

Beryllium Gap Training Course

004G004

3/1/2010



Welcome

EXIT COMMENTS HANDOUT

CBDPP Gap Training for Beryllium Wo

<input checked="" type="checkbox"/>	Welcome	Req	0:30
<input type="checkbox"/>	CBDPP Introduction	Req	
<input type="checkbox"/>	CBDPP Scope	Req	
<input type="checkbox"/>	CBDPP Facilities	Req	
<input type="checkbox"/>	Work Process and Permit	Req	
<input type="checkbox"/>	Action Levels	Req	
<input type="checkbox"/>	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Welcome to the Update on the Chronic Beryllium Disease Prevention Program (CBDPP)

To complete the training, you must complete all of the required sections listed in the table to the left. You may take the sections in any order you choose by clicking on the section title or just use the forward arrow to guide you through the lesson in the natural order. The average time required to complete each section, if known, is displayed in that section's row.

Click the forward arrow whenever you are ready to begin.



CBDPP Introduction

EXIT ↑ COMMENTS ↓ HANDOUT 📄

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Hanford Site Chronic Beryllium Disease Prevention Program

There have been changes to the program.

As a Beryllium Worker, this training will familiarize you with the key elements of the newly developed Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP) DOE-0342. When the document is fully implemented it will replace individual company CBDPPs. The purpose of a single program is to have a consistent approach to work activities in beryllium-regulated areas and beryllium-controlled areas.



Program Goal: Minimize exposure to employees



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Introduction

Course Overview

There are some significant changes in the Program.

This training will focus on the changes that will most affect you as a Beryllium Worker. It will not cover every change to the Program. If you have specific questions you may refer to the CBDPP or get help from one of the Points-of-Contact listed at the end of this course.

Course Outline

- The scope of the Program
- Facility characterization and posting
- Work process and permits
- Points of contact



The most significant changes that affect you as a Beryllium Worker are:

- Employee designations
- Establishment of a new action level
- Changes in the postings and signs
- Use of a work permit.



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Scope

The Site Program Implements a Consistent Approach

The integrated Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP) DOE-0342 has been developed to minimize beryllium exposure for employees working at Hanford. The Hanford CBDPP provides a consistent approach for Hanford contractors who are responsible for facilities where beryllium activities may have previously been conducted and/or to any current activities that involve actual or potential exposure to airborne beryllium.



CBDPP Scope

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Most Site Contractors Have Committed to the Program

The Site CBDPP was developed jointly with both technical and labor representatives.

The following companies are adopting this program:

- AdvanceMed Hanford
- CH2M HILL Plateau Remediation Company
- Mission Support Alliance
- Washington Closure Hanford LLC
- Washington River Protection Solutions LLC



CH2MHILL
Plateau Remediation Company



CBDPP Scope

EXIT COMMENTS HANDOUT

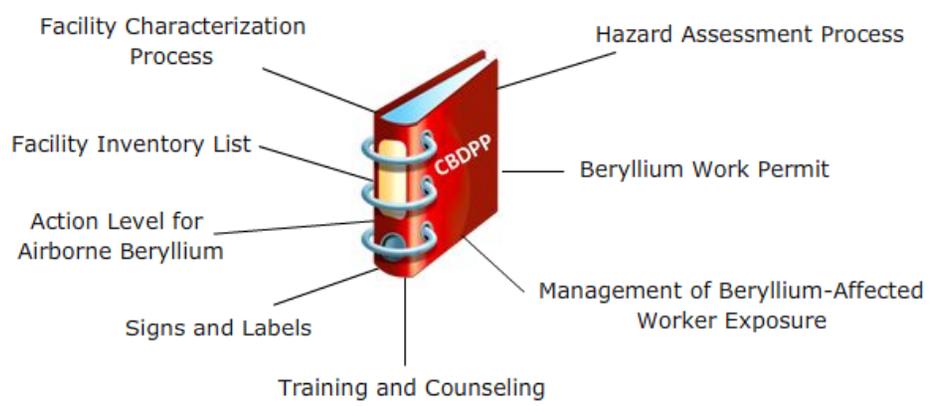
CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

The Site Program Standardizes Numerous Items

The CBDPP covers Hanford workers who have previously been exposed or currently have the potential for exposure to beryllium while working at Department of Energy (DOE) sites. The program standardized the following items:



CBDPP Scope

EXIT ↑ COMMENTS ✎ HANDOUT 📄

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

The Program Establishes a Committee to Support the Program

The program also establishes a CBDPP committee which is chartered with the administration, training, and implementation of the CBDPP. The committee is a technical resource that may be utilized by employees for clarification and implementation guidance. The committee is also available to address questions, comments, or concerns.



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Scope

Employees are Designated Differently Within the CBDPP

(Definitions can be viewed by clicking on blue colored text.)

It is important for you to know your designation so you can determine how the program applies to you.

Beryllium Worker Defined: A current worker who is regularly employed in a DOE [beryllium activity](#). Note: the term "beryllium-assigned worker" will no longer be used.



All workers will be trained as a [Beryllium-Associated Worker](#), including [Beryllium-Affected Workers](#).



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Scope

Employees are Designated Differently Within the CBDPP

(Definitions can be viewed by clicking on blue colored text.)

It is important for you to know your designation so you can determine how the program applies to you.



Beryllium Worker Defined: A current worker who is regularly employed in a DOE [beryllium activity](#). Note: the term "beryllium-assigned worker" will no longer be used.

All workers will be trained as a [Beryllium-Associated Worker](#), including [Beryllium-Affected Workers](#).

Beryllium Activity: An activity taken for, or by, DOE at a DOE facility, that can expose workers to airborne beryllium, including but not limited to design, construction, operation, maintenance, or decommissioning, and which may involve one DOE facility or operation or a combination of facilities and operations. Close



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Scope

Employees are Designated Differently Within the CBDPP

(Definitions can be viewed by clicking on [blue](#) colored text.)

It is important for you to know your designation so you can determine how the program applies to you.



Beryllium Worker Defined: A current worker who is regularly employed in a DOE [beryllium activity](#). Note: the term "beryllium-assigned worker" will no longer be used.

All workers will be trained as a [Beryllium-Associated Worker](#), including [Beryllium-Affected Workers](#).

Beryllium-Associated Worker: A current worker who is (or was) exposed, or potentially exposed to airborne concentrations of beryllium at a DOE facility, including:

- A beryllium worker
- A current worker whose work history shows that the worker may have been exposed to airborne concentrations of beryllium at a DOE facility
- A current worker who exhibits signs or symptoms of beryllium exposure
- A current worker who is receiving medical removal protection benefits

Close



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Scope

Employees are Designated Differently Within the CBDPP

(Definitions can be viewed by clicking on blue colored text.)

It is important for you to know your designation so you can determine how the program applies to you.



Beryllium Worker Defined: A current worker who is regularly employed in a DOE [beryllium activity](#). Note: the term "beryllium-assigned worker" will no longer be used.

All workers will be trained as a [Beryllium-Associated Worker](#), including [Beryllium-Affected Workers](#).

Beryllium-Affected Worker: A worker affected medically by beryllium exposure; e.g., beryllium sensitization, chronic beryllium disease (CBD) or a medical condition otherwise associated with beryllium exposure.

Close



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Scope

The Site Program Will Have a Phased Implementation Approach

The transition to working to the site CBDPP will be phased in between now and January, 2010. During this transition, contractors will continue to work to their individual CBDPP until the site CBDPP is fully adopted. Activities you will see as we work towards full implementation will be:

- Communicate the Program changes through training
- An update of all procedures referencing the contractors CBDPP
- A complete review of existing facilities to update the beryllium facility inventory list



Click To See List Content

- New posting of areas as beryllium-controlled areas as they are identified
- A beryllium work permit will be adopted into the work process
- A centralized website listing the inventory of beryllium facilities
- Ongoing communications to all employees regarding the implementation of the program

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

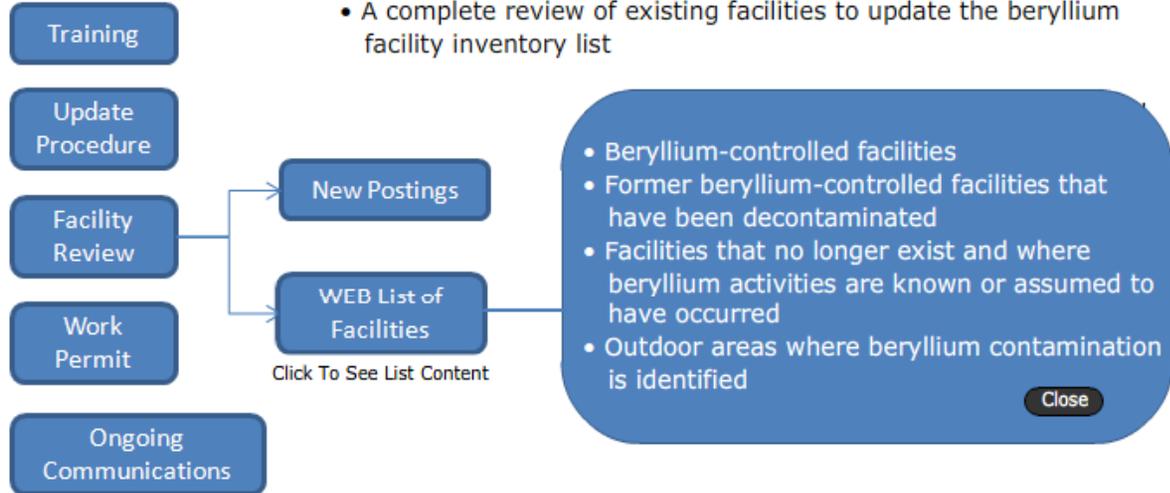
Select desired section from the list above or just let the program guide you.

CBDPP Scope

The Site Program Will Have a Phased Implementation Approach

The transition to working to the site CBDPP will be phased in between now and January, 2010. During this transition, contractors will continue to work to their individual CBDPP until the site CBDPP is fully adopted. Activities you will see as we work towards full implementation will be:

- Communicate the Program changes through training
- An update of all procedures referencing the contractors CBDPP
- A complete review of existing facilities to update the beryllium facility inventory list



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Scope

This is the End of the CBDPP Scope Section

✓ CBDPP Scope	Req	
---------------	-----	--

Key Points to Remember

- Most contractors will adopt the program to achieve standardization
- Beryllium Worker has replaced Beryllium-Assigned Worker designation
- A committee has been formed and is available to address questions, comments, or concerns
- The Program will be implemented in a phased approach

What's Next? Changes Related to Facilities Including

- A facility review and reevaluation
- Facility and area designation
- New signs



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Facilities

Suspect Beryllium Contamination is a Part of Hanford History

Historically, beryllium was used at Hanford in the fuel fabrication process for N-Reactor. Other sources of suspect beryllium contamination may have been generated from cutting and grinding on beryllium alloy tools, or use/ wear of other parts and equipment that contained beryllium.

An initial review of facilities with beryllium activity and possible contamination was compiled in 1988. This information was reviewed and updated in 1998 when 10 CFR 850 Chronic Beryllium Disease Prevention Program was enacted and established the requirements for all contractors to maintain a list of beryllium facilities.



N Reactor (1970s)



CBDPP Gap Training for Beryllium Wo

✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Facilities

Some Facilities Do Not Contain Beryllium

Beryllium-Clean Facility: An existing facility where, through characterization sampling and/or process knowledge, the potential for exposure to beryllium does not exist. The facility may be an entire building or a geographic area.



Mission Support Alliance Headquarters, Stevens Center, Richland



CBDPP Facilities

EXIT [] COMMENTS [] HANDOUT []

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Facilities to be Evaluated and Classified

In an ongoing effort to identify areas with possible beryllium contamination, contractors will conduct a review of their existing facilities and re-evaluate the potential for beryllium contamination.



As a result of this effort, new facilities or areas in facilities may be identified as beryllium controlled. Signs will be installed on those facilities or areas that are already identified and/or that are newly identified as a result of the updated assessments.



CBDPP Gap Training for Beryllium Wo

✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Facilities

There is a new set of signs that you will need to recognize and understand their meaning.
Click on an icon to view a sign and its use.



Beryllium Regulated Area



Beryllium Contaminated



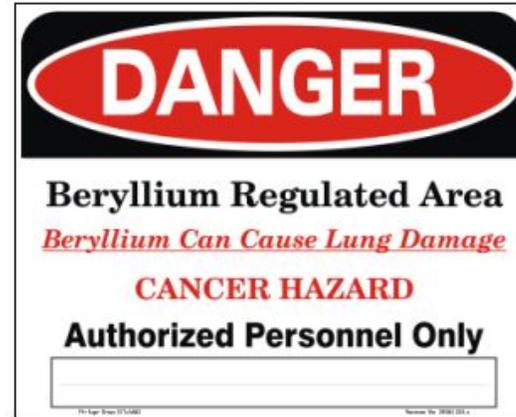
Beryllium Controlled Area



Beryllium Controlled Facility



Potential Beryllium Contamination



Beryllium Regulated Area is an area demarcated by the responsible employer in which the airborne concentration of beryllium exceeds or can reasonably be expected to exceed the action level.



CBDPP Gap Training for Beryllium Wo

✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Facilities

There is a new set of signs that you will need to recognize and understand their meaning.
Click on an icon to view a sign and its use.

 <p>Beryllium Regulated Area</p>  <p>Beryllium Contaminated</p>  <p>Beryllium Controlled Area</p>  <p>Beryllium Controlled Facility</p>  <p>Potential Beryllium Contamination</p>	 <p>DANGER</p> <p>Contaminated with <i>Beryllium</i></p> <p><i>Do Not Remove Dust By Blowing or Shaking</i></p> <p><i>Cancer & Lung Disease Hazard</i></p> <p><small>FH Sign Shop 373-5682 Reorder No. 25305129-1DC</small></p> <p>Beryllium-Contaminated Material: Material with removable surface beryllium at greater than 0.2 µg/100cm², after decontamination or cleaning, when characterized by wipe sampling methods, or at levels that exceed the background beryllium level when characterized by bulk sampling methods.</p>
--	--



CBDPP Facilities

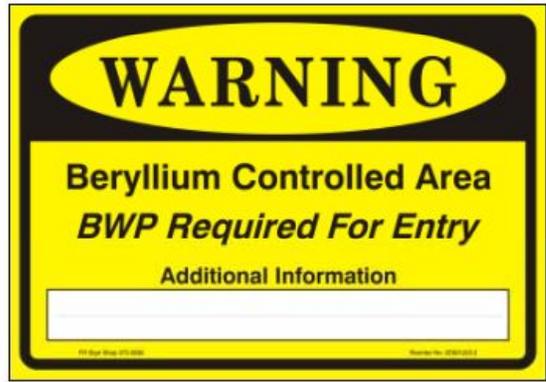
EXIT COMMENTS HANDOUT

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

There is a new set of signs that you will need to recognize and understand their meaning. **Click on an icon to view a sign and its use.**

 Beryllium Regulated Area	
 Beryllium Contaminated	
 Beryllium Controlled Area	
 Beryllium Controlled Facility	
 Potential Beryllium Contamination	

Beryllium-Controlled Area (BCA): An accessible area where removable surface beryllium levels have the potential to exceed the Background Beryllium Level, as determined by the methodology outlined in DOE interpretation D06-07-004 or a decontaminated surface $>0.2 \mu\text{g}/100\text{cm}^2$. A BCA can be an entire building, room, system, or a geographic area.

CBDPP Gap Training for Beryllium Wo

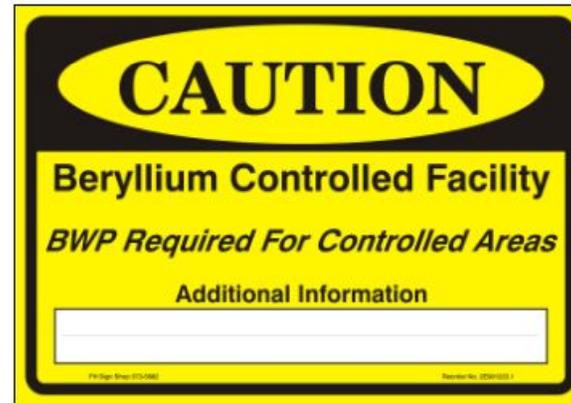
✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Facilities

There is a new set of signs that you will need to recognize and understand their meaning. **Click on an icon to view a sign and its use.**

- 
Beryllium Regulated Area
- 
Beryllium Contaminated
- 
Beryllium Controlled Area
- 
Beryllium Controlled Facility
- 
Potential Beryllium Contamination



- Beryllium-Controlled Facility: An existing facility where:
- Beryllium activities are ongoing
 - Beryllium activities have occurred in the past
 - Beryllium surface contamination has been confirmed
 - There is some evidence that a beryllium activity may have occurred in the past and characterization sampling has not been completed.

Note: Within a Beryllium-Controlled facility there may be beryllium controlled and/or beryllium regulated areas.



CBDPP Gap Training for Beryllium Wo

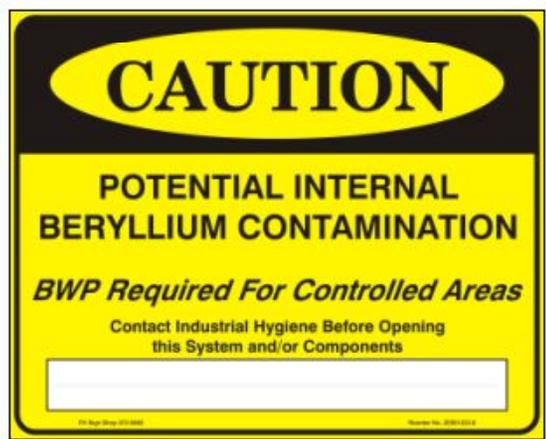
✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Facilities

There is a new set of signs that you will need to recognize and understand their meaning. **Click on an icon to view a sign and its use.**

-  **Beryllium Regulated Area**
-  **Beryllium Contaminated**
-  **Beryllium Controlled Area**
-  **Beryllium Controlled Facility**
-  **Potential Beryllium Contamination**



Internal Beryllium Contamination: Enclosed systems or equipment with inaccessible internal surfaces with suspected or known beryllium contamination. In general, the external surfaces of these items are below the release limit of 0.2 µg/100cm², or 2 ppm, but represent a potential hazard for workers unknowingly disturbing the internal surfaces.

CBDPP Facilities

EXIT ↑ COMMENTS ↗ HANDOUT 📄

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Section Summary: Facilities

Key Points to Remember

- Facility's condition will be reviewed to determine its characterizations
- Signs and positings will be standardized site wide
- Beryllium-Controlled Facilities indicates that a facility has some beryllium association
- Beryllium-Controlled Areas refer to levels of surface beryllium above limits
- Beryllium-Regulated Areas refer to levels of airborne concentrations.

Select desired section from the list above or just let the program guide you.



Work Process and Permit

EXIT COMMENTS HANDOUT

CBDPP Gap Training for Beryllium Wo

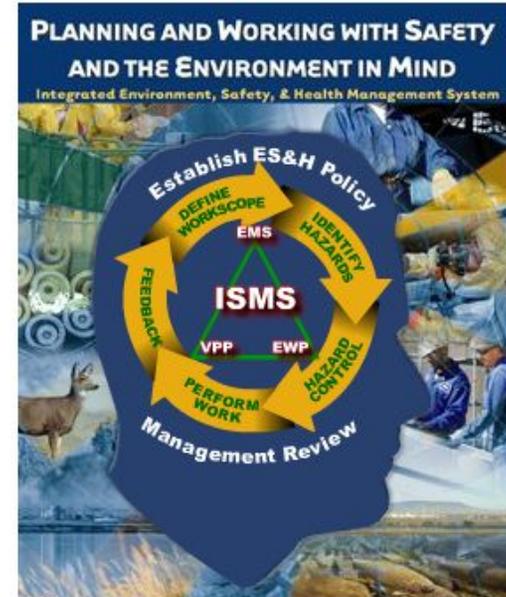
✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
✓	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Beryllium Work Process and Work Permit

This section will cover some of the details of the work process when dealing with beryllium. It will include information on the process flow and details of the hazard assessment that is conducted prior to work. Then the section will cover the Site Beryllium Work Permit.

As you review this material, keep in mind what you need to know in order to perform beryllium related work. Think about the things you would like to know when you do a job. Who should I contact if I have questions? What work can I do? How will I know what protective equipment I will need?



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Exposure to Beryllium is on a Risk-Based Graded Approach

Work control processes require contractors to evaluate the hazards of a job. When work is performed in a beryllium-regulated area or a beryllium-controlled area, an industrial hygienist will complete a written hazard assessment of the work. The purpose of the hazard assessment is to determine the potential for employee exposure and the controls necessary to minimize the exposure risk. **Click on the "Hazard Assessment" block to see the details.**



CBDPP Gap Training for Beryllium Wo

✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
✓	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

There Will Be One Site Beryllium Work Permit (BWP) Form

Hazard assessments shall be reviewed and updated as necessary when conditions change. Prior to conducting work, employees shall ensure that the work activity description included in the BWP accurately describes the planned work scope and current site conditions. If the work scope does not match the work activity described in the BWP, the hazard assessment shall be updated and any changes in the controls shall be documented in the revised BWP.



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

There are 21 Sections on a Beryllium Work Permit (BWP)

What you should know about the BWP:

- It should be completed and approved before you begin work
- Who the point-of-contact is if you have questions
- The permit can be good for up to one year
- The job description sets the extent of the work that can be conducted
- You must follow the beryllium-control information



[Click to View a BWP](#)

Next, some of the details about the Beryllium Work Permit.



CBDPP Gap Training for Beryllium Wo

✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
✓	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

The Top Section of the Permit Answers Who and Where

BERYLLIUM WORK PERMIT			
Responsible Organization			
1) Beryllium Work Permit (BWP) No.:		2) Work Document if applicable:	
Rev. No.:			
3) Point of Contact (POC): Name:		Phone No.:	MSIN:
4) Location (Bldg./Area): Area:		Building:	Room: Other:
5) Start Date:	6) Contractor:	7) End Date:	8) Permit Type: <input type="checkbox"/> General <input type="checkbox"/> Job Specific

Section 3 provides you with contact information. Who to contact if you have questions. It gives you their phone number and MSIN information.

Section 4 indicates where the work will take place by area, building and room and can provide additional details in the "Other" block.

Section 8 designates the type of permit. The Beryllium Work Permit may be general in nature or job specific.

- General work permits apply to multiple work packages and have an open-ended time frame (examples: conduct job walk downs in BCA's located in PFP, removing beryllium-contaminated equipment from 234-5Z)
- Job specific permits support a single work package and are terminated when the work is complete



CBDPP Gap Training for Beryllium Wo

✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
✓	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

The Job Description Defines the Scope of Work

The job description sets the extent of the work that can be conducted. You're not to perform work that exceeds the job description (scope creep). If you need clarification about the task(s) you need to perform, contact your supervisor or the Point-of-Contact listed on the permit. Have the permit revised if necessary. This will ensure the task will be evaluated for safety impact.

Click to View a BWP

BERYLLIUM WORK PERMIT	
Responsible Organization	
1) Beryllium Work Permit (BWP) No.:	2) Work Covered & Applicable:
3) Point of Contact (POC) Name:	Phone No.:
4) Location (Bldg./Room):	Job No.:
5) Start Date:	6) Permit Type:
7) End Date:	8) Job Specific:
9) Job Description:	
Respiratory Protection (RP) - Beryllium Control Information	
10) Respiratory Protection Required:	
11) Protection Clothing:	
12) Sampling:	
13) Containment:	
14) Area Posting & Barriers:	
15) Engineering/Work Controls:	
16) Waste Labeling & Handling:	
17) RC Coverage:	
18) Training:	
19) Special Instructions:	



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Multiple Sections Cover the Beryllium Control Information

Sections 10 through 19 provide information on the controls that are required for the job that is described in Section 9 (Job Description). These sections include information such as what Personal Protective Equipment (PPE) is to be used and when an industrial hygienist needs to be involved.

You can view the details for the sections listed below, by clicking on the section button.

Section 10
Respiratory
Equipment

Section 11
Protective
Clothing

Section 12
Sampling

Section 13
Decon

Section 14
Area Posting
& Barriers

Section 16
Waste Labeling
& Handling

10) Respiratory Protection Equipment

Yes
 No
 APR w/P100
 PAPR w/P100
 Other (specify)

Respiratory Protection: Not all work activities will require respiratory protection. This would usually be required if the work was a dust disturbing activity.



Close



CBDPP Gap Training for Beryllium Wo

✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
✓	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Multiple Sections Cover the Beryllium Control Information

Sections 10 through 19 provide information on the controls that are required for the job that is described in Section 9 (Job Description). These sections include information such as what Personal Protective Equipment (PPE) is to be used and when an industrial hygienist needs to be involved.

You can view the details for the sections listed below, by clicking on the section button.

- Section 10
Respiratory Equipment
- Section 11
Protective Clothing
- Section 12
Sampling
- Section 13
Decon
- Section 14
Area Posting & Barriers
- Section 16
Waste Labeling & Handling

11) Protective Clothing

Work Gloves (Leather)
 Gloves
 Shoe covers/disposable booties
 Tape openings
 Cap
 Hood
 Coveralls
 Disposable Coveralls
 Other (specify)
 None

Protective clothing: Protective clothing will vary depending on work activity, surface contamination, and the potential to get beryllium on your clothing. Government furnished modesty clothing and/or coveralls shall be worn under full body anti-contamination clothing in Beryllium-Regulated Area (this clothing shall not be taken home).



Close



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Multiple Sections Cover the Beryllium Control Information

Sections 10 through 19 provide information on the controls that are required for the job that is described in Section 9 (Job Description). These sections include information such as what Personal Protective Equipment (PPE) is to be used and when an industrial hygienist needs to be involved.

You can view the details for the sections listed below, by clicking on the section button.

- Section 10 Respiratory Equipment
- Section 11 Protective Clothing
- Section 12 Sampling
- Section 13 Decon
- Section 14 Area Posting & Barriers
- Section 16 Waste Labeling & Handling

12) Sampling

Breathing zone A/S Work Area A/S Wipe Bulk Other (specify) _____

Sampling: Personal, area, or surface sampling may be performed before, during, or after a job task depending on the purpose and nature of the job task.



Close



EXIT COMMENTS HANDOUT

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Multiple Sections Cover the Beryllium Control Information

Sections 10 through 19 provide information on the controls that are required for the job that is described in Section 9 (Job Description). These sections include information such as what Personal Protective Equipment (PPE) is to be used and when an industrial hygienist needs to be involved.

You can view the details for the sections listed below, by clicking on the section button.

- Section 10 Respiratory Equipment
- Section 11 Protective Clothing
- Section 12 Sampling
- Section 13 Decon
- Section 14 Area Posting & Barriers
- Section 16 Waste Labeling & Handling

13) Decontamination

Wet-wipe HEPA Vac Hand Wash Shower Undress Assistance

Other (specify) _____ None

Decontamination: Tools and equipment may be required to be HEPA vacuumed or wet wiped down prior to exiting a beryllium controlled or regulated area.



Close



EXIT COMMENTS HANDOUT

CBDPP Gap Training for Beryllium Wo

✓	Welcome	Req	0:30
✓	CBDPP Introduction	Req	
✓	CBDPP Scope	Req	
✓	CBDPP Facilities	Req	
	Work Process and Permit	Req	
	Action Levels	Req	
	CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Multiple Sections Cover the Beryllium Control Information

Sections 10 through 19 provide information on the controls that are required for the job that is described in Section 9 (Job Description). These sections include information such as what Personal Protective Equipment (PPE) is to be used and when an industrial hygienist needs to be involved.

You can view the details for the sections listed below, by clicking on the section button.

Section 10
Respiratory
Equipment

Section 11
Protective
Clothing

Section 12
Sampling

Section 13
Decon

Section 14
Area Posting
& Barriers

Section 16
Waste Labeling
& Handling

14) Area Posting & Barriers

Controlled
 Regulated
 Material/Equipment Storage Area
 Other (specify)

None Required

Area Posting & Barriers: Signs will be posted at entrances to beryllium-controlled facilities. Signs may also be posted at doors going in to a controlled area, on systems such as duct work that is suspected of having contamination, or for tools and material control storage areas.



Close



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Multiple Sections Cover the Beryllium Control Information

Sections 10 through 19 provide information on the controls that are required for the job that is described in Section 9 (Job Description). These sections include information such as what Personal Protective Equipment (PPE) is to be used and when an industrial hygienist needs to be involved.

You can view the details for the sections listed below, by clicking on the section button.

- Section 10
Respiratory
Equipment
- Section 11
Protective
Clothing
- Section 12
Sampling
- Section 13
Decon
- Section 14
Area Posting
& Barriers
- Section 16
Waste Labeling
& Handling

16) Waste Labeling & Handling

Mark and label waste
 Designated container
 Double bag
 Other (specify)

Waste Labeling & Handling: Waste from beryllium work is usually double bagged and labeled with a "Danger" sign unless it is going directly into an Environmental Reclamation and Disposal Facility (ERDF) can. The ERDF cans are controlled in a closed-loop so as to not send "beryllium" contaminated cans to a non-beryllium location.

DANGER

Contaminated with
Beryllium

Do Not Remove Dust
By Blowing or Shaking

Cancer & Lung Disease Hazard

[Close](#)

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Other Areas Within the Industrial Hygiene - Beryllium Control Information

Other areas addressed on the beryllium work permit are:

- Industrial Hygiene coverage
- Engineering/work controls
- Training requirements
- Special instructions

Click to View a BWP

BERYLLIUM WORK PERMIT	
Responsible Organization	
1) Beryllium Work Permit (BWP) No.:	2) VMA Document Applicable
3) Point of Contact (POC): Name:	Phone No.:
4) Location (Bldg./Room):	Room: Other: Misc:
5) Start Date:	6) End Date:
7) Contractor:	8) Permit Type: General <input type="checkbox"/> Job Specific <input type="checkbox"/>
9) All Categories:	
Industrial Hygiene (IH) - Beryllium Control Information	
10) Respiratory Protection Equipment	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> APR w/P100 <input type="checkbox"/> P100 w/P100 <input type="checkbox"/> Other (specify):	
11) Protective Clothing	
<input type="checkbox"/> Work clothes (cotton) <input type="checkbox"/> Gloves <input type="checkbox"/> Shoe covers/disposable booties <input type="checkbox"/> Tape aprons <input type="checkbox"/> Cap <input type="checkbox"/> Hood <input type="checkbox"/> Coveralls <input type="checkbox"/> Disposable Coveralls <input type="checkbox"/> Other (specify):	
12) Handing	
<input type="checkbox"/> Handing area AD <input type="checkbox"/> VMA Area AD <input type="checkbox"/> VMA <input type="checkbox"/> Bulk <input type="checkbox"/> Other (specify):	
13) Decontamination	
<input type="checkbox"/> Airlock <input type="checkbox"/> HEPA Vac <input type="checkbox"/> Hand Wipe <input type="checkbox"/> Shower <input type="checkbox"/> Urinal Antiseptic <input type="checkbox"/> Other (specify):	
14) Area Posting & Barriers	
<input type="checkbox"/> Controlled <input type="checkbox"/> Restricted <input type="checkbox"/> Material/Equipment Storage Area <input type="checkbox"/> Other (specify):	
15) Engineering/Work Controls	
<input type="checkbox"/> Wettable <input type="checkbox"/> Containment <input type="checkbox"/> Hot method <input type="checkbox"/> Positive <input type="checkbox"/> HEPA Vac Area Prior to Working <input type="checkbox"/> Other (specify):	
16) Waste Labeling & Handling	
<input type="checkbox"/> Bags and containers <input type="checkbox"/> Designated container <input type="checkbox"/> Double bag <input type="checkbox"/> Other (specify):	
17) IH Coverage	
<input type="checkbox"/> Duration of Project <input type="checkbox"/> Interim <input type="checkbox"/> Continuous <input type="checkbox"/> Release/Change <input type="checkbox"/> None	
18) Training	
<input type="checkbox"/> Beryllium Monitor Qualified <input type="checkbox"/> Beryllium Awareness <input type="checkbox"/> Other (specify):	
19) Special Instructions:	

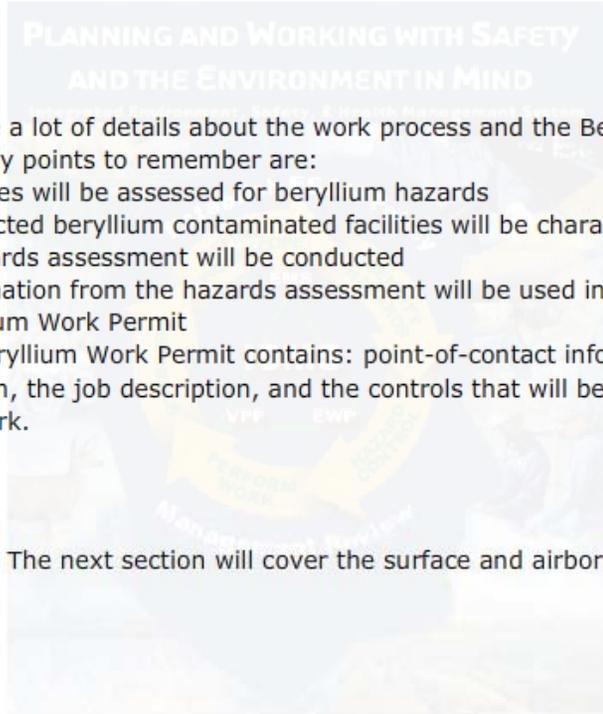
CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Work Process and Permit

Work Process and BWP Section Summary



There were a lot of details about the work process and the Beryllium Work Permit. Key points to remember are:

- Facilities will be assessed for beryllium hazards
- Suspected beryllium contaminated facilities will be characterized
- A hazards assessment will be conducted
- Information from the hazards assessment will be used in filling out a Beryllium Work Permit
- The Beryllium Work Permit contains: point-of-contact information, the job location, the job description, and the controls that will be applied during the work.

The next section will cover the surface and airborne limits.



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
✓ Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Action Levels

Beryllium Action Levels Are Standardized

The Hanford CBDPP establishes consistent levels for airborne and surface contamination.

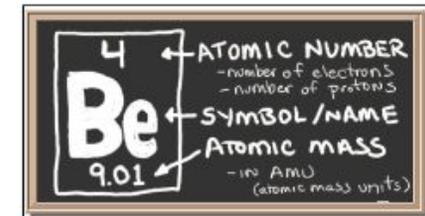
In Air:

Breathing zone air samples: DOE allows the contractors to set an action limit for airborne beryllium up to 0.2µg/m³ 8-hr TWA. The Hanford CBDPP adopted an action limit of 0.1µg/m³ 8-hr TWA or one-half of the DOE action limit.

On Surfaces:

Surfaces will be considered to be contaminated if beryllium levels are found to be above 0.2µg/100cm², the DOE release criterion, or 2 parts-per-million (ppm), based on regional and local soil sampling data of naturally-occurring beryllium levels.

[View Sampling Techniques](#)



Next, a course summary.



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
✓ Work Process and Permit	Req	
Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

Action Levels

Beryllium Action Levels Are Standardized

The Hanford CBDPP establishes consistent levels for airborne and surface contamination.

• **Wipe Samples:** Some areas or equipment that are relatively clean may be wipe sampled to determine the amount of beryllium contamination on the surface. One example of this would be respiratory protection equipment that has been used in a beryllium regulated area. The equipment would be wet wiped to remove any gross contamination then a wipe sample may be performed on some of the respirators before they are sent to the laundry to verify that the cleaning was effective.

• **Bulk Samples:** Bulk sampling will be used to characterize facilities or equipment that has visible dust/dirt on the surface. Beryllium is a naturally occurring element in soil and the concentration of beryllium varies depending on location. The Hanford CBDPP has adopted a background soil concentration to be at or below 2 parts-per-million (2 ppm), based on soil sampling data.

Close

View Sampling Techniques

Next, a course summary.



CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
✓ Work Process and Permit	Req	
✓ Action Levels	Req	
CBDPP Course Summary	Req	

Select desired section from the list above or just let the program guide you.

CBDPP Course Summary

Course Summary

Key changes to the program as a result of the new Hanford Site CBDPP:

- Employee designation terminology
- Beryllium Work Permit
- New signs
- Standardized action levels

If You Have Specific Questions You May Contact

Please contact your project industrial hygienist or the following points of contact for more information:

- AMH: Dr. Brian Fawcett (376-4716)
- CHPRC: Scott Seydel (373-4860)
- MSA: Bob Gilmore (372-9551)
- WCH: Henry Ruby (521-8896)
- WRPS: Elizabeth Hill (373-1215)
- Beryllium Awareness Group: Mark Fisher (373-3870)
- **Any** Labor representative

At this time you may review any part of the course or send in a completion report.



lessonOne - Windows Internet Explorer

Hanford Site CBDPP Gap Training for Beryllium Workers - CBT

EXIT **COMMENTS** **HANDOUT**

Diploma

CBDPP Gap Training for Beryllium Wo

✓ Welcome	Req	0:30
✓ CBDPP Introduction	Req	
✓ CBDPP Scope	Req	
✓ CBDPP Facilities	Req	
✓ Work Process and Permit	Req	
✓ Action Levels	Req	
✓ CBDPP Course Summary	Req	

Diploma

Select desired section from the list above or just let the program guide you.

Lesson Complete!

Okay!

You have completed all of the required sections for this lesson. You may review if you wish, or just

[Exit this Lesson](#)

Done Local intranet 100%