/or gusts to 35 mph.</li> <li>• Crane and other material lifting/hoisting equipment activities will be suspended at wind speeds of 25 mph and/or gusts to 35 mph.</li> <li>• Elevated outdoor work will be suspended when lightning is detected within a 50-mile radius.</li> <li>• All outdoor work will be suspended when lightning is detected within a 10-mile radius.</li> </ul>
Bomb threat/suspicious object/written threat letter	Notify the BED and Hanford Patrol	<p>A bomb threat, suspicious object, or written threat letter is to be reported immediately to the Building Warden and Hanford Patrol by calling 911 or (509) 373-0911 (if using a cell phone).</p> <p>For reporting a bomb threat/explosive device, workers should ensure they are beyond 300 ft from the suspect object before calling 911 or (509) 373-0911.</p> <p>A written threat letter is to be handled as little as possible.</p>
Hostage situation/armed intruder	Notify the SOM/BED and Hanford Patrol	A hostage situation or armed intruder is to be reported immediately to the BED and to Hanford Patrol by calling 911 or (509)373-0911 (if using a cell phone).
Range fire	Immediately leave the area and contact the supervisor. Notify the SOM/BED and Hanford Fire Department.	In the event of a wild land/range fire, employees shall immediately contact their appropriate supervisor to report accountability and receive further direction. Follow the direction provided by the SOM/BED or Incident Command Department.

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ARA	=	Airborne Radioactivity Area	IH	=	Industrial Hygiene
BED	=	Building Emergency Director	NRR	=	noise reduction rating
SOM	=	Shift Office Manager	OS&IH	=	Occupational Safety and Industrial Hygiene
FPWP	=	Fall Protection Work Permit	PPE	=	personal protective equipment
FWS	=	field work supervisor			
HCA	=	High Contamination Area			