



Administrative Procedure

PRC-PRO-SH-6155

Implementation of the Hanford Site Chronic Beryllium Disease Prevention Program

Revision 2, Change 1

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**Project: CH2M HILL Plateau Remediation Company
Topic: Occupational Safety & Industrial Hygiene**

Administrative Use

**Implementation of the Hanford Site Chronic Beryllium Disease
Prevention Program**

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GCX-2, for an editorial change.

Description of Change

Rev 2-1: Changed actionee in step 3.5.2 from Human Resources to Beryllium Health Advocate.

Rev 2-0: Revisions to keep the procedure consistent with the Hanford Site CBDPP requirements.

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1.0 INTRODUCTION

All Department of Energy (DOE) contractors with operations or activities that involve present or past exposure or the potential for exposure to beryllium are required to develop and implement a Chronic Beryllium Disease Prevention Program (CBDPP). DOE-0342 (Hanford Site Chronic Beryllium Disease Prevention Program) functions as CH2M HILL Plateau Remediation Company's (CHPRC) CBDPP. This procedure provides additional direction to CHPRC personnel on how to implement specific sections of DOE-0342 and associated procedures.

1.1 Purpose

The purpose of this procedure is to ensure consistent implementation of DOE-0342 and associated procedures across CHPRC projects.

1.2 Scope

This Level 1 Management Control Procedure provides instruction on how to effectively implement certain performance based requirements contained in DOE-0342 and associated procedures. As such, this procedure supplements DOE-0342. If a conflict exists between DOE-0342 and this procedure, DOE-0342 takes precedence.

1.3 Applicability

This Level 1 Management Control Procedure is applicable to CHPRC Team employees performing CHPRC scope of work.

1.4 Implementation

- This procedure supplements DOE-0342 and associated procedures.
- This procedure takes effect on July 30, 2012.

2.0 RESPONSIBILITIES

All responsibilities associated with this procedure are identified in the process steps.

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3.0 PROCESS

3.1 Conducting Initial Building Assessments

Actionee	Step	Action
Manager, Facilities & Property Management	1.	ASSIGN a person responsible for conducting the initial assessment (building assessor) for every building under the control of the responsible CHPRC project.

NOTE: *The person assigned will normally be the Building Manager or the Building Administrator. In cases where no Building Manager or Building Administrator has been identified, a person knowledgeable of the building's past and current uses should be selected. Projects may also use Industrial Hygienists to complete the Initial Building Assessments.*

Building Assessor	2.	BEGIN the assessment by completing the Facility Information section of the <i>Beryllium Facility Assessment</i> form (A-6005-329 or its equivalent).
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NOTE: *While the Site Form A-6005-329 is the preferred method for collecting the data, any hard copy or electronic format that captures all of the data listed on the form may be used.*

3. INTERVIEW individuals who are knowledgeable of the building's history and past uses.
4. COMPLETE the Assessment Information section of the *Beryllium Facility Assessment* form.
 - ENSURE that sufficient detail is provided to justify any characterization decisions that are made.
 - DOCUMENT any known historical beryllium use and anecdotal evidence of past beryllium use in the "Comments" section.
 - IF additional space is needed, THEN ATTACH additional documentation to the form.
5. PROVIDE the form (or its equivalent) to the project Industrial Hygienist for completion of the Characterization Information.

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Project Industrial Hygienist (IH)	6.	<p>COMPLETE the Characterization Information section of the <i>Beryllium Facility Assessment form</i> (or its equivalent).</p> <p>Indications that characterization sampling is not necessary include:</p> <ul style="list-style-type: none"> • Building constructed since 1988 • Clear history of past building uses • No reports or indications of past beryllium exposure <p>Indications that characterization sampling may be appropriate include:</p> <ul style="list-style-type: none"> • Anecdotal evidence of past beryllium use • Known or potential sources of cross-contamination identified • Possible maintenance of beryllium items in the facility • Possible handling and storage of beryllium items in the facility • Incomplete building history
Beryllium Technical Authority	7.	PROVIDE the form (or its equivalent) to the CHPRC beryllium Technical Authority.
	8.	For any buildings requiring characterization, COORDINATE with project management to arrange for the resources necessary to complete the characterization.
	9.	REVIEW completed <i>Beryllium Facility Assessment</i> forms to ensure data accuracy and completeness.

3.2 Development of Characterization Sampling Plans

The purpose of the Characterization Sampling Plan is to document the number, type, and location of samples to be collected during characterization sampling. The sampling plan is a tool for the IH conducting the sampling and can be modified in the field if necessary.

Appendix A of DOE-0342 provides the technical basis for characterization sampling as well as guidance on how to conduct characterization sampling.

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Project IH	1.	WALK DOWN the building identifying any areas with an increased possibility of contamination. If possible, have any workers who are concerned about beryllium walk down the building with you.

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Project IH	2.	<p>DIVIDE the building into the appropriate number of survey units. <u>WHEN</u> identifying the survey units, <u>THEN</u> CONSIDER:</p> <ul style="list-style-type: none"> • Square footage of the building • Whether building should be considered a MARSIMM Class 1, Class 2, or Class 3 structure (DOE-0342 Appendix A contains definitions of Class 1, Class 2, and Class 3) • Areas of the building that have/had similar uses • Whether different elevations of the room are homogeneous • Areas that are most likely to have beryllium contamination • Any areas where characterization sampling is not feasible • Whether an area is a closed air space or has a separate ventilation system from other areas of the building <p>3. DETERMINE whether bulk samples, wipe samples, or a combination of the two is appropriate.</p> <p>4. IDENTIFY any specific areas requiring sampling based on the findings of the walk down.</p> <p>5. COMPLETE the <i>Industrial Hygiene Characterization Sampling Plan form</i> (A-6005-358).</p> <p>6. SUBMIT the completed <i>Industrial Hygiene Characterization Sampling Plan form</i> to the Beryllium Technical Authority for review.</p>
Beryllium Technical Authority	7.	<p>REVIEW Characterization Report for completeness and accuracy.</p> <ul style="list-style-type: none"> • <u>IF</u> revisions or corrections are necessary, <u>THEN</u> WORK with the Project IH to make the necessary corrections. • <u>IF</u> the form is complete and accurate, <u>THEN</u> SIGN <u>AND</u> FORWARD a copy to the Industrial Hygiene Records Point of Contact (IH Records POC).
IH Records POC	8.	FILE per record retention requirements.

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3.3 Characterization Reports

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Project IH	1.	Once the characterization sampling has been completed and analysis results received, WRITE the Characterization Report. The Characterization Report should contain the following information: <ul style="list-style-type: none"> • Building history (why was beryllium a concern) • Historical beryllium sampling data • Characterization Sampling plan (including description of survey units) • Sample results • Determination of building status (Beryllium Clean or Beryllium Controlled) • Any future sampling plans (for example validation sampling during future demolition activities to document non-exposures)
Beryllium Technical Authority	2.	SUBMIT the draft Characterization Report to the Beryllium Technical Authority for review.
	3.	REVIEW Characterization Report for completeness and accuracy. <ul style="list-style-type: none"> • <u>IF</u> revisions or corrections are necessary, <u>THEN</u> WORK with the Project IH to make the necessary corrections. • <u>IF</u> report is complete and accurate, <u>THEN</u> SIGN <u>AND FORWARD</u> a copy to the IH Records POC.
IH Records POC	4.	FILE per record retention requirements.

3.4 Completion of Hazard Assessments and Beryllium Work Permits

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Project IH	1.	ENSURE that planners and workers are adequately involved in defining the work scope.
	2.	COMPLETE the hazard assessment and beryllium work permit according to the requirements of DOE-0342-001, <i>Hanford Site Beryllium Work Permit (BWP) and Hazard Assessment Procedure</i> .
	3.	After the BWP has been approved, SUBMIT a copy of the hazard assessment and the BWP to the IH Records POC.
IH Records POC	4.	FILE per record retention requirements.

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3.5 Handling of Newly Identified Beryllium Affected Personnel

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Worker Protection Program Safety Specialist	1.	<u>WHEN</u> notified by the Site Occupational Medical Director (SOMD) of an employee with a new beryllium medical restriction, <u>THEN</u> : <ul style="list-style-type: none"> • NOTIFY HR of the need to counsel employee • NOTIFY the Beryllium Technical Authority to arrange for routine monitoring of the affected employee
Beryllium Health Advocate	2.	ENSURE required counseling is conducted per Section 6.27.2 of DOE-0342.
	3.	ENSURE that the employee's manager is informed of the employee's medical restriction and is aware of the requirements contained in Section 6.14 of DOE-0342.
Employee's Manager	4.	BECOME familiar with <u>AND IMPLEMENT</u> as necessary the requirements contained in Section 6.14 of DOE-0342.
Beryllium Health Advocate	5.	WORK with the newly affected employee and the Project Operating System (OS)/IH staff to determine the appropriate routine monitoring protocol per Appendix C of DOE-0342.
	6.	DOCUMENT the required sampling frequency.
Project IH	7.	ENSURE that routine monitoring of the affected employee is conducted in accordance with Section 6.14 and Appendix C of DOE-0342.

3.6 Routine Monitoring of Hygiene Facilities and Lunch Rooms

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Project OS/IH	1.	DEVELOP <u>AND MAINTAIN</u> a list of: <ul style="list-style-type: none"> • Change rooms used by Beryllium Workers working in Beryllium Controlled Areas (BCA's) and Beryllium Regulated Areas (BRA's) • Personal Protective Equipment (PPE) removal areas located at the border of BCA's and BRA's • Lunch rooms used by Beryllium Workers working in BCA's and BRA's
	2.	For all change rooms, lunch rooms, and PPE removal areas identified on the list above, ENSURE that wipe sampling is conducted at least every 30 days per section 6.18 of DOE-0342.

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4.0 FORMS

Beryllium Facility Assessment Form, A-6005-329
Beryllium Hazard Assessment Form, A-6005-852
Industrial Hygiene Characterization Sampling Plan, A-6005-358

5.0 RECORD IDENTIFICATION

All records are required to be managed in accordance with PRC-PRO-IRM-10588, *Records Management Processes*. OCRWM records are also managed in accordance with PRC-PRO-QA-19579, *OCRWM Records Management*.

Records Capture Table

Name of Record	Submittal Responsibility	Retention Responsibility	OCRWM Retention Schedule (If OCRWM Related)
Beryllium Facility Assessment forms	Project Industrial Hygienists	IH Records POC	N/A
Characterization Sampling Plans	Project Industrial Hygienists	IH Records POC	N/A
Beryllium Characterization Reports	Project Industrial Hygienists	IH Records POC	N/A
Hazard Assessments	Project Industrial Hygienists	Projects	N/A
Beryllium Work Permits	Project Industrial Hygienists	Projects	N/A

6.0 SOURCES

6.1 Requirements

10 CFR 850, *Chronic Beryllium Disease Prevention Program; Final Rule*
 DOE-0342, *Hanford Site Chronic Beryllium Disease Prevention Program*
 DOE-0342-001, *Hanford Site Beryllium Work Permit (BWP) and Hazard Assessment Procedure*
 RDD 007, *Chronic Beryllium Disease Prevention Program*

6.2 References

PRC-PRO-IRM-10588, *Records Management Processes*
 PRC-PRO-QA-19579, *OCRWM Records Management*