

Hanford Site Beryllium Posting and Labeling Requirements Procedure

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



U.S. DEPARTMENT OF
ENERGY

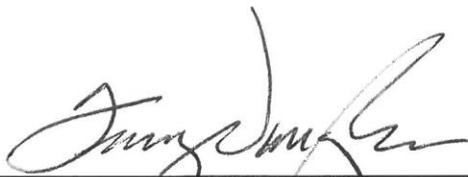
Change Summary

Revision #	Date/Section Changed	Change Details
1	3/19/13, Misc. changes as listed	Minor editorial changes throughout. 1.0, added callout to Attachment 1. 5.2, directed reader to DOE-0342 for definitions. 6.1.1, added an exception. Change to 6.3.2 re: downposting. 6.6, addition of language re: 'intrusive activity' 7.0, addition of training requirements. Attachment 1: Posting Signs and Labels, language added re: the manufacture of signs and description of their appearance.
0	3/19/12	Initial Issue

Hanford Site Beryllium Posting and Labeling Requirements Procedure

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8 MAY 2013

Date



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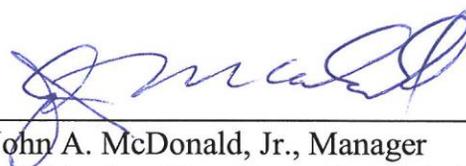
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1.0 PURPOSE AND SCOPE

This Hanford Site Beryllium Postings and Labeling Requirements Procedure, herein known as the Procedure, documents the requirements for:

- The establishment, use and posting of the beryllium status of facilities and locations of known or suspected surface/airborne beryllium contamination
- The labeling of contaminated or potential internally contaminated equipment, items and/or systems
- Labeling of areas with fixed beryllium contamination

Conformance with this Procedure ensures proper demarcation of areas with beryllium contamination or potential beryllium contamination and protection against inadvertent exposure of personnel to beryllium hazards.

Postings are used to alert personnel to areas with the presence of beryllium, or possible beryllium contamination, and to aid them in minimizing exposures while preventing the spread of contamination.

The requirements outlined in this Procedure are minimum requirements. Postings and labeling may be completed more conservatively as long as the approach meets the requirements of this Procedure. The sign design shall match the appropriate example in Attachment 1.

This Procedure does not apply to dormant Waste Information Data System (WIDS) Sites as defined in DOE-0342.

2.0 APPLICABILITY

This Procedure applies to all facilities, as defined in this Procedure, and activities on the Hanford Site.

3.0 ROLES AND RESPONSIBILITIES

3.1 Project IH

- Notifies the Facility Manager/Site Owner of the need for posting changes
- Determines the appropriate posting/labeling of areas where beryllium hazards have been identified

3.2 Facility Manager/Site Owner

- Ensures the correct signs are posted and clearly identify the current beryllium hazards per Section 4.0, *Requirements*
- Communicates the posting changes to the appropriate workforce
- Ensures that posting inspections are completed and documented as required

4.0 REQUIREMENTS

4.1 Inspection

- Inspect postings on an annual basis. In addition, inspect exterior postings after severe weather events.
- Consider As Low As Reasonably Achievable (ALARA) concerns and other personal safety issues (e.g., confined spaces) for posting inspections. If the inspection/surveillance cannot be performed, properly document the reason for not inspecting the posting.
- Document and maintain inspections/surveillance with the facilities' beryllium related records.

4.2 Posting

NOTE: *These are general requirements for all postings. See Section 6.3 for specific requirements.*

The requirements for posting signs are:

- Clearly and conspicuously posted
- Immediately reported and replaced if noticed to be missing, difficult to read due to fading, or otherwise degraded
- Include project beryllium contact information in the Additional Information block. Any other pertinent information may also be included. The Additional Information block may be modified without replacing the sign as long as it is legible.
- Entry requirements are identified

The requirements for postings are:

- Hung in a manner that supports continual visibility
- Clearly visible at each access/entry point
- On/attached to doors, walls, ropes/chains and/or posts as necessary to control access
- Posted in a manner to minimize inadvertent removal of sign by environmental conditions
- Posted or re-positioned in a manner so that they remain visible if changes in configuration should occur, such as opening/closing doors

4.3 De-Posting Beryllium Facilities/Areas

NOTE: *This section applies for those postings that require characterization sampling prior to the de-posting. See Sections 6.1 and 6.3 for specific requirements.*

When full characterization per the appropriate Hanford Site characterization procedure has been completed within a beryllium facility/area, de-post the facility/area if the results indicate a beryllium cleared status and the following criteria are met:

- The appropriate Hanford Site Characterization report is complete, approved, and supports a change in status of the area.
- Communication of sampling results to the facility occupants has taken place.
- Concurrence of Facility Manager or building administrator is obtained.

When a Beryllium Suspect Area (BSA) is established below an elevated Beryllium Controlled Area (BCA), de-post the area if the requirements of Section 6.3.3, *Elevated BCA*, have been met.

4.4 Labeling

The requirements for labels are:

- Positioned so they can be easily read
- Located near valves; branches; on entry/exit ports; wall, floor, or ceiling penetrations where affected piping, ventilation duct, etc., transverse to different locations as required
- Directly on the location of fixed contamination and/or affected equipment, items, systems as required
- Stuck on or tied on in a manner to remain affixed

4.5 Outdoor Area

This section is specific to outdoor, open-air areas controlled for beryllium. See Section 4.2, *Postings*, for the requirements of posting on exterior doors of buildings.

- Metal signs shall be posted on each side or avenue of approach to an area, and no greater than 100 feet apart.
- To prevent inadvertent access, in all cases, spacing between metal signs shall ensure that the area is clearly and conspicuously posted, no matter what the avenue of approach.

5.0 DEFINITIONS

5.1 Acronyms

ALARA	As Low as Reasonably Achievable
BCA	Beryllium Controlled Area
BCF	Beryllium Controlled Facility
BMA	Beryllium Material Area
BRA	Beryllium Regulated Area
BSA	Beryllium Suspect Area
BWP	Beryllium Work Permit
CBDPP	Hanford Site Chronic Beryllium Disease Prevention Program
DOE	Department of Energy

EDE	Electrical Distribution Equipment
ERDF	Environmental Restoration and Disposal Facility
HEPA	High-Efficiency Particulate Air
IH	Industrial Hygienist
MSC	Mission Support Contractor
RAA	Restricted Access Area
UBA	Underground Beryllium Area
WIDS	Waste Information Data System

5.2 Definition of Terms

Several terms used in this procedure are defined in DOE-0342, *Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP)*. These include:

- De-Posting
- Dormant WIDS site
- Down-Posting
- Facility
- Up-Posting

6.0 PROCEDURE

6.1 Posting Requirements for Beryllium Facilities

6.1.1 Beryllium Controlled Facilities (BCF)

Post a facility as a Beryllium Controlled Facility (BCF) when one or more of the following exist:

- Beryllium contamination is known in one or more areas of a facility, as determined on the appropriate assessment form
- The facility has been identified on the appropriate assessment form as having an area, or item of concern and full characterization has not been completed
- The facility contains non-transient equipment/items which have been posted or labeled for beryllium controls

EXCEPTIONS:

- *A facility with electrical distribution equipment (EDE) does not require posting as a BCF, if the EDE does not contain known beryllium contamination and the facility does not contain any other areas/items of concern.*
- *When an entire facility is a beryllium area, BCF signs are not required on the outer entrances. Each entrance will be posted with the appropriate BSA/BCA/BRA sign.*

If a facility has both beryllium areas and beryllium cleared areas, exterior doors that provide direct access to a BSA/BCA/BRA shall be posted with both a BCF sign and the appropriate BSA/BCA/BRA sign.

The determination of this basis may be made by either sampling data, or by known or possible historical usage. A BCF may contain any number of BCAs, BRAs, and/or BSAs.

When full characterization has been completed per the appropriate Hanford Site Assessment & Characterization/Verification Procedure, de-post a BCF if the results indicate a beryllium cleared status per Section 4.3, Requirements for De-Posting Beryllium Facilities/Areas.

6.1.2 Beryllium Facilities Under Demolition

NOTE: Some facilities may be demolished under environmental requirements which differ from the requirements of DOE-0342, Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP). This section is intended to maintain the protection of Hanford Site employees during and after demolition activities, regardless of the governing environmental requirements for demolition.

Follow these requirements for posting of areas where a BCF is in the process of being demolished or has been demolished:

- Post established boundary as a Demolished Beryllium Facility Site in accordance with the requirements identified for outdoor areas in Section 4.5, *Outdoor Area*
- Once the facility has been demolished, establish a BCA/BRA around the debris

Do not remove the BCA/BRA posting until:

- Facility debris has been removed and characterization sampling, per the appropriate Hanford Site Characterization procedure, of the area supports a beryllium cleared status or
- The demolition site has been covered with a minimum of 1 foot of clean fill and the area posted as a UBA

Do not remove the Demolished Beryllium Facility Site posting until the demolition site is appropriately posted and an additional caution boundary is no longer necessary.

Any postings originating from a demolished beryllium facility may be de-posted when characterization sampling, per the appropriate Hanford Site Characterization procedure, of the area supports a beryllium cleared status or environmental regulations become the sole governing requirements and the area is no longer considered a part of the Hanford Site.

6.2 Establishment of Beryllium Area Boundaries

Once an area requires posting for beryllium controls, the demarcated area shall meet the following criteria (except as identified for elevated surfaces):

- The area is adequate to prevent the spread of contamination.
- Has access easily controlled and identifiable (step-off pads).
- Use proper barriers to prevent the spread of contamination.
- Have signage posted per requirements described in the appropriate section of 4.2, *Posting*
- Have clearly visible postings for elevated surfaces to prevent inadvertent entry into the area.

The use of a beryllium worker in lieu of a physical boundary is acceptable when addressed as part of the Beryllium Hazard Assessment and the limitations included in the Beryllium Work Permit (BWP).

6.3 Posting Requirements for Beryllium Areas

6.3.1 Beryllium Regulated Areas (BRA)

Where airborne beryllium concentrations have been measured to be at or above the Action Level per DOE-0342, *Hanford Site Chronic Beryllium Disease Prevention Program*, or where the work activities can reasonably be expected to meet or exceed the Action Level for airborne beryllium, the area shall be posted as a Beryllium Regulated Area (BRA). Personnel access into a BRA shall be documented on the *Beryllium Regulated Area Access Log* (A-6006-150) for each entry made and must include the following information:

- The entry date,
- Beryllium Work Permit (BWP) number,
- Employee Name and Hanford ID number,
- A description of the work activity being performed; and
- Actual time in and time out.

When the work activity is completed and no additional entries will be made, incorporate a copy of the *Beryllium Regulated Area Access Log* into the appropriate work document along with the Hazard Assessment/BWP and associated beryllium paperwork. Scan a non-record copy of the completed form and maintain the form in a searchable electronic repository.

A BRA may be down-posted to a BCA when:

- Breathing zone and area beryllium airborne sample results indicate that the airborne beryllium levels are below the Action Level; and
- Future activities are not expected to generate airborne beryllium levels at or above the Action Level.

A BRA may be down-posted to a BSA if both of the above requirements are met and surface sampling indicates a beryllium cleared status in accessible and sampled inaccessible areas.

6.3.2 Beryllium Controlled Areas (BCA)

Establish a BCA for any areas in which contamination is at or above the Control Level. Also establish a BCA when identified on the appropriate Hanford Site Facility Assessment Form as an area/item of concern that has evidence of **surface** beryllium contamination. Determine the basis of this knowledge by either sampling data or by utilizing known historical usage.

When airborne beryllium levels during work activities within a BCA are reasonably expected to meet or exceed the Action Level, up-post the BCA to a BRA.

A BCA may be down-posted to a BSA when accessible surfaces have been sampled and indicate contamination is below the applicable Control Level.

6.3.3 Elevated BCA

Post an elevated area (above 8 feet) where the beryllium contamination level is at, or exceeds, the Control Level as a BCA. Post the area underneath the elevated contaminated surface as a BSA, unless sampling of the underneath area is at or exceeds the Action or Control Level.

Any time sampling of a posted BSA (below an elevated BCA) determines beryllium contamination, up-post the BSA to a BCA.

When work is being conducted in the elevated area BCA, up-post the BSA to the same level of controls as the elevated area.

An elevated area may be down-posted from BCA to a BSA when:

- The contamination has been captured by fixative, or paint, and sampling confirms no removable contamination.

Once either of the following conditions has occurred, the elevated area may be de-posted:

- The elevated surface has been decontaminated and sampling supports a beryllium cleared status; or
- A physical barrier capable of preventing the spread of contamination is erected around the contaminated area and the barrier is properly posted

The BSA established underneath the contaminated elevated area may be de-posted when:

- One of the three conditions described above has been met; and
- Sampling of the BSA confirms no spread of contamination from the elevated area

6.3.4 Beryllium Suspect Areas (BSA)

Establish a BSA when:

- An area that has been identified per a Hanford Site Assessment Form as an area/item of concern when the area has historical (knowledge and/or sampling) data which indicates no beryllium use and/or contamination, and
- Full characterization has not been completed per the appropriate Hanford Site Characterization procedure

Establish a BSA underneath an elevated BCA per Section 6.3.3, *Elevated BCA*.

During normal work activities in accessible areas and/or any sampled inaccessible areas, any employee may enter the area including Beryllium Affected Workers.

Prior to performing intrusive activities in un-sampled areas, up-post the area to a BCA or BRA. When work is completed and sampling results indicate a beryllium cleared status, re-establish the area as a BSA.

When full characterization per the appropriate Hanford Site Characterization procedure has been completed within a BSA, see Section 4.3, *Requirements for De-Posting Beryllium Facilities/Areas*, to de-post the area if the results indicate a beryllium cleared status.

If sampling has been conducted during an intrusive activity of an inaccessible area and the results indicate a beryllium cleared status, the area will not require up-posting for future work conducted in the beryllium cleared area.

6.3.5 Beryllium Material Areas (BMA)

A BMA may be established for the sole purpose of storing items or equipment removed from a BCA/BRA and awaiting sampling results. Demarcate BMAs that are only of sufficient size needed for temporary storage of items or equipment awaiting sample results.

A BMA is not to be established for the storage of beryllium contaminated items or to be used as a permanent storage area for beryllium containing tools/equipment.

De-post a BMA when all sample results of items/equipment are received from the lab and support a beryllium cleared status. If sample results do not support a beryllium cleared status, perform the following:

- Return items to the BCA/BRA or dispose of in a proper waste disposal container; and
- Complete sampling of the area prior to de-posting

6.3.6 Underground Beryllium Areas (UBA)

Post an underground area where a suspect or known beryllium contamination source exists as an Underground Beryllium Area (UBA). Examples of such sources include underground piping systems, tanks, or where known beryllium has been washed into the ground. Post the area informing employees that additional controls for beryllium are required when digging more than 6 inches (see Section 4.5, *Outdoor Area*).

De-post UBAs (or area reduced) when the source (or a portion of the source) of contamination or suspected contamination has been removed or decontaminated and sampling of the surrounding area indicates a beryllium cleared status.

6.3.7 Physical Barriers

Some beryllium activities may require several different types of physical barriers specifically designed to control the spread of beryllium contamination (e.g., glove bags, greenhouses, containments) in the performance of beryllium activities. Post physical barriers erected for this purpose in accordance with Section 4.2, *Posting*, with the appropriate signage.

This section only applies to newly erected containments for the purpose of controlling the spread of beryllium contamination during specific beryllium work activities.

6.4 Establishment of Temporary Beryllium Areas

Management may conservatively establish, for less than a 60 day period, a temporary (BRA/BCA/BSA) for control of an area within a facility deemed as beryllium cleared. In this instance, establish the area per the requirements of Section 4.2, *Posting*. The facility is not required to be posted as a BCF, unless sample results determine beryllium contamination at or above the Control or Action Level. Areas that need posting longer than 60 days require the facility to be posted as a BCF and the Facility Assessment form to be updated.

Once sample results indicate a beryllium cleared status, de-post the area.

6.5 Restricted Access Area

When performing investigative sampling due to results above the Trigger Level, restrict access to the area and follow the actions outlined in the appropriate Hanford Site Assessment and Characterization procedure within 60 days, or as approved by the appropriate Department of Energy (DOE) Field Office.

Post the area as “Restricted Access Area.” No additional posting of the facility is required.

6.6 Labeling Requirements

6.6.1 Potential Internal Beryllium Contaminated Equipment/Systems

Label items/equipment/systems identified with potential, but unconfirmed, internal contamination as “Potential Internal Beryllium Contamination” per Section [4.4, Labeling](#). Establish a BCA or BRA prior to performing an intrusive activity on the equipment/system. De-post the BCA or BRA once sample results indicate no spread of contamination has occurred.

6.6.2 Internal Beryllium Contaminated Equipment and Systems

When items, equipment, and/or systems have confirmed beryllium contamination, label the items, equipment, and/or system with an “Internal Beryllium Contamination” label. Establish a BCA or BRA prior to performing an intrusive activity on the equipment/system. De-post the BCA or BRA once sample results indicate no spread of contamination has occurred.

6.7 Contaminated Waste

Label waste generated from areas controlled for beryllium contamination with a “DANGER: Contaminated with Beryllium” label, as shown in Attachment 1: *Posting Signs and Labels*. The requirements for labeling waste are:

6.7.1 Bagged Waste

- Label bagged waste on the outside of the bag, clearly visible to employees and in a manner that the label will remain affixed by either stick-on labels or tie-on tags.
- Directly place waste removed from an area controlled for beryllium contamination into a properly labeled, sealed container or Environmental Restoration Disposal Facility (ERDF) can.

NOTE: *Bagged waste, removed from an area controlled for beryllium contamination, and directly disposed into an ERDF can, does not require labeling.*

- Label waste removed from an area controlled for beryllium contamination that is not directly placed into its final disposal container and stored in a lidded container specifically for beryllium contaminated material. Properly label the container in compliance with the requirements of containerized waste.

6.7.2 Containerized Waste

- Label drums/round casks with two labels oriented 180 degrees on the body of the drum and one label on the lid.

- Label ERDF containers so that the labeling is clearly visible to employees and appears on each side (front, back and both sides). For ERDF containers with metal lids, affix a label to the lid, in addition to the above requirements.
- Label boxes and square/rectangular casks on all four sides and the lid, so that labels appear clearly visible to the employees.
- Wrap equipment/debris considered beryllium contaminated waste in a manner that prevents the spread of contamination and labeled in accordance with the requirements for bagged waste.

6.8 Areas with Fixed Beryllium Contamination

When centralized, known beryllium contamination has been captured by fixative or paint:

- Label the area/equipment/item/system with a “Fixed Beryllium Contamination” label per Section 4.4, *Labeling*.
- The area surrounding the fixed beryllium contamination shall be posted per the appropriate requirements of Section 6.3, *Posting Requirements for Beryllium Areas*, but as a BSA at a minimum.

When beryllium contamination may exist behind a painted surface as identified on the appropriate Hanford site assessment form:

- The posting of the area shall indicate that it contains fixed beryllium contamination.

If intrusive work will be performed on the location of the fixed beryllium contamination, up-post the area as a BCA/BRA as required.

6.9 Samples

Label samples collected from a BCA or BRA with a “Potential Internal Beryllium Contamination” label on the outside shipping container, whether the samples are taken for beryllium analysis or other analytes. Samples labeled with a “Potential Internal Beryllium Contamination” label do not require storage inside a BMA.

6.10 Electrical Distribution Equipment (EDE)

NOTE: *Tamper seals placed on EDE shall be in a location approved by a qualified electrician*

Label electrical distribution equipment (EDE) that is known to have beryllium contamination above the Control Level with an “Internal Beryllium Contamination” tamper seal. Replace the tamper seal each time the equipment is closed at the completion of the specific work activity.

EXCEPTION: *A facility with electrical distribution equipment does not require posting as a beryllium controlled facility, if the electrical distribution equipment does not contain known beryllium contamination and the facility does not contain any other areas/items of concern.*

Post areas containing electrical distribution equipment based on the results of the appropriate Hanford Site Assessment/Characterization procedure.

7.0 TRAINING REQUIREMENTS

The level of an employee's knowledge of the requirements of this Procedure may vary.

The following are the training requirements needed to work under the requirements of this procedure:

Associated Worker – HGET, Course #004108, Beryllium Associated Worker Training - CBT (included as a module in Course #000001, Hanford General Awareness Training)

Beryllium Worker – Beryllium Worker Training, Course #004140 Beryllium Worker Training

IH/IHT/Safety Professional – IH/IHT Training, Course #004114, Beryllium Posting, Assessment, Characterization and Verification

8.0 DOCUMENT CONTROL AND REVIEW

The Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP) Committee will provide long-term stewardship and operation of this Procedure.

9.0 RECORDS

The following records are generated during the performance of this Procedure:

Record Description	Submittal Responsibility	Retention Responsibility
Beryllium Regulated Area Access Log (A-6006-150)	Project Management	As part of Work Package documentation.

10.0 REFERENCES

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 10, *Code of Federal Regulations*, Part 1910, as amended.

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

ATTACHMENT 1: POSTING SIGNS AND LABELS

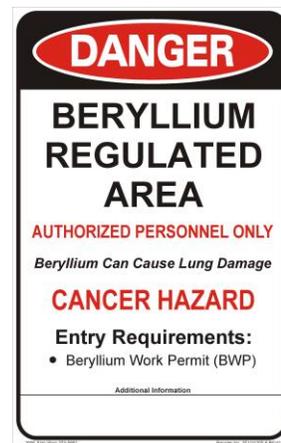
The master templates of all beryllium posting signs and labels shall be maintained by the MSC Sign Shop. Contractors may produce their own posting signs and labels provided they match the master template controlled by the MSC Sign Shop and remain compliant with the requirement of this procedure. The sign shop may place contact information and the posting and labeling reorder number in the lower corners of the posting/label.

Beryllium Regulated Area (BRA)

Danger signage to identify an accessible area where airborne beryllium levels exceed, or may be reasonably expected to exceed, the Action Level. A BRA may be an entire facility, a room, a system, or a geographic area.

The signage is white text in red oval on black background for the header, and black and red text on white background as specifically designated in this illustration:

MSA Sign shop reference number: [2E1111205.6 rev2]



Contaminated with Beryllium

Danger label to be affixed to all containers of beryllium and/or beryllium compounds including beryllium-contaminated clothing, equipment, waste scrap or debris. This also includes waste shipping containers used to transport beryllium waste.

This label is white text in a red oval on black background for the header, with black and red text on white background, as specifically designated in this illustration:

MSA Sign shop reference number: [2E305129.1DC]



Internal Beryllium Contamination

Warning label indicating confirmed beryllium contamination inside an item/equipment/system that requires additional controls when intrusive activities are performed.

This label may be in standard label form, or used as a tamper seal on electrical distribution equipment.

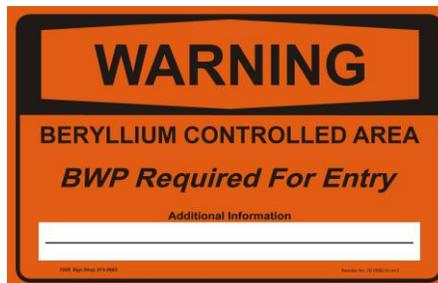
The label features black text in an orange background, as specifically designated in this illustration: MSA Sign shop reference number: [2E1111205.8 rev2]



Beryllium Controlled Area (BCA)

Warning signage to identify an accessible area where removable surface beryllium contamination has the potential to, or does exceed the background beryllium level. A BCA may be an entire facility, a room, a system, or a geographic area.

Signage is black text on an orange background, as specifically designated in this illustration:



MSA Sign shop reference number: [2E1009210 rev2]

Beryllium Controlled Facility (BCF)

Caution signage to indicate that the facility has area(s) that exceed or have the potential to exceed the background beryllium level. A BCF may include one or more BRAs, BCAs and/or BSAs.

This signage is used at facility entrances to caution personnel of the potential presence of beryllium in identified areas.

This signage is also used to indicate a BCF established for control of suspected areas until facility/area characterization data collection and interpretation is completed. Post every entrance into a beryllium-controlled facility.



Signage is black text on a yellow background, with yellow text on black background for the header, as specifically designated in this illustration:

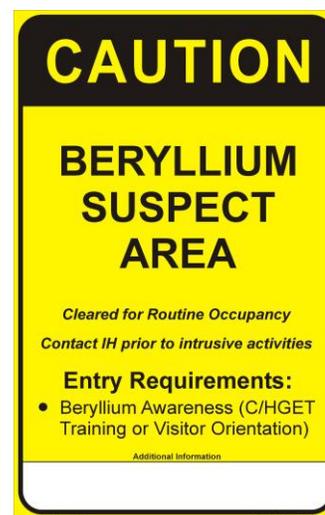
MSA Sign shop reference number: [2E1111205.1 rev2]

Beryllium Suspect Area (BSA)

Caution signage to indicate the potential for beryllium contamination in un-sampled inaccessible areas within an area/item of concern identified on the appropriate Assessment Form.

This signage is also used to indicate a BSA established for control of an area below an elevated BCA.

Signage is black text on a yellow background, with yellow text on black background for the header, as specifically designated in this illustration:



MSA Sign shop reference number: [2E1111205.3 rev2]

Underground Beryllium Area

Caution signage to indicate known, or potential of, beryllium contaminated systems/items which exist underground.

This signage is black text on a yellow background, with yellow text on black background for the header, as specifically designated in this illustration:

MSA Sign shop reference number: [2E1111205.5 rev2]



Potential Internal Beryllium Contamination

Caution label indicating the potential for un-confirmed beryllium contamination inside an item/equipment/system requiring additional controls when intrusive activities are performed.

This label is black text on a yellow background, with yellow text on black background for the header, as specifically designated in this illustration:

MSA Sign shop reference number: [2E1009230.1 rev2]



Fixed Beryllium Contamination

Caution label indicating an area where beryllium contamination has been affixed by use of an approved fixative. Additional controls are required when intrusive activities are performed on the affixed area.

This label is black text on a yellow background, with yellow text on black background for the header, specifically designated in this illustration:

MSA Sign shop reference number: [2E1111205.4 rev2]

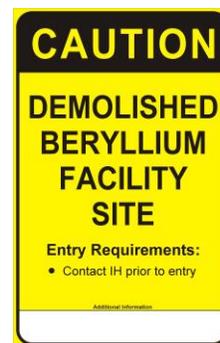


Demolished Beryllium Facility Site

Caution signage indicating an area where a BCF is in progress of being and/or has been demolished and characterization sampling per the appropriate Hanford Site procedure has not been completed.

This signage is designed to protect the Hanford worker from potential exposure to beryllium until the area is no longer considered part of the Hanford Site.

Signage is black text on a yellow background, with yellow text on black background for the header, as specifically designated in this illustration:

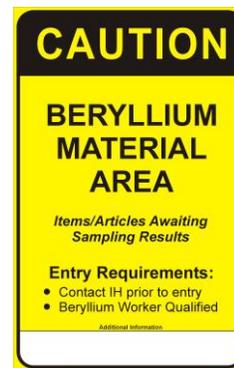


MSA Sign shop reference number: [2E1111205.9 rev2]

Beryllium Material Area

Caution signage to indicate an area where material removed from a BCA or BRA is temporarily stored and awaiting sampling results.

Signage is black text on a yellow background, with yellow text on black background for the header, as specifically designated in this illustration:



MSA Sign shop reference number: [2E1111205.2 rev2]

Restricted Access Area

Caution signage indicating an area with sample results above the Trigger Level. Restricted Access Areas are established on a temporary basis (no more than 60 days, or as approved by DOE Field Office).

Signage is black text on a yellow background, with yellow text on black background for the header, as specifically designated in this illustration:



MSA Sign shop reference number: [2E1111205.7 rev2]