

# Hanford Site Assessment & Characterization/Verification of Structures & Conex Boxes Procedure

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



U.S. DEPARTMENT OF  
**ENERGY**

**CHANGE SUMMARY**

Rev #	Date - Section Changed	Change Details
1	10/06/14 - 1.0	Add note to state that forms created using a previous revision of the procedure don't need to be revised until a revision is otherwise required.
1	10/06/14 - 2.1	Added note that individuals who are not trained/qualified as assessors may assist in the collection of information and the coordination of walkdowns so long as a qualified assessor is responsible for determining completeness and accuracy.
1	10/06/14 - 2.4	Added note that individuals who are not trained/qualified as project IHs may assist in the collection of information and the coordination of walkdowns so long as a qualified project IH is responsible for determining completeness and accuracy.
1	10/06/14 - 4.1.1,4	Clarified the term "adjacent."
1	10/06/14 - 4.1.1, 5	Changed note regarding CWB&CTC to be part of the step.
1	10/06/14 - 4.1.1, 6	Changed actionee from HAMTC to Union representative.
1	10/06/14 - 4.1.1, 9	Assessment form will now be completed in the SWIHD Beryllium Module.
1	10/06/14 - 4.1.1, 10	Removed the requirement to provide non-record copies of the assessment to the MSC and RL/ORP (will be done automatically in SWIHD).
1	10/06/14 - 4.1.2, 3	Changed note regarding CWB&CTC to be part of the step.
1	10/06/14 - 4.1.2, 4	Changed actionee from HAMTC to Union representative.
1	10/06/14 - 4.1.2, 5	Changed actionee from Assessor to Assessment Coordinator.
1	10/06/14 - 4.1.2, 7	Assessment form will now be completed in the SWIHD Beryllium Module.

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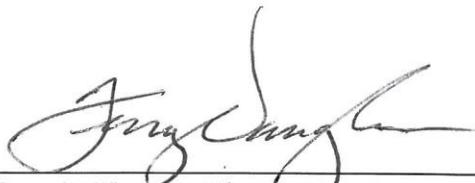
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<b>Rev #</b>	<b>Date - Section Changed</b>	<b>Change Details</b>
<b>1</b>	10/06/14 - 4.1.2, 8	Removed the requirement to provide non-record copies of the assessment to the MSC and RL/ORP (will be done automatically in SWIHD).
<b>1</b>	10/06/14 - 4.2.5	In Case 2, clarified where the additional samples need to be collected from.
<b>1</b>	10/06/14 - 4.2.5	Removed the requirement to notify the MSC of changes in posting status (will be done automatically in SWIHD).
<b>1</b>	10/06/14 - 4.2.8	<ol style="list-style-type: none"><li>1. Added CWB&amp;CTC to the groups consulted.</li><li>2. Added requirement to post the building until the field office concurs with the technical basis.</li></ol>
<b>1</b>	10/06/14 - 4.2.9	Clarified when verification of Conex boxes is required.
<b>1</b>	10/06/14 - 4.2.10	<ol style="list-style-type: none"><li>1. Added a note that verification sampling of structures isn't required prior to demolition.</li><li>2. Added the sentence, "Access shall be controlled to the Conex box once sampling has been completed to ensure that potentially-contaminated items aren't introduced into the Conex box."</li></ol>
<b>1</b>	10/06/14 - A&A	Added the acronym "SWIHD."
<b>1</b>	10/06/14 - App B	Added the instructions for completing Assessment Forms for Structures in SWIHD.
<b>1</b>	10/06/14 - App C	Added the instructions for completing Assessment Forms for Conex Boxes in SWIHD.
<b>0</b>	09/19/13	Initial issue.

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Terry L. Vaughn, Vice President  
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10/15/2014

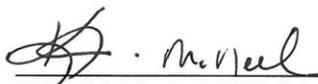
Date



Michael B. Wilson, ESH&T Vice President  
Mission Support Alliance, LLC

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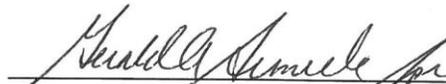
Date



Kliss McNeel, ESH&QA Director  
Washington Closure Hanford, LLC

11/4/14

Date



Robert E. Wilkinson, ESH&Q Manager  
Washington River Protection Solutions, LLC

11/4/14

Date

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## 1.0 PURPOSE

This *Hanford Site Assessment and Characterization/Verification of Structures & Conex Boxes Procedure*, herein called the Procedure, defines the process for preparing beryllium facility assessments, sampling plans, and characterization/verification sampling reports for structures and Conex boxes used for the storage of materials. This Procedure applies to Hanford Site contractors performing such activities.

Examples of structures include (but are not limited to):

- Compressed gas cylinder bunkers
- Smoke stacks
- Tanks and pits
- Containment basins
- Vaults that are not associated with a building
- Loading docks that are listed as separate structures in CareTaker
- Semi-permanent tent structures that are listed in CareTaker
- Steam tunnels that are listed in CareTaker

This Procedure is not applicable to:

- Buildings designed for human occupancy
- Conex boxes that have been modified for regular use as an office, respirator issuance station, or other similar activity
- Temporary structures made from materials such as fabric and tubular framing
- Waste sites and other outdoor areas

Previously completed assessment forms, sampling plans, and sampling reports created by following the requirements of previous revisions of this procedure **are not** required to be redone. Updates to assessment forms, sampling plans, and sampling reports shall be completed using the most current forms.

## 2.0 ROLES AND RESPONSIBILITIES

### 2.1 Assessor

The facility assessment of structures/Conex boxes shall be conducted by an assessor with sufficient knowledge and experience to perform such activity (i.e., project industrial hygienist [IH], industrial hygiene technician [IHT], or assigned certified industrial hygienist [CIH]).

**NOTE:** Individuals who are not trained/qualified as assessors may assist in the collection of information and the coordination of walkdowns so long as a qualified assessor is responsible for determining completeness and accuracy.

**2.2 CBDPP Hanford Atomic Metal Trades Council (HAMTC) Representative**

HAMTC and Beryllium Awareness Group (BAG) representatives for assessment walkdowns shall be identified by the Chronic Beryllium Disease Prevention Program (CBDPP) HAMTC representative for the contractor that they represent.

**2.3 CIH/Industrial Hygiene Team (Exempt) Lead**

Facility assessment forms, beryllium characterization/verification sampling plans, and characterization/verification sampling reports shall be reviewed by a person with sufficient knowledge and experience to perform such an activity (e.g., assigned CIH, Industrial Hygiene Team [Exempt] Lead).

**2.4 Project Industrial Hygienist**

Beryllium characterization/verification sampling plans and characterization/verification sampling reports shall be completed by a person with sufficient knowledge and experience to perform such activity (e.g., project IH, or assigned CIH).

**NOTE:** Individuals who are not trained/qualified as project IHs may assist in the collection of information and the coordination of walkdowns so long as a qualified project IH is responsible for determining completeness and accuracy.

**3.0 TRAINING REQUIREMENTS**

All facility assessments of structures and Conex boxes and/or characterization/verification sampling will be conducted by an IH or IHT. At a minimum, IH/IHT personnel conducting facility assessments and/or characterization/verification sampling shall be Beryllium Worker qualified and have completed the Beryllium Facility Assessment and Characterization/Verification Training. In addition, the CIH or Industrial Hygiene Team (Exempt) Lead/Manager reviewing the assessments shall have completed the Beryllium Facility Assessment and Characterization/Verification Training that corresponds with this procedure.

**4.0 PROCEDURE**

**4.1 Beryllium Facility Assessment of Structures & Conex Boxes**

Contractors shall utilize a graded approach in determining the order and scheduling of facility assessments of structures and Conex boxes. Assessors will consider the frequency of use and potential for beryllium contamination to determine the prioritization for completing assessments.

## 4.1.1 Completing Beryllium Facility Assessment Forms for Structures

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Assessor	1.	Collect facility information such as the structure description, year built (if available), and any assessments for adjacent buildings.
	2.	Identify documentation, such as building histories and technical basis documents that might provide information on prior uses. Identify any applicable beryllium sampling data.
	3.	Conduct an initial interview with a person knowledgeable about the structure and its history (e.g., building administrator, building manager, or a senior Hanford employee) to determine the past usage of the structure.
	4.	Determine if any of the following statements are true (or may have been true in the past) about the structure, using the available documentation and the initial interview. The statements are: <ul style="list-style-type: none"> <li>a. Attached to a beryllium controlled facility</li> <li>b. Adjacent to a beryllium controlled facility (close enough for potential cross-contamination)</li> <li>c. Potential beryllium contamination sources exist (this includes when sampling data collected since 2010 suggests that contamination may exist)</li> <li>d. Potential beryllium cross-contamination sources exist</li> <li>e. Potential internal beryllium contamination exists</li> <li>f. Beryllium items/equipment were transported over/through the structure</li> </ul> <p><b>NOTE:</b> The above statements are referred to as the “Six Criteria” in <a href="#">Figure 1</a>.</p>
	5.	Determine whether a walkdown is required. A walkdown is normally required if any of the above statements are true (or may have been true in the past). <p>If a walkdown is required, notify their Hanford Site CBDPP Committee HAMTC representative of when a walkdown will be conducted. Give all current assessment data to the HAMTC representative prior to the walkdown with sufficient time for them to review and become familiar with the data. Take the necessary steps to ensure the representative (or designee) is released and available to participate in the walkdown.</p>

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
CBDPP Bargaining Unit Representative(s)	6.	<p>If the structure is routinely used or occupied (or is known to have been previously occupied) by Central Washington Building &amp; Construction Trades Council (CWB&amp;CTC) employees, the CWB&amp;CTC CBDPP Representative shall also be notified of when the walkdown will be conducted. Give all current assessment data to the CWB&amp;CTC representative prior to the walkdown with sufficient time for them to review and become familiar with the data. Take the necessary steps to ensure the representative (or designee) is released and available to participate in the walkdown.</p> <p>If a walkdown is not necessary, Steps 6 – 7 may be skipped.</p> <p>Determine what, if any, Bargaining Unit /BAG participation is appropriate for the walkdown.</p> <p>Inform the assessor of who will be attending the walkdown. Designate alternates as necessary from the company-level CBDPP subcommittee, or from the specific project, to attend the walkdown in the event the original designated Bargaining Unit/BAG representative(s) are not available and/or request that additional individuals participate.</p>
Assessor	7.	<p>Schedule the walkdown with the administrator/manager of the structure. The administrator/manager may participate in the walkdown if they so choose.</p>
Assessor / Walkdown Team	8.	<p>Determine the following:</p> <ol style="list-style-type: none"> <li>a. Is it feasible and appropriate to conduct sampling of the structure? Issues to consider when determining if it is feasible and appropriate:               <ol style="list-style-type: none"> <li>1. How likely is it that there may be residual beryllium contamination?</li> <li>2. Do sources of naturally-occurring beryllium make sampling inappropriate?</li> <li>3. Does the presence of other hazards substantially outweigh the benefit of conducting beryllium sampling?</li> <li>4. Does the nature of the structure make sampling inappropriate?</li> </ol> </li> <li>b. If it is feasible and appropriate to conduct sampling, how many samples should be collected and where should the samples be collected from?</li> </ol>

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		<p>c. If it is determined that sampling should be conducted, when should sampling be conducted? Sampling options are:</p> <ol style="list-style-type: none"> <li>1. Schedule sampling to be conducted as soon as practicable.</li> <li>2. Schedule sampling prior to recommencing work in the area where the structure is located.</li> <li>3. Schedule sampling prior to demolition.</li> </ol> <p><b>NOTE:</b> The walkdown team should attempt to immediately address any issues raised during the walkdown by working with the structure administrator/manager and/or the appropriate project management personnel. If one or more walkdown team members still have concerns regarding the results of the walkdown, the team shall take the issue to the company-level CBDPP subcommittee for assistance in resolving the issue.</p> <p>If the company-level CBDPP subcommittee cannot resolve the issue, it shall be raised to Hanford Site CBDPP Committee.</p>
Assessor	9.	<p>Complete the assessment using the beryllium specific feature of Site-Wide Industrial Hygiene Database (SWIHD) using the Beryllium Facility Assessment Form Completion Instructions (Appendix B).</p>
CIH or Industrial Hygiene Team (Exempt) Lead/Manager	10.	<p>Review the completed form that has been electronically signed by the assessor in SWIHD.</p> <p>The purpose of the review is to ensure that all data requirements have been met, that the forms have been completed properly, and that the conclusions are consistent with the data collected. The review does not require that the collected information be checked for accuracy. The person who conducts the review of the assessment form shall be different from the person who conducted the assessment. Contractors may conduct additional quality assurance reviews at their discretion.</p> <p><b>NOTE 1:</b> The form must be completed electronically. Hand-written copies of the form are not acceptable as the record copy.</p> <p><b>NOTE 2:</b> The applicable U.S. Department of Energy (DOE) field office(s) and the Mission Support Contractor (MSC) will have “read only” access to the completed assessment and applicable supporting documentation through the SWIHD interface to Integrated Document Management System (IDMS). The MSC will use this access and the SWIHD reports to create</p>

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		the monthly summary of newly assessed facilities and for electronically posting in a central location.
		<b>NOTE 3:</b> It is the responsibility of the contractor conducting the assessment to maintain the record copy of the assessment.

**4.1.2 Completing Beryllium Facility Assessment Forms For Conex Boxes**

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Assessor	1.	Collect facility information, such as the description of the Conex usage, year built (if available), year brought on site (if available), and any assessments for adjacent buildings and/or structures.
	2.	Identify documentation, such as building histories and technical basis documents that might provide information on prior usage of the Conex box. Identify any applicable beryllium sampling data.
	3.	Notify their Hanford Site CBDPP Committee HAMTC representative of when a walkdown will be conducted. Provide all current assessment data to the HAMTC representative prior to the walkdown, allowing sufficient time for them to review and become familiar with the data. Take the necessary steps to ensure the HAMTC representative (or designee) is released and available to participate in the walkdown.
		If the Conex box is routinely used or occupied (or is known to have been previously occupied) by Central Washington Building & Construction Trades Council (CWB&CTC) employees, the CWB&CTC CBDPP Representative shall also be notified of when the walkdown will be conducted. Give all current assessment data to the CWB&CTC representative prior to the walkdown with sufficient time for them to review and become familiar with the data. Take the necessary steps to ensure the representative (or designee) is released and available to participate in the walkdown.

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CBDPP Bargaining Unit Representative(s)	4.	<p>Determine what, if any, Bargaining Unit /BAG participation is appropriate.</p> <p>Inform the assessor of who will be attending the walkdown. Designate alternate(s) as necessary from the company-level CBDPP subcommittee or from the specific project to attend the walkdown in the event that the original designated Bargaining Unit/BAG representative(s) are not available, and/or request that additional individuals participate.</p>
Assessor	5.	<p>Arrange for access into the Conex box. A person knowledgeable with the Conex box contents shall be a participant in the walkdown. The knowledgeable person will normally be an employee who routinely enters the Conex box to add and/or remove items/equipment.</p> <p>The Conex box owner may also participate in the walkdown if they so choose.</p>
Assessor / Walkdown Team	6.	<p>Determine the following during the walkdown(s):</p> <ol style="list-style-type: none"> <li>a. Is the Conex box currently adjacent to a beryllium controlled facility? Has the Conex box been adjacent to a beryllium controlled facility in the past?</li> <li>b. Is the Conex box known to be used for storage of beryllium items and/or waste? Has it been used to store beryllium items and/or waste in the past?</li> <li>c. Does the Conex box have the potential to store items that were removed from a beryllium controlled facility? Does the Conex box have the potential to have been used to store items that were removed from a beryllium controlled facility in the past?</li> <li>d. Does the Conex box have the potential to store items contaminated with tank waste? Has it been used to store items potentially contaminated with tank waste in the past?</li> <li>e. How many samples of items need to be collected? Are there any specific items that need to be sampled?</li> </ol> <p><b>NOTE:</b> The walkdown team should attempt to immediately address any issues raised during the walkdown by working with the Conex box owner and/or the appropriate project management personnel. If one or more walkdown team members still have concerns regarding the results of the walkdown, the team shall take the issue to the company-level CBDPP subcommittee for assistance in resolving the issue. If</p>

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		the company-level CBDPP subcommittee cannot resolve the issue, it shall be raised to the Hanford Site CBDPP Committee.
Assessor	7.	Complete the assessment using the beryllium specific feature of SWIHD using the Beryllium Facility Assessment Form Completion Instructions (Appendix C).
CIH or Industrial Hygiene Team (Exempt) Lead/Manager	8.	<p>Review the completed form electronically signed by the assessor in SWIHD.</p> <p>The purpose of the review is to ensure that all data requirements have been met, that the forms have been completed properly, and that the conclusions are consistent with the data collected. The review does not require that the collected information be checked for accuracy. The person who conducts the review shall be different from the person who conducted the assessment. Contractors may conduct additional quality reviews at their discretion.</p> <p><b>NOTE 1:</b> The form must be completed electronically. Hand-written copies of the form are not acceptable as the record copy.</p> <p><b>NOTE 2:</b> The applicable DOE field office(s) and the Mission Support Contractor (MSC) will have “read only” access to the completed assessment and applicable supporting documentation through the SWIHD interface to IDMS. The MSC will use this access and SWIHD reports to create the monthly summary of newly assessed facilities and for electronically posting in a central location.</p> <p><b>NOTE 3:</b> It is the responsibility of the contractor conducting the assessment to maintain the record copy of the assessment.</p>

**4.1.3 Posting of Conex Boxes Awaiting Initial Sampling**

If a Conex box is not sampled within the specified time for sampling as listed on the Beryllium Facility Assessment Form for Conex Boxes, Contractors shall post the Conex Box as a Beryllium Suspect Area (BSA).

**4.1.4 Revision to the Beryllium Facility Assessment Form for Structures**

Any of the following changes will require that the Beryllium Facility Assessment Form for Structures be updated:

- Structure ownership changes from one contractor to another
- Controlling project changes
- Current status (active, inactive, demolished) of the facility changes

- Structure changes from radiologically to nonradiologically controlled or vice versa

Revision of the form for the above reasons does not require that the entire assessment be conducted again. Only the sections of the assessment form that are impacted need to be revised.

Any of the following changes will require that the Beryllium Facility Assessment Form for Structures undergo a complete revision (including a new walkdown):

- Additional structure information becomes available that changes the sampling requirements
- Reduction in the number of recommended sample points
- Removal of one or more locations from the recommended sample locations
- Reduction in the number of recommended sample points for items
- Sampling data is generated that determines beryllium contamination in excess of control levels is present

#### **4.1.5 Revision to the Beryllium Facility Assessment Form for Conex Boxes**

Any of the following changes will require that the Beryllium Facility Assessment Form for Conex Boxes be updated:

- Conex box ownership changes from one contractor to another
- Controlling project changes
- Current status (i.e., active, inactive, disposed of) of the Conex box changes
- Conex box changes from radiologically to nonradiologically controlled or vice versa
- The nature of the items stored significantly changes (e.g., changed from storing furniture to storing demolition equipment)
- Entry frequency/verification sampling frequency

Any of the following changes will require that the Beryllium Facility Assessment Form for Conex Boxes undergo a complete revision (including a new walkdown):

- The location of the Conex box changes
- The Conex box information changes in a way that impacts the initial sampling priority, other than entry frequency
- Reduction in the number of recommended sample points for items
- Sampling data is generated that determines beryllium contamination in excess of control levels is present

#### **4.1.6 Communication of Assessment Results**

Non-record copies of all assessment forms shall be available to employees. These copies may be stored electronically, if all employees have access to electronic

records. If hard copies are used, contractors shall set up centrally-located information stations where hard copies of the assessment forms are stored.

The first week of each month, the MSC shall create a summary for buildings, structures, and Conex boxes. The summary shall include:

- Facilities that have been newly listed as Beryllium Controlled Facilities (BCFs)
  - Reason why each facility was listed as a Beryllium Controlled Facility (BCF)
- Structures and/or Conex boxes that have been listed as BSAs or BCAs
- Facilities that have been down-posted based on characterization sampling
  - Technical basis for down-posting

Distribution of the monthly summaries for use in safety tailgate meetings (or other safety meetings) is the responsibility of all affected contractors.

**4.2 Characterization/Verification Sampling of Structures and Conex Boxes**

**4.2.1 Development of Beryllium Characterization/Verification Sampling Plan for Structures and Conex Boxes**

A Beryllium Characterization/Verification Sampling Plan for Structures/Conex Boxes, A-6006-206, herein called the Sampling Plan, is required to be completed and approved for all beryllium characterization sampling of structures and Conex boxes. The Sampling Plan shall be completed by a person with sufficient knowledge and experience to perform such activity (e.g., project IH or assigned CIH).

**4.2.1.1 Sampling Plan Information**

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
Project IH	1.	Complete the Job Information section of the Sampling Plan, A-6006-206. <ul style="list-style-type: none"> <li>• Enter the Structure or Conex ID number</li> <li>• Enter the Structure/Conex Description. This description should match the description provided on the appropriate Facility Assessment Form.</li> <li>• Enter the Location Description. Ensure that this description matches the description provided on the appropriate Facility Assessment Form. Update the Facility Assessment Form if the information does not match the information on the appropriate Facility Assessment Form.</li> </ul> Enter the Purpose for the sampling.

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
	2.	<p>Enter the Number of Sample Points based on whether it is a structure or a Conex box:</p> <p>a) If a structure, the number of sample points will normally be the same as what is listed in the “Recommended Location/Number of Sample Points” on the Beryllium Facility Assessment Form for Structures. If this data is not the same as the “Recommended Location/Number of Sample Points” on the Beryllium Facility Assessment Form for Structures, revise the assessment form as described in <u>Section 4.1.4</u>: “Revision to the Facility Assessment Form for Structures.”</p> <p>b) If a Conex box, the recommended number of sample points is 10 sample points for initial sampling, 12 samples for shipment off-site, or 6 sample points for verification sampling.</p>
	3.	<p>Enter the Location of Sample Points based on whether it is a structure or a Conex box:</p> <p>a) If a structure, the location of sample points will normally be the same as what is listed in the “Recommended Location/Number of Sample Points,” in the Beryllium Facility Assessment Form for Structures. If this data is not the same as the “Recommended Location/Number of Sample Points,” in the Beryllium Facility Assessment Form for Structures, revise the assessment form as described in <u>Section 4.1.4</u>: “Revision to the Facility Assessment form for Structures.”</p> <p>b) If a Conex box is undergoing initial characterization sampling, the recommended locations of sample points will be:</p> <ul style="list-style-type: none"> <li>• Two from the inside of the doors</li> <li>• Two from the floor</li> <li>• Two from each of the long (side) walls (four total)</li> <li>• One from the back wall</li> <li>• One from the ceiling</li> </ul> <p>c) If a Conex box undergoing verification sampling, the recommended locations of sample points will be:</p> <ul style="list-style-type: none"> <li>• One from the inside of the doors</li> </ul>

<i>Actionee</i>	<i>Step</i>	<i>Action</i>
		<ul style="list-style-type: none"> <li>• One from the floor</li> <li>• One from each of the long (side) walls, (two total)</li> <li>• One from the back wall</li> <li>• One from the ceiling</li> </ul>
	d)	<p>If a Conex box is getting demobilized off-site, the recommended locations of sample points will be:</p> <ul style="list-style-type: none"> <li>• Two from the inside of the doors</li> <li>• Two from the floor</li> <li>• Two from each of the long (side) walls, (four total)</li> <li>• Two from the back wall</li> <li>• Two from the ceiling</li> </ul>
	4.	<p>Enter the Number of Sample Points for Items. If this data is not the same as the “Recommended Location/Number of Sample Points for Items” on the appropriate Facility Assessment Form, revise the assessment form as described in:</p> <ul style="list-style-type: none"> <li>• Section 4.1.4 if a structure</li> <li>• Section 4.1.5 if a Conex box</li> </ul>
	5.	<p>Enter the Location of Sample Points for Items. If this data is not the same as the “Recommended Location/Number of Sample Points for Items” on the appropriate Facility Assessment Form, revise the assessment form as described in:</p> <ul style="list-style-type: none"> <li>• <u>Section 4.1.4</u>: “Revision to the Beryllium Facility Assessment Form for Structures” if a structure</li> <li>• <u>Section 4.1.5</u>: “Revision to the Beryllium Facility Assessment Form for Conex Boxes” if a Conex box</li> </ul>

**4.2.1.2 Personal Protective Equipment (PPE)**

As part of planning, identify any required PPE. If the sampling will be conducted under a Beryllium Work Permit (BWP), list the appropriate permit number in the “Personal Protective Equipment” section of the Sampling Plan. PPE identified in a BWP, operating procedure, or work package does not have to be listed again in the Sampling Plan; however, the Sampling Plan must reference those documents.

**4.2.1.3 Work Practices**

As part of planning, identify any specific work practices that are required. This includes determining if the area needs to be temporarily up-posted to a Beryllium Controlled Area (BCA) during intrusive sampling. If the sampling will be conducted under a BWP, list the appropriate permit

number in the “Work Practices” section of the Sampling Plan. Work practices identified in a BWP, operating procedure, or work package do not have to be listed again in the Sampling Plan. When required work practices are specified in other documents, the Sampling Plan must also reference those documents. If specific craft support is necessary to support the sampling, the craft requirements shall be listed in the “Work Practices” section of the Sampling Plan.

**NOTE 1:** Specific work practices include statements such as:

- An elevated lift shall be used while sampling the high bay area.
- All tools, respirators, and sample pumps shall be wet wiped prior to removal from the area.

**NOTE 2:** General statements such as “*Use proper lift techniques when moving objects*” should not be included in the “Work Practices” section.

#### 4.2.1.4 **Sample Analysis**

Identify whether beryllium is the only analyte, or if other metals also need to be assessed as part of the analysis. Identify any special instructions for the analysis of the samples in the “Sample Analysis” section of the Sampling Plan.

#### 4.2.1.5 **Comments/Deviations**

Note any comments in this section. Document any deviations made from the recommendations in the appropriate Facility Assessment Form, as well as the rationale for the changes. If any deviations must be made from the sample collection methods contained in Appendices B, C, D, E, F and G of DOE-0342-002, *Hanford Site Assessment & Characterization/Verification of Buildings Procedure* as well as the rationale for these deviations.

#### 4.2.1.6 **Approval of Sampling Plan**

After the Sampling Plan has been completed and signed, either a CIH or Industrial Hygiene Team (Exempt) Lead/Manager must review and approve the Sampling Plan. The person who conducts the review shall be different from the person who wrote the Sampling Plan. Contractors may conduct additional quality reviews at their discretion.

### 4.2.2 **Collection and Analysis of Samples**

Collect samples using the methods outlined in Appendices B, C, D, E, F and G of DOE-0342-002, *Hanford Site Assessment & Characterization/Verification of Buildings Procedure*. Document any deviation from the methods in the appendices. In addition, the deviation for the sampling method must be discussed in the “Comments/Deviation” section of the characterization/verification sampling report.

All samples shall be analyzed by a laboratory accredited for metals by the American Industrial Hygiene Association (AIHA) or a laboratory that demonstrates quality assurance for metals analysis that is equivalent to AIHA accreditation.

Track and control all samples using the chain of custody process agreed upon by the contractor and the laboratory.

### 4.2.3 Changes to Sampling Plans

#### 4.2.3.1 Minor Changes to Sampling Plans

Because conditions in the field can change, it is sometimes necessary to make field changes to the Sampling Plan. Minor changes may be made in the field with pen and ink by the IH/IHT conducting the work. While work may continue once the change is made, report all minor changes made in the field to the IH overseeing the sampling. Any change not included in the list below shall be considered to be a major change.

##### Minor Changes:

- Editorial changes to correct grammatical, typographical, or spelling errors
- Correction of units of measure (e.g., incorrectly referring to  $\mu\text{g/g}$  when discussing wipe samples)
- Changing the types of samples to be collected (bulk or wipes)
- Modifying the locations where samples will be taken
- Increasing the number of samples to be collected

Document pen and ink changes by drawing a single line through the text being changed and inserting the new text in a legible manner. The IH/IHT conducting and/or overseeing the sampling shall then print their name, sign, and date the changed document at the location of the revised text. Reporting of the change to the IH overseeing the work may be made in person, via telephone, or by email. Document the change, as well as the justification for the change, in the characterization/verification sampling report.

#### 4.2.3.2 Major Changes to Sampling Plans

Major changes require a change to the Sampling Plan, and must also be approved by either a CIH or Industrial Hygiene Team (Exempt) Lead/Manager. Such approvals may be made by teleconference. If the approval is by teleconference, a written notation must be made on the changed document that the approval was received via teleconference. The notation shall include the following:

- Printed name of the person approving the change

- Printed name and signature of the person who received the verbal approval
- Date and time that the approval was received

Examples of Major Changes:

- Decreasing the number of samples to be collected
- Not sampling an item or location that was specifically identified in the Sampling Plan as requiring sampling

When a major change is required, work may continue on all portions of the Sampling Plan that are not impacted by the major change. In cases where it is necessary to reduce the items/locations which are specifically identified for sampling, partial sampling may be conducted. In all cases, suspend sampling on the specific portion of the Sampling Plan that requires a major change.

Document pen and ink changes by drawing a single line through the text being changed and inserting the new text in a legible manner. The IH conducting and/or overseeing the sampling shall then print their name, sign and date the changed document. If the approval is by teleconference, make a notation on the changed document that the approval was received via teleconference, including the printed name of the person approving the change, the printed name and signature of the person who received the verbal approval and the date and time that approval was received.

Document the change, as well as the justification for the change, in the characterization/verification sampling report.

#### **4.2.4 Partial Completion of Sampling**

In the event that not all of the sampling specified on the Sampling Plan can be completed as planned, the contractor may either:

- Temporarily suspend sampling and complete the sampling at a later date
- Revise the Sampling Plan to reflect the changed scope of work

If sampling cannot be completed within 30 calendar days of the sampling being suspended, revise the Sampling Plan and complete an interim characterization/verification sampling report. The results shall be summarized and posted.

**NOTE:** Contractors may not take credit for meeting required sampling frequencies using partially completed sampling.

#### 4.2.5 Analysis of Data

When final sample results are received from the laboratory, review the sample results to determine which of the three cases below apply and follow the appropriate steps.

- a. Case 1 – All samples are below the trigger level:
  1. No further sampling required (If full characterization sampling was conducted, the structure/Conex box may be considered beryllium cleared).
  2. Complete the characterization/verification sampling report.
  3. Communicate results to employees.
  4. Modify postings as necessary.
  5. Update the appropriate Beryllium Facility Assessment Form as necessary.
  
- b. Case 2 – One or more samples are at or above the trigger level but none are at or above the control level:
  1. Control the area/item as a Restricted Access Area, and modify the Sampling Plan to require the collection of additional samples.
  2. Collect 6 or more samples from adjacent areas. If possible, collect the samples from within 5 linear feet radiating out in all directions from each sample location that exceeded the trigger level.
    - a. If none of the additional samples collected exceed the trigger level, no further sampling is required.
    - b. If any of the additional sample results indicate a level of beryllium that exceeds the trigger level in a particular direction, additional samples shall be taken as directed by the Project IH to determine the boundary of potential beryllium contamination in that direction.
  3. The additional samples shall be collected within two weeks or as agreed upon with the applicable DOE field office.
  4. Analyze the additional data.
    - a. If none of the additional samples exceed the control level, the area/item may be considered to be beryllium cleared.

- b. If any of the additional samples exceeds the trigger level, as part of good housekeeping the area/item shall be remediated to the defined boundary by an accepted method prior to being deemed beryllium cleared.
  - c. If any of the additional samples are found to be above the control level post in accordance with DOE-0342-003, *Hanford Site Postings and Labeling Requirements Procedure*.
5. Complete the characterization/verification sampling report.
  6. Communicate results to employees.
  7. Modify postings as necessary.
  8. Update the appropriate Beryllium Facility Assessment Form as necessary.

**NOTE:** If the sample that exceeds the trigger level was collected on an item, the item may either be disposed of or decontaminated. The additional samples shall be collected from the area around the item.

- c. Case 3 – One or more samples at or above the control level:
  1. Notify the applicable DOE field office of the results within one working day of receiving the final lab report via phone call or email.
  2. Appropriately post the structure/Conex box.
  3. Conduct additional characterization sampling of surrounding areas to ensure that contamination has not spread outside of the posted area.
  4. Consider conducting additional sampling to define the area of contamination.
  5. Complete the characterization/verification sampling report.
  6. Communicate results to employees.
  7. Update the Beryllium Facility Assessment Form.

#### 4.2.6 Completion of Sampling Reports

The characterization/verification sampling report shall be completed by a person with sufficient knowledge and experience to perform such activity (e.g., project IH or assigned CIH), and shall be completed for all sampling within 30 calendar days of receipt of the last sample result (including any follow-up samples for results at or above the trigger level).

The characterization/verification sampling report shall consist of the following:

- Report Sections:
  - Executive Summary

The executive summary is a brief (less than one page) summary of the report. A reader of the summary should be able to understand why the sampling was conducted, what the results were, and the main conclusions reached.

- Introduction

The introduction describes the structure/Conex box sampled and the reason that it was identified for sampling.

- Sample Strategy & Methodology

This section provides an overview of the sampling strategy and how the sampling was conducted. Because the Beryllium Characterization/Verification Sampling Plan is attached to the report, this section does not need to capture all of the Sampling Plan details.

- Deviations

In the event that a deviation is made that is authorized by this procedure, discuss each deviation in this section, including the reason for each deviation.

- Results Summary

A summary of the results that describes the number and type of samples collected, and whether any samples were above the trigger and/or control levels. Discuss any trends in the sampling data in this section.

- Conclusions/Recommendations

Any conclusions reached regarding the structure/Conex box status, including recommendations.

- References

A list of any documents mentioned in the report that are not provided as attachments.

- Attachments:

- Sample Data Tables

- Sampling Plan (including all changes from the initial version)

- Photos and/or maps of sample locations

- Summary of Data (Postings)

Once the report has been completed and signed, it shall be reviewed by either a CIH or Industrial Hygiene Team (Exempt) Lead/Manager. The person who conducts the review shall be different from the person who wrote the report. The reviewer shall also sign the report. Contractors may conduct additional quality reviews at their discretion.

#### 4.2.7 Communication of Sampling Results

Non-record copies of all characterization/verification sampling reports shall be available to employees. These copies may be stored electronically if all employees have access to electronic records. If hard copies are used, contractors shall set up centrally located information stations where hard copies of the reports are stored.

#### 4.2.8 Developing a Technical Basis for Exceeding Control Levels

Additional analysis may be conducted by the contractor when a naturally occurring source of beryllium is known to be present. In such cases, the contractor must present evidence that a naturally occurring beryllium source is expected to be the cause of any samples that exceed the control levels.

The technical basis shall include:

- The scope and/or area defined by the technical basis
- Description of the workforce affected
- Source of the natural occurring beryllium
- Expected concentrations of beryllium
- Evidence that no sources of anthropogenic beryllium were ever present
- Exposure controls that will be used

If the applicable DOE field office (with BAG, HAMTC, CWB&CTC involvement) concurs with the contractor's technical basis, the area defined by the technical basis can be considered beryllium cleared even if control levels are exceeded. In addition, ongoing work can be considered to not be a beryllium activity.

Any areas where one or more samples were at or above the applicable control level shall be controlled for beryllium until the applicable DOE field office concurs with the technical basis. This includes posting in accordance with DOE-0342-003, *Hanford Site Beryllium Posting and Labeling Requirements Procedure*.

#### 4.2.9 Verification Sampling of Conex Boxes

Once the initial characterization sampling has been completed, contractors shall conduct verification sampling of Conex boxes that have the potential to inadvertently receive beryllium contaminated items. The frequency for verification sampling shall be based on the frequency of entry into the Conex box.

- Sampling shall be conducted annually for Conex boxes that are entered one or more times per month
- Sampling shall be conducted every three years for Conex boxes that are entered less than one time per month but are entered at least once per year
- Sampling shall be conducted every seven years for Conex boxes that are entered less than once per year

Verification sampling is not required in the following instances:

- Conex boxes that are used solely for the storage of new items/equipment
- Conex boxes that do not have the potential for any of the following:
  - Supports work within a BCA or Beryllium Regulated Area (BRA) (or supported work within a BCA or BRA since last sampling)
  - Store items/equipment that have been used within a BCA or BRA
  - Store items contaminated with tank waste

**NOTE:** Except for the two conditions noted above, the Assessor must assume that the potential to inadvertently receive beryllium contaminated items exists and that verification sampling is required.

If contamination at or above the control level is found in a structure/Conex box considered to be beryllium clear, document the identified issue and process in accordance with the contractor's issue management system.

#### **4.2.10 Sampling Requirements for Structure Demolition Preparation and Conex Box Shipment Off-Site**

Contractors shall ensure that prior to demolition that characterization sampling has been conducted for all structures where sampling has been identified as being feasible and appropriate. Characterization sampling shall be conducted prior to demolition or the structure status shall be changed to a BCF during demolition.

**NOTE:** Sampling prior to demolition isn't required for structures that have been determined to be beryllium cleared in accordance with this procedure.

Prior to transferring a Conex box from one contractor to another, the sending contractor shall determine if assessment and characterization sampling has been completed. If an assessment has been completed in accordance with this document, DOE-0342-004, *Hanford Site Beryllium Assessment and Characterization/Verification of Structures & Conex Boxes Procedure* and all characterization sampling required by the procedure has been conducted, no further sampling is required.

If an assessment hasn't been conducted in accordance with DOE-0342-004, the sending contractor shall conduct an assessment in accordance with DOE-0342-004. If the assessment determines that characterization sampling is required, the sending contractor shall either conduct the sampling prior to moving the Conex box or shall post it as a Beryllium Suspect Area in accordance with DOE-0342-003, *Hanford Site Beryllium Posting and Labeling Requirements Procedure*.

Conex boxes that are being prepared for shipment off the Hanford Site shall be sampled. Results shall be analyzed in accordance with Section 4.2.5 of this procedure. Access to the Conex box shall be controlled once sampling has been completed to ensure that potentially-contaminated items aren't introduced into the Conex box.

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**5.0 CONTROL AND REVIEW OF DOCUMENTS**

The Hanford Site CBDPP Committee will provide long-term stewardship and operation of this Procedure.

**6.0 RECORDS**

<b>Record Description</b>	<b>Submittal Responsibility</b>	<b>Retention Responsibility</b>
Beryllium Facility Assessment Form	Assessor	Site-Wide Industrial Hygiene Database (SWIHD)
Characterization/Verification Report (including all attachments)	Project IH	Electronic (IDMS or similar)
Sampling Data	IH/IHT	Site-Wide Industrial Hygiene Database (SWIHD)

**7.0 SOURCES****7.1 Requirements**

10 CFR 850, "Chronic Beryllium Disease Prevention Program," Title 10, *Code of Federal Regulations*, Part 850, as amended.

10 CFR 851, "Worker Safety and Health Program," Title 10, *Code of Federal Regulations*, Part 851, as amended.

29 CFR 1910, "Occupational Safety and Health Standards," Title 29, *Code of Federal Regulations*, Part 1910, as amended.

DOE-0342, Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP), U.S. Department of Energy.

**7.2 References**

Beryllium Characterization/Verification Sampling Plan for Structures & Conex Boxes, A-6006-206.

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**DOE-0342-004, Rev. 1**  
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DOE-0342-002, *Hanford Site Assessment & Characterization/Verification of Buildings Procedure.*

DOE-0342-003, *Hanford Site Postings and Labeling Requirements Procedure.*

FIGURE 1: ASSESSMENT & CHARACTERIZATION OF STRUCTURES

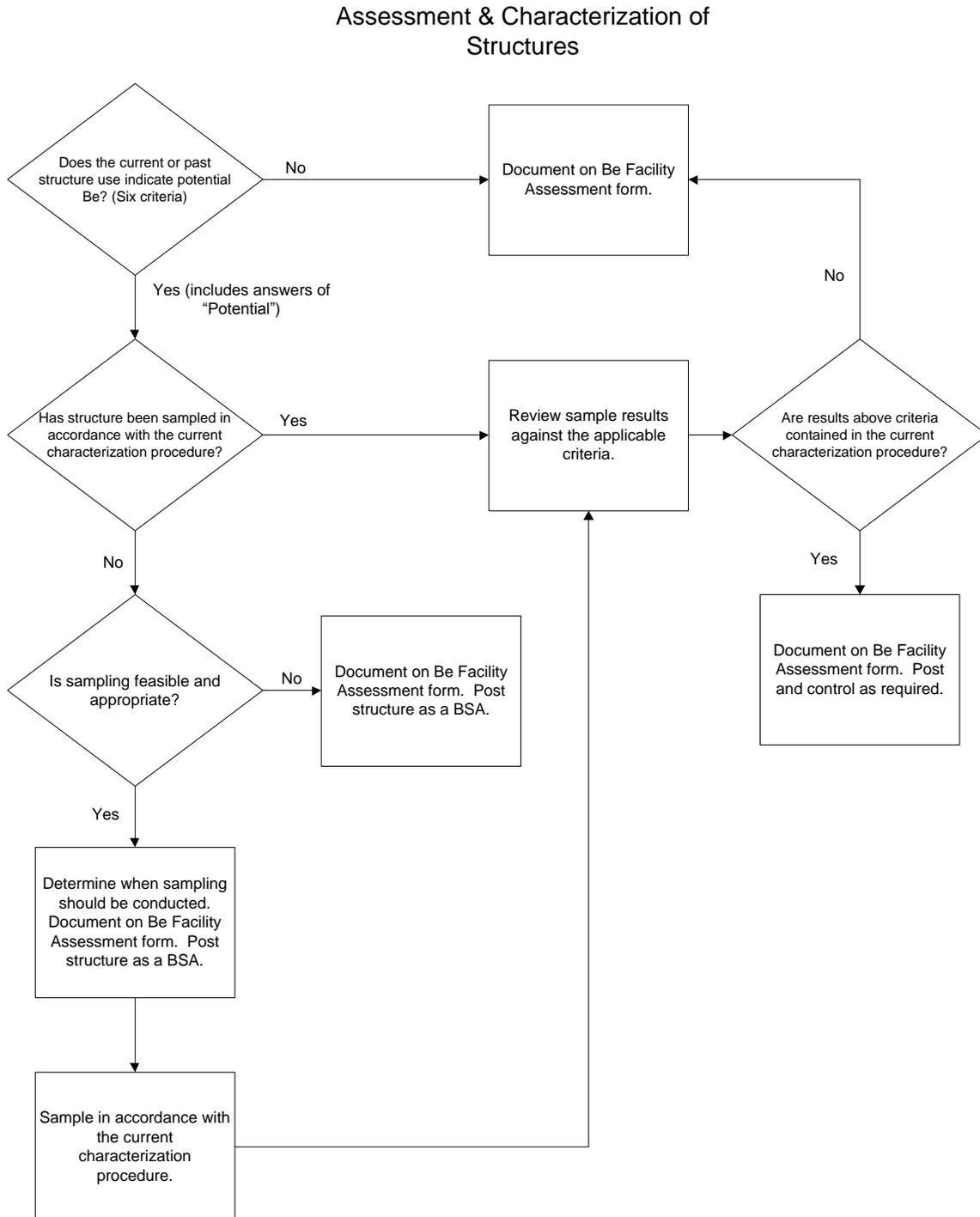
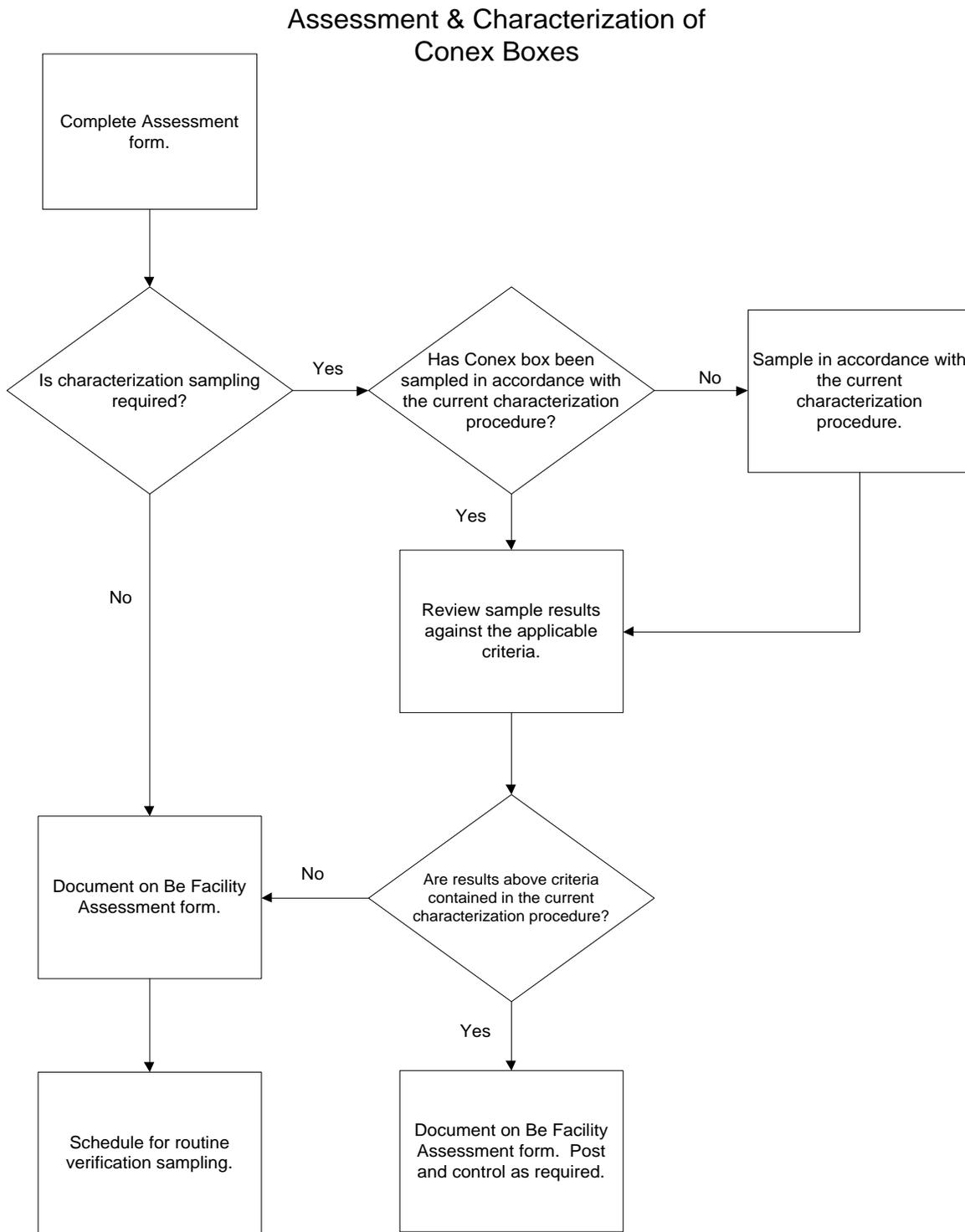


FIGURE 2: ASSESSMENT & CHARACTERIZATION OF CONEX BOXES



**APPENDIX A: DEFINITIONS & ACRONYMS****DEFINITIONS**

Term	Definition
Anthropogenic Beryllium	Beryllium and beryllium alloys created through artificial activities. The most common forms are beryllium, beryllium oxide, and copper beryllium alloys.
Control Level	The sample concentration level that requires an area to be beryllium controlled.
Facility	Buildings, Conex boxes, and structures are all considered to be facilities.
Naturally Occurring Beryllium	Natural forms of beryllium such as those found in soil, rocks, coal, and oil.  <b>NOTE:</b> Fly ash is considered to contain naturally occurring beryllium since the process of burning coal does not change the form of the beryllium.
Tank Waste	Legacy liquid and semi-solid waste materials that are currently stored in the 177 underground storage tanks.
Trigger Level	The sample concentration level that triggers additional investigative requirements.

## ACRONYMS

AIHA	American Industrial Hygiene Association
BAG	Beryllium Awareness Group
BCA	Beryllium Controlled Area
BCF	Beryllium Controlled Facility
Be	Beryllium
BRA	Beryllium Regulated Area
BSA	Beryllium Suspect Area
BWP	Beryllium Work Permit
CBDPP	Chronic Beryllium Disease Prevention Program
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
CWB&CTC	Central Washington Building & Construction Trades Council
DOE	U.S. Department of Energy
HAMTC	Hanford Atomic Metal Trades Council
EDE	Electrical Distribution Equipment
IDMS	Integrated Document Management System
IH	Industrial Hygienist
IHT	Industrial Hygiene Technician
PPE	Personal Protective Equipment
MSC	Mission Support Contractor
SWIHD	Site-Wide Industrial Hygiene Database

**APPENDIX B: BERYLLIUM FACILITY ASSESSMENT FORM FOR  
STRUCTURES COMPLETION INSTRUCTIONS**

**Facility Information**

Revision #

Autogenerated by SWIHD.

Date

Date that assessment was initiated. For revised assessments, this will be the date that the revisions began and not when the first assessment was started.

Assessor

Name of the assessor completing the form in SWIHD.

Reviewer:

The name of the Certified Industrial Hygienist or Industrial Hygiene Team (exempt) Lead/Manager who reviewed the assessment form and electronically approved the assessment form.

Structure Location

The general Hanford Area where the building is located.

Location Detail (Structure ID #)

Structure number as listed in CareTaker or other reliable source.

Structure Description

Obtained from CareTaker or other reliable source.

Building Administrator

Names of people responsible for the structure. This could be building administrator, building manager or other knowledgeable individual. For some structures, this may require a determination of who is responsible for the structure. In the case of demolished structures, this field may be listed as "N/A."

Contractor

Name of contractor company conducting the assessment.

Project

Project/organization name that has responsibility for the structure.

Date Built

This can be obtained from Caretaker, the Facilities Management organization, or from structure contacts. Estimates are acceptable. If not available, enter "Unknown."

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Square Footage

Obtained from Caretaker or other reliable source. If square footage isn't known or isn't applicable (e.g., for a smokestack) enter "N/A."

Current Status

Obtained from Caretaker or other reliable source.

Rad Contaminated Structure

Does the structure have any CAs, HCAs, RBAs, RMAs and /or Radiation Areas present? This information can be obtained from structure contacts.

Location Description

A text description of where the structure is located. An example would be, "Stack located on the south side of 234-5Z."

Structure Purpose

What is the intended purpose of the structure? Is it used for any other reason than its intended purpose? This information can be obtained from Caretaker or structure contacts.

**Contacts**

Walk down Conducted

List the date that the walk down was conducted. If no walk down was conducted, mark the box as "N/A."

Walkdown Date:

Leave blank if a walkdown wasn't conducted.

Individuals Contacted

List the names of all individuals who provided information used in this assessment (including walk-down participants). Include the date contacted and a summary of the information that they provided. Don't include previous assessors unless they are contacted.

**Assessment Information**

Structure Information

For the following statements, evaluate both present usage as well as past usage:

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- Attached to Beryllium Controlled Facility
- Adjacent to Beryllium Controlled Facility
- Be items transported/stored
- Potential Be contamination sources
- Potential Be cross-contamination
- Potential internal Be contamination

Areas where document reviews or interviews find some indication that a past usage may have included one of the above activities shall be marked as “Potential.” The assessment team shall make conservative decisions when minimal information is available. If the area of concern has been determined to be beryllium cleared through characterization sampling, check “Yes” in the appropriate “Cleared by Sampling” box. Provide location details, unless obvious, as well as any other applicable information.

Items of Concern

For the following processes, evaluate both present usage as well as past usage:

- Electrical Distribution Equipment
- Other (e.g., bridge cranes, elevator control systems, or other items that may contain beryllium)

Items where document reviews or interviews find some indication that items of concern may have been present in the past shall be marked as “Potential.” If the item of concern has been determined beryllium cleared through characterization sampling, check “Yes” in the appropriate “Cleared by Sampling” box. Provide location details, unless obvious, as well as any other applicable information.

**Characterization Information**

Current Status

If all of the questions are marked “No” or if characterization sampling confirms that contamination is below the control level, list the current status as “Beryllium Cleared.” If any of the following questions are marked “Yes” or “Potential,” list the current status as “BSA” unless there is characterization data for the structure that confirms that contamination is below the control level:

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- Attached to Beryllium Controlled Facility
- Adjacent to Beryllium Controlled Facility
- Be items transported/stored
- Potential Be contamination sources
- Potential Be cross-contamination
- Potential internal Be contamination
- Other area/items of concern

If characterization data shows that contamination above the control level exists, list the current status as a “BCA.” If no contamination above the control level has been found in the structure but there is electrical distribution equipment that hasn’t been characterized, list the structure as “Uncharacterized EDE Only.”

Sampling Feasible/Appropriate:

Mark as “Yes” if the consensus of the walk-down team is that sampling is feasible and appropriate. Otherwise mark as “No.” If answered “No,” discuss the rationale for the decision in the “Comments” section above.

Recommended Number/Location of Sample Points for Structure

List the number of samples recommended by the walk-down team.

List any locations that were recommended for sampling by the walk-down team. This list can either be specific (e.g., collect a sample from on top of ledge on north side of the structure) or general (collect six samples from the interior surface of the walls).

If sampling of the structure isn’t feasible and/or appropriate, mark as “N/A.”

Recommended Number/Location of Sampling Points for Items

While items won’t normally be located within a structure, they must be accounted for if they are present. If items are present, list the number of samples recommended by the walk-down team.

List any items that were recommended for sampling by the walk-down team. This list can either be specific (e.g. sample probe located in upper section of stack) or general (collect six samples from assorted cylinders in the compressed gas cylinder storage structure).

If no items are present in the structure, or if sampling of the structure isn’t feasible and/or appropriate, mark as “N/A.”

Schedule Sampling

Mark the appropriate box to note the consensus of the walk-down team regarding when sampling should be scheduled. If sampling isn’t feasible and/or appropriate, mark as “N/A.”

Summary of Sampling Data

List the name(s) (and identification number if available) of the characterization report(s) for the structure being assessed. If sampling has been done and no characterization reports were written, list the survey number of any industrial hygiene surveys unless those surveys are included in a

larger report that is referenced. If sampling doesn't have a survey number, list the dates that the samples were collected and the storage location of the sample data. The assessor may attach the characterization report instead of summarizing the data.

#### References

List any relevant documents. Examples may include:

- Building histories for facilities that are attached or adjacent to the structure
- Employee interviews – provide a brief description of each employee's expertise
- Transition reports
- CERCLA documents (e.g. RAWP, EE/CA)
- Environmental sampling documents
- Technical Basis Documents

For referenced documents, include the revision number and/or the creation date. In the event that no references are applicable (such as structures built to support ARRA activities), mark as "N/A."

#### **Comments**

This should be a brief summary of the information obtained for this structure. If documents were obtained during the assessment, they should be summarized here and referenced in the "References" section.

**APPENDIX C: BERYLLIUM FACILITY ASSESSMENT FORM FOR CONEX  
BOXES COMPLETION INSTRUCTIONS**

**Facility Information**

Revision #

Autogenerated by SWIHD.

Date

Date that assessment was initiated. For revised assessments, this will be the date that the revisions began and not when the first assessment was started.

Assessor

Name of the assessor completing the form in SWIHD.

Reviewer:

The name of the Certified Industrial Hygienist or Industrial Hygiene Team (exempt) Lead/Manager who reviewed the assessment form and has electronically approved the assessment form.

Conex Box Location

The general Hanford Area where the building is located.

Location Detail (Conex Box ID #)

Structure number as listed in CareTaker or other reliable source.

Conex Description

Obtained from CareTaker or other reliable source.

ID #

Conex box number as listed in CareTaker or other reliable source.

Contractor

Name of contractor company conducting the assessment.

Building Administrator

Names of people responsible for the Conex box. This could be building administrator, building manager or other knowledgeable individual. For some Conex boxes, this may require a determination of who is responsible for the Conex box. In the case of Conex boxes that have been disposed of or sent off site, this field may be listed as "N/A."

Project

Project/organization name that has responsibility for the Conex box.

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Date Built

This can be obtained from Caretaker, the Facilities Management organization, or from the Conex box contacts. Estimates are acceptable. If not available, enter “Unknown.”

Current Status

Obtained from Caretaker or other reliable source.

Rad Contaminated Conex box

Is the Conex box a CA, HCA, RBA, RMA and /or Radiation Area? This information can be obtained from the Conex box contacts.

Location Description

A text description of where the Conex box is located. An example would be, “Conex box located on the south side of 234-5Z.”

Summary of Items Stored

A text description of the general type of the items stored in the Conex box. An example would be, “Various hand tools and equipment used by demolition work teams” or “Completely full of unused office furniture that is in long-term storage”.

**Contacts**

Walk down Conducted

Check “Yes” or “No.”

Walkdown Date

List the date that the walk down was conducted. If no walk down was conducted, leave blank.

Individuals Contacted

List the names of all individuals who provided information used in this assessment (including walk-down participants). Include the date contacted and a summary of the information that they provided. Don’t include previous assessors unless they are contacted.

**Assessment Information**

Conex Box Information

For the following statements, evaluate both present usage as well as past usage:

- Adjacent to Beryllium Controlled Facility
- Known storage of Be Items/Waste
- Potential to store items from a BCF
- Potential to store items contaminated with tank waste

Areas where document reviews or interviews find some indication that a past usage may have included one of the above activities shall be marked as “Potential.” If the area of concern has

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been determined to be beryllium cleared through characterization sampling, check “Yes” in the appropriate “Cleared by Sampling” box. The assessment team shall make conservative decisions when minimal information is available.

Entry Frequency

On average, how frequently do employees enter the Conex box? This information can be obtained from the Conex box contacts.

**Characterization Information**

Current Status

If characterization sampling hasn’t yet been conducted, list the current status as “Awaiting Initial Sampling” unless other information indicates that the Conex box should be conservatively posted as a “BSA” or “BCA.” If characterization sampling confirms that contamination is below the control level, list the current status as “Beryllium Cleared.” If characterization data shows that contamination above the control level exists, list the current status as a “BCA.”

Recommended Number/Location of Sampling Points for Items

If items are present, list the number of samples recommended by the walk-down team.

List any items that were recommended for sampling by the walk-down team. This list can either be specific (e.g. “drill press located in back corner”) or general (“collect six samples from assorted desks”).

No items are present in the Conex box, mark as “N/A.”

Initial Sampling

Mark the appropriate box to note the consensus of the walk-down team regarding when sampling should be scheduled. While the walk-down team can agree that sampling should be done sooner, the minimum priorities apply:

- Conex boxes that have an entry frequency of “Daily” shall be marked as “Within 45 days”
- Conex boxes that have an entry frequency of “Weekly” or “Monthly” shall be marked as “Within next year”
- Conex boxes that have an entry frequency of “Annually” or “Less frequent than Annually” shall be marked as “Within three years”

Conex boxes that are associated with a BCF shall be considered for requiring initial sampling “As soon as practicable” based on the likelihood of potential cross-contamination from items.

Mark as “N/A” if:

- The Conex box was purchased new and hasn’t had any items/equipment stored inside it yet

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- The Conex box is was purchased new and only new items/equipment have been stored inside
- Characterization sampling has been conducted within the past three years prior to the initial assessment being conducted

Verification Sampling

Mark the appropriate box to note the consensus of the walk-down team regarding when sampling should be scheduled. While the walk-down team can agree that sampling should be done more frequently, the minimum priorities apply:

- Conex boxes that have an entry frequency of “Daily,” “Weekly,” or “Monthly” shall be marked as “Annually”
- Conex boxes that have an entry frequency of “Annually” shall be marked as “Every three years”
- Conex boxes that have an entry frequency of “Less frequent than Annually” shall be marked as “Within seven years”

Mark as “Not required” if:

- The Conex box is used solely for the storage of new items/equipment
- The Conex box is controlled by a project that doesn't:
  - Have employees that work within any BCFs
  - Share used items/equipment with other projects that do work within any BCFs
  - Have the potential to store items contaminated with tank waste

Summary of Sampling Data

List the name(s) (and identification number if available) of the characterization report(s) for the Conex box being assessed. If sampling has been done and no characterization reports were written, list the survey number of any industrial hygiene surveys unless those surveys are included in a larger report that is referenced. If sampling doesn't have a survey number, list the dates that the samples were collected and the storage location of the sample data. The assessor may attach the characterization report instead of summarizing the data.

Reference Information

List any relevant documents. Examples may include:

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- Building histories for facilities that are attached or adjacent to the Conex box
- Employee interviews – provide a brief description of each employee’s expertise
- Transition reports
- CERCLA documents (e.g., RAWP, EE/CA)
- Environmental sampling documents
- Technical Basis Documents

For referenced documents, include the revision number and/or the creation date. In the event that no references are applicable (such as Conex boxes purchased to support ARRA activities), mark as “N/A.”

Comments

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