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Standards

PRC-STD-OP-54266

Hazardous Energy Control

Revision 0, Change 0

Published: 07/03/2018

Effective: 07/03/2018

Program: Worker Protection Programs

Topic: Operations

Technical Authority: Mar, Phillip

Functional Manager: Ferguson, Randy

Use Type: Administrative



- 100 K Facility :
Screening Determination Performed: (Screening/Determination Performed (no issues))
0160-080
Screener: Williams, James
- 324 Facility :
Screening Determination Performed: (Screening/Determination Performed (no issues))
324-18-107
Screener: Enghusen, Mark
- Canister Storage Building/Interim Storage Area :
Screening Determination Performed: (Screening/Determination Performed (no issues))
CSB-18-044
Screener: Covey, Lori
- Central Plateau Surveillance and Maintenance :
Screening Determination Performed: (Screening/Determination Performed (no issues))
S&M-18-052
Screener: Hicks, Jarrod
- Plutonium Finishing Plant :
Screening Determination Performed: (Screening/Determination Performed (no issues))
PFP 021-2018 R0
Screener: King, Jeffry
- Solid Waste Operations Complex :
Screening Determination Performed: (Screening/Determination Performed (no issues))
SWOC-18-072
Screener: Jacobs, Orvil
- Transportation :
Excluded from USQ
Exclusion Reason:
N/A per Section 1.3 - < 1 A2
- Waste Encapsulation Storage Facility :
Screening Determination Performed: (Screening/Determination Performed (no issues))
WESF-18-116
Screener: Covey, Lori

JHA: Administrative

Periodic Review Due Date:07/03/2023

Rev. 0, Chg. 0

Change Summary

Description of Change

Establish expectations for hazardous energy control. Replaces current MDs for hazardous energy and implement requirements from common cause.

Hazardous Energy Control

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1.0 INTRODUCTION**1.1 Purpose**

This standard establishes CH2M HILL Plateau Remediation Company (CHPRC) specific requirements for consistently implementing the hazardous energy control process described in DOE-0336, *Hanford Site Lockout/Tagout Procedure*.

1.2 Scope

This standard provides CHPRC requirements for the management and execution of the lockout/tagout (LOTO) process. The requirements listed within this standard have been identified to provide the highest assurance of compliance with DOE-0336 providing a safe work environment for execution of servicing, maintenance, construction, operations and deactivation and decommissioning (D&D) activities.

1.3 Applicability

This standard applies to all CHPRC personnel and subcontractors.

1.4 Implementation

This standard is effective upon publication.

2.0 STANDARD**2.1 General Requirements**

- 2.1.1 Management and supervision must ensure during walkdowns, preplanning, work planning, and pre-job briefs that workers are engaged in the process and understand requirements and expectations.
- 2.1.2 Use of the work control processes must be adhered to in all cases. No determination by any individual or group that procedural or work package use is "optional" is allowed.

2.2 Training Requirements

- 2.2.1 The Controlling Organization LOTO Administrator (COA) will qualify per *Controlling Organization Lockout/Tagout Administrator* (course 600605).
- 2.2.2 Facility/Project Management will designate the members of the controlling organization on the *Controlling Organization Designation Letter* (Site Form A-6005-976)

Hazardous Energy Control

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Effective Date: 07/03/18

2.3 Requirements for Identification of Isolation Boundaries

2.3.1 Isolation boundaries for Lockout/Tagout Authorization Form (TAF) or Eight-Criteria Checklist must be confirmed by one of the following:

- An electrical circuit verification investigative work package used as evidence of accuracy for electrical isolation.
 - A previous TAF or Eight-Criteria Checklist using the isolation point(s) which is documented as accurate, based on previous use.
 - The isolation point for the equipment or system is readily identifiable by visual confirmation.
- a. The COA developing the isolation boundary will verify no system temporary changes or modifications have taken place that would invalidate the use of a previous circuit verification, TAF or Eight-Criteria Checklist as evidence of accuracy.
 - b. Method of confirmation will be documented in block 4 when using a TAF.
 - c. The electrical circuit verification requirement for a TAF may be waived by Facility/Project Management.
 - 1) Waiver of the verification will be documented in block 4 of the TAF.

2.3.2 The Preparer and Technical Reviewer (for TAFs) shall perform 100% field walkdowns as part of determining isolation boundaries and the points in the system where verification of absence of hazardous energy will be conducted.

- a. The field walkdown may be waived by Facility/Project Management when performance would create a hazard to the COA (e.g., isolations in confined space, exposure to a hazard, as low as reasonably achievable [ALARA] concerns).
 - 1) Waiver of the walkdown will be documented in block 15 of the TAF or in the Required Component Position Section of the Eight-Criteria Checklist.

2.3.3 Inaccuracies identified in drawings/design media during verifications will be utilized to update the design media per engineering processes.

Hazardous Energy Control

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2.4 Working under LOTO

- 2.4.1 When performing lockout/tagout work in the field, ensure workers carry a copy of applicable section(s) of DOE-0336 and that workers FOLLOW the appropriate steps called out in the procedure.
- 2.4.2 All electrical equipment, circuit conductors, and circuit parts shall be considered energized until placed in an electrically safe work condition in accordance with DOE-0336. Every exposed conductor or circuit part shall be tested before touching.
- 2.4.3 Proximity voltage testers may only be used for credited voltage checks per DOE-0336 (i.e., safe-condition checks and safe-to-work checks) as an alternate method when contact voltage measurements are not possible and when specifically authorized via the work document.
- 2.4.4 Proximity testers may be used for “self-checking” such as a final check before cutting a conductor or checking conductors in a cable tray.

2.5 Configuration Control

- 2.5.1 Situations that allow for crediting configuration control in lieu of applying lockout/tagout per DOE-0336 must meet one of the following criteria:
- a. New build (greenfield) activities prior to connecting systems to hazardous energy sources.
 - b. Permanent removal of hazardous energy sources with no intent to reconnect (e.g., support of deactivation and decommissioning work), including associated documentation, in accordance with the following procedures:
 - PRC-PRO-EN-2001, *Facility Modification Package Process*
 - PRC-PRO-WKM-53080, *CHPRC Cold and Dark Process*

Hazardous Energy Control

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2.6 Facility/Project Management Review of LOTO Activities

NOTE: *Recognizing the diversity of CHPRC facilities, Facility/Project Management shall tailor the definition of non-routine work to the specific facility and hazardous energy controls.*

2.6.1 Facility/Project Management shall document the facility/project definition of non-routine work for LOTO activities.

2.6.2 Facility/Project Management will perform and document a review of non-routine LOTO activities.

3.0 FORMS

Controlling Organization Designation Letter, A-6005-976

4.0 RECORD IDENTIFICATION

All records are required to be managed in accordance with PRC-PRO-IRM-10588, *Records Management Processes*.

Records Capture Table

Name of Record	Submittal Responsibility	Retention Responsibility
<i>Controlling Organization Designation Letter (A-6005-976)</i>	Operations Manager	IRM Services Provider

5.0 SOURCES**5.1 Requirements**

None

5.2 Commitments

CR-2018-0395, CA #3

5.3 References

DOE-0336, *Hanford Site Lockout/Tagout Procedure*
 DOE-0359, *Hanford Site Electrical Safety Program (HSESP)*
 NFPA 70E-2018, *Standard for Electrical Safety in the Workplace*
 PRC-PRO-EN-2001, *Facility Modification Package Process*
 PRC-PRO-IRM-10588, *Records Management Processes*
 PRC-PRO-OP-53077, *Senior Supervisor Watch*
 PRC-PRO-WKM-53080, *CHPRC Cold and Dark Process*