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10 CFR 850 Implementation of Requirements

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Issue: The CBDPP does not fully meet the requirements In DOE Rule 10CFR850.
Proposed Action: LLNS will perform and document a line-by-line crosswalk of 10CFR850 and LLNL implementing documents.

Background

10 CFR 850 defines a contractor as any entity, including affiliated entities, such as a parent corporation, under contract with DOE, including a subcontractor at any tier, with responsibility for performing work at a DOE site in furtherance of a DOE mission. The Chronic Beryllium Disease Prevention Program (CBDPP) applies to beryllium-related activities that are performed at the Lawrence Livermore National Laboratory (LLNL). The CBDPP or Beryllium Safety Program is integrated into the LLNL Worker Safety and Health Program and, thus, implementation documents and responsibilities are integrated in various documents and organizational structures. Program development and management of the CBDPP is delegated to the Environment, Safety and Health (ES&H) Directorate, Worker Safety and Health Functional Area.

As per 10 CFR 850, Lawrence Livermore National Security, LLC (LLNS) periodically submits a CBDPP to the National Nuclear Security Administration/Livermore Site Office (NNSA/LSO). The requirements of this plan are communicated to LLNS workers through *ES&H Manual* Document 14.4, "Working Safely with Beryllium."

Implementation

10 CFR 850 is implemented by the LLNL CBDPP, which integrates the safety and health standards required by the regulation, components of the LLNL Integrated Safety Management System (ISMS), and incorporates other components of the LLNL ES&H Program. As described in the regulation, and to fully comply with the regulation, specific portions of existing programs and additional requirements are identified in the CBDPP. The CBDPP is implemented by documents that interface with the workers, principally through *ES&H Manual* Document 14.4. This document contains information on how the management practices prescribed by the LLNL ISMS are implemented, how beryllium hazards that are associated with LLNL work activities are controlled, and who is responsible for implementing the controls. Adherence to the requirements and processes described in the *ES&H Manual* ensures that ES&H practices across LLNL are developed in a consistent manner. Other implementing documents, such as the *ES&H Manual*, are integral in effectively implementing 10 CFR 850.

Table 1 is a crosswalk between specific parts of 10 CFR 850 and the LLNS documents that implement them. As shown in Figure 1, implementation of the LLNL Beryllium Safety Program is integrated across several directorate and work lines.

Exclusions

The LLNL Beryllium Safety Program is implemented by documents that interface with the workers, principally through *ES&H Manual* Document 14.4, "Working Safely with Beryllium." References to ES&H are limited to the protection of workers from workplace hazards. Citations of specific sections of the *ES&H Manual* refer to the most current version of these documents and may be included by references in Table 1.

Reference

850 (Be) Crosswalk Master.xlsx
CBDPP Flow Down Final R1.3.xlsx

Table 1: 10 CFR 850 Implementation Matrix¹

Item No.	10 CFR 850 Section	Subject	Applicable?	LLNL Impl Mechanism	LLNL ES&H Program Component	Implementation Guide/Comment
1	Subpart A	General Provisions	Yes			
2	850.1	Scope: This part establishes a chronic beryllium disease prevention program (CBDPP) that supplements and is integrated into existing worker protection programs that are established for Department of Energy (DOE) employees and DOE contractor employees.	Yes	WSHP	WSHP, Sec 1.6 Scope	
3	850.2	Applicability	Yes			
4	850.2(a)	This part applies to:	Yes			
5	850.2(a)(1)	DOE offices responsible for operations or activities that involve present or past exposure, or the potential for exposure, to beryllium at DOE facilities;	Yes			Overarching statement - not incorporated.
6	850.2(a)(2)	DOE contractors with operations or activities that involve present or past exposure, or the potential for exposure, to beryllium at DOE facilities; and	Yes			Overarching statement - not incorporated.
7	850.2(a)(3)	Any current DOE employee, DOE contractor employee, or other worker at a DOE facility who is or was exposed or potentially exposed to beryllium at a DOE facility.	Yes	CBDPP	CBDPP, Sec I. Introduction	
8	850.2(b)(1)	Beryllium articles; and	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec. 4.0	
9	850.2(b)(2)	DOE laboratory operations that meet the definition of laboratory use of hazardous chemicals in 29 CFR 1910.1450, Occupational Exposure to Hazardous Chemical in Laboratories.	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec. 4.1	
10	850.3	Definitions	Yes			
11	850.3(a)	As used in this part:	Yes			

¹ Documents that are cited in this table are incorporated by reference, not including the references cited in the incorporated documents. Citations of specific sections of the LLNL documents refer to the most current version of these documents as of the date of this implementation review. The key to abbreviations and acronyms is at the end of the table.

Item No.	10 CFR 850 Section	Subject	Applicable?	LLNL Impl Mechanism	LLNL ES&H Program Component	Implementation Guide/Comment
12	850.3(a)	Action level means the level of airborne concentration of beryllium established pursuant to section 850.23 of this part that, if met or exceeded, requires the implementation of worker protection provisions specified in that section.	Yes	CBDPP ES&H Man	CBDPP, Appendix A ES&H Man, Doc 14.4, Appendix A	
13	850.3(a)	Authorized person means any person required by work duties to be in a regulated area.	Yes	ES&H Man	ES&H Man, Doc 2.2	Defined in ISMS documentation
14	850.3(a)	Beryllium means elemental beryllium and any insoluble beryllium compound or alloy containing 0.1 percent beryllium or greater that may be released as an airborne particulate.	Yes	CBDPP ES&H Man	CBDPP, Appendix A ES&H Man, Doc 14.4, Appendix A	
15	850.3(a)	Beryllium activity means 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.	Yes	CBDPP ES&H Man	CBDPP, Appendix A ES&H Man, Doc 14.4, Appendix A	Referred to as beryllium "work" vs activity.
16	850.3(a)	Beryllium article means a manufactured item that is formed to a specific shape or design during manufacture, that has end-use functions that depend in whole or in part on its shape or design during end use, and that does not release beryllium or otherwise result in exposure to airborne concentrations of beryllium under normal conditions of use.	Yes	CBDPP ES&H Man	CBDPP, Appendix A ES&H Man, Doc 14.4, Appendix A	

Item No.	10 CFR 850 Section	Subject	Applicable?	LLNL Impl Mechanism	LLNL ES&H Program Component	Implementation Guide/Comment
17	850.3(a)	Beryllium-associated worker means a current worker who is or was exposed or potentially exposed to airborne concentrations of beryllium at a DOE facility, including: (1) A beryllium worker; (2) A current worker whose work history shows that the worker may have been exposed to airborne concentrations of beryllium at a DOE facility; (3) A current worker who exhibits signs or symptoms of beryllium exposure; and (4) A current worker who is receiving medical removal protection benefits.	Yes	CBDPP	CBDPP, Appendix A	Note: Beryllium Worker - defined as individuals trained and authorized to perform work with beryllium.
18	850.3(a)	Beryllium emergency means any occurrence such as, but not limited to, equipment failure, container rupture, or failure of control equipment or operations that results in an unexpected and significant release of beryllium at a DOE facility.	Yes	CBDPP	CBDPP, Appendix A	
19	850.3(a)	Beryllium-induced lymphocyte proliferation test (Be-LPT) is an in vitro measure of the beryllium antigen specific, cell-mediated immune response.	Yes	Int Proc	HSD Policies and Procedures	
20	850.3(a)	Beryllium worker means a current worker who is regularly employed in a DOE beryllium activity.	Yes	CBDPP	CBDPP, Appendix A ES&H Man, Doc 14.4, Appendix A	
21	850.3(a)	Breathing zone is defined as a hemisphere forward of the shoulders, centered on the mouth and nose, with a radius of 6 to 9 inches. DOE means the U.S. Department of Energy.	Yes	Int Proc	IH Policies and Proc	
22	850.3(a)	DOE contractor means any entity under contract with DOE (or its subcontractor) that has responsibility for performing beryllium activities at DOE facilities.	Yes	WSHP	WSHP, Sec 1.6 Scope	
23	850.3(a)	DOE facility means any facility operated by or for DOE.	Yes	CBDPP	CBDPP, Appendix A	
24	850.3(a)	Head of DOE Field Element means an individual who is the manager or head of the DOE operations office or field office, or any official to whom the Head of DOE Field Element delegates his or her functions under this part.	Yes	WSHP	WSHP, Sec 1.4 Site Manager	

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25	850.3(a)	High-efficiency particulate air (HEPA) filter means a filter capable of trapping and retaining at least 99.97 percent of 0.3 micrometer monodispersed particles. Immune response refers to the series of cellular events by which the immune system reacts to challenge by an antigen.	Yes	CBDPP	CBDPP, Appendix A	
26	850.3(a)	Medical removal protection benefits means the employment rights established by section 850.35 of this part for beryllium-associated workers who voluntarily accept temporary or permanent medical removal from beryllium areas following a recommendation by the Site Occupational Medicine Director.	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policy and Proc Man	
27	850.3(a)	Operational area means an area where workers are routinely in the presence of beryllium as part of their work activity.	Yes	CBDPP ES&H Man	CBDPP, Sec H ES&H Man, Doc 14.4, Sec 5.3.3	
28	850.3(a)	Regulated area means 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.	Yes	CBDPP ES&H Man	ES&H Man, Doc 14.4, Appendix A	
29	850.3(a)	Removable contamination means beryllium contamination that can be removed from surfaces by nondestructive means, such as casual contact, wiping, brushing or washing.	Yes	ES&H Man	ES&H Man, Doc 14.4, Appendix A	
30	850.3(a)	Responsible employer means: (1) For DOE contractor employees, the DOE contractor office that is directly responsible for the safety and health of DOE contractor employees while performing a beryllium activity or other activity at a DOE facility; or (2) For DOE employees, the DOE office that is directly responsible for the safety and health of DOE Federal employees while performing a beryllium activity or other activity at a DOE facility; and (3) Any person acting directly or indirectly for such office with respect to terms and conditions of employment of beryllium-associated workers.	Yes			

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31	850.3(a)	Site Occupational Medical Director (SOMD) means the physician responsible for the overall direction and operation of the site occupational medicine program.	Yes	CBDPP	CBDPP, Appendix A	
32	850.3(a)	Unique identifier means the part of a paired set of labels, used in records that contain confidential information, that does not identify individuals except by using the matching label.	Yes	CBDPP	CBDPP, Appendix A	
33	850.3(a)	Worker means a person who performs work for or on behalf of DOE, including a DOE employee, an independent contractor, a DOE contractor or subcontractor employee, or any other person who performs work at a DOE facility.	Yes	CBDPP	CBDPP, Appendix A	
34	850.3(a)	Worker exposure means the exposure of a worker to airborne beryllium that would occur if the worker were not using respiratory protective equipment.	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec. 4.1	
35	850.4	DOE may take appropriate steps under its contracts with DOE contractors to ensure compliance with this part. These steps include, but are not limited to, contract termination or reduction in fee.	Yes			
36	850.5	Dispute resolution.	Yes			
37	850.5(a)	Subject to paragraphs (b) and (c) of this section, any worker who is adversely affected by an action taken, or failure to act, under this part may petition the Office of Hearings and Appeals for relief in accordance with 10 CFR part 1003, Subpart G.	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policy and Proc Man	
38	850.5(b)	The Office of Hearings and Appeals may not accept a petition from a worker unless the worker requested the responsible employer to correct the violation, and the responsible employer refused or failed to take corrective action within a reasonable time.	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policy and Proc Man	

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39	850.5(c)	If the dispute relates to a term or condition of employment that is covered by a grievance-arbitration provision in a collective bargaining agreement, the worker must exhaust all applicable grievance-arbitration procedures before filing a petition for relief with the Office of Hearings and Appeals. A worker is deemed to have exhausted all applicable grievance-arbitration procedures if 150 days have passed since the filing of a grievance and a final decision on it has not been issued.	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policy and Proc Man	
40	Subpart B	Administrative requirements.	Yes			
41	850.10	Development and Approval of the CBDPP.	Yes			
42	850.10(a)	Preparation and submission of initial CBDPP to DOE.	Yes	WSHP	WSHP, Sec 1.6 Scope	Implied Commitment
43	850.10(a)(1)	The responsible employer at a DOE facility must ensure that a CBDPP is prepared for the facility and submitted to the appropriate Head of DOE Field Element before beginning beryllium activities, but no later than April 6, 2000 of this part.	Yes	WSHP	WSHP, Sec 1.6 Scope	Implied Commitment
44	850.10(a)(2)	If the CBDPP has separate sections addressing the activities of multiple contractors at the facility, the Head of DOE Field Element will designate a single DOE contractor to review and approve the sections prepared by other contractors, so that a single consolidated CBDPP for the facility is submitted to the Head of DOE Field Element for review and approval.	No	N/A	N/A	
45	850.10(b)	DOE review and approval. The appropriate Head of DOE Field Element must review and approve the CBDPP.	Yes	N/A	N/A	Implied Commitment
46	850.10(b)(1)	The initial CBDPP and any updates are deemed approved 90 days after submission if they are not specifically approved or rejected by DOE earlier.	Yes	CBDPP	CBDPP, Introduction - New Work	DOE Field Office Responsibility and Authority

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47	850.10(b)(2)	The responsible employer must furnish a copy of the approved CBDPP, upon request, to the DOE Assistant Secretary for Environment, Safety and Health or designee, DOE program offices, and affected workers or their designated representatives.	Yes	WSHP	WSHP, Sec 1.6 Scope	Implied Commitment
48	850.10(c)	Update. The responsible employer must submit an update of the CBDPP to the appropriate Head of DOE Field Element for review and approval whenever a significant change or significant addition to the CBDPP is made or a change in contractors occurs. The Head of DOE Field Element must review the CBDPP at least annually and, if necessary, require the responsible employer to update the CBDPP.	Yes	CBDPP	CBDPP, Introduction - New Work	
49	850.10(d)	Labor Organizations. If a responsible employer employs or supervises beryllium-associated workers who are represented for collective bargaining by a labor organization, the responsible employer must:	Yes	WSHP		
50	850.10(d)(1)	Give the labor organization timely notice of the development and implementation of the CBDPP and any updates thereto; and	Yes	WSHP	WSHP, Sec 1.10	
51	850.10(d)(2)	Upon timely request, bargain concerning implementation of this part, consistent with the Federal labor laws.	Yes	WSHP	WSHP, Sec 1.10	Implied Commitment
52	850.11	General CBDPP requirements	Yes			
53	850.11(a)	The CBDPP must specify the existing and planned operational tasks that are within the scope of the CBDPP. The CBDPP must augment and, to the extent feasible, be integrated into the existing worker protection programs that cover activities at the facility.	Yes	CBDPP	CBDPP, Sec I: Introduction	
54	850.11(b)	The detail, scope, and content of the CBDPP must be commensurate with the hazard of the activities performed, but in all cases the CBDPP must:	Yes	CBDPP	CBDPP, Sec I: Introduction	

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55	850.11(b)(1)	Include formal plans and measures for maintaining exposures to beryllium at or below the permissible exposure level prescribed in § 850.22;	Yes	CBDPP	CBDPP, Sec I: Introduction and CBDPP, Sec G: Exposure Reduction and Minimization Plan	
56	850.11(b)(2)	Satisfy each requirement in subpart C of this part;	Yes			
57	850.11(b)(3)	Contain provisions for:	Yes			
58	850.11(b)(3)(i)	Minimizing the number of workers exposed and potentially exposed to beryllium;	Yes	CBDPP ES&H Man	CBDPP, Sec I: Introduction ES&H Man, Doc 14.4, Sec 1.1	
59	850.11(b)(3)(ii)	Minimizing the number of opportunities for workers to be exposed to beryllium;	Yes	CBDPP	CBDPP, Sec I: Introduction ES&H Man, Doc 14.4, Sec 1.1	
60	850.11(b)(3)(iii)	Minimizing the disability and lost work time of workers due to chronic beryllium disease, beryllium sensitization and associated medical care; and	Yes	CBDPP	CBDPP, Sec I: Introduction ES&H Man, Doc 14.4, Sec 1.1	
61	850.11(b)(3)(iv)	Setting specific exposure reduction and minimization goals that are appropriate for the beryllium activities covered by the CBDPP to further reduce exposure below the permissible exposure limit prescribed in § 850.22.	Yes	CBDPP	CBDPP, Sec G. and Appendix B. Exposure Reduction and Minimization Plan	
62	850.12	Implementation.	Yes			
63	850.12(a)	The responsible employer must manage and control beryllium exposures in all DOE beryllium activities consistent with the approved CBDPP.	Yes	CBDPP ES&H Man	CBDPP, Appendix B. Exposure Reduction and Minimization Plan ES&H Man, Doc 14.4, Sec 1.2	
64	850.12(b)	No person employed by DOE or a DOE contractor may take or cause any action inconsistent with the requirements of:	Yes			Implied Commitment
65	850.12(b)(1)	This part,	Yes			
66	850.12(b)(2)	An approved CBDPP, and	Yes			

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67	850.12(b)(3)	Any other Federal statute or regulation concerning the exposure of workers to beryllium at DOE facilities.	Yes			
68	850.12(c)	No task involving potential exposure to airborne beryllium that is outside the scope of the existing CBDPP may be initiated until an update of the CBDPP is approved by the Head of DOE Field Element, except in an unexpected situation and, then, only upon approval of the Head of DOE Field Element.	Yes	CBDPP ES&H Man	CBDPP, Sec I: Introduction ES&H Man, Doc 14.4, Sec 1.1	
69	850.12(d)	Nothing in this part precludes a responsible employer from taking any additional protective action that it determines to be necessary to protect the health and safety of workers.	Yes			
70	850.12(e)	Nothing in this part affects the responsibilities of DOE officials under the Federal Employee Occupational Safety and Health Program (29 CFR part 1960) and related DOE directives.	No			
71	850.13	Compliance.				
72	850.13(a)	The responsible employer must conduct activities in compliance with its CBDPP.	Yes			
73	850.13(b)	The responsible employer must achieve compliance with all elements of its CBDPP no later than January 7, 2002.	Yes			CBDPP, Rev 6 Approved June 2009
74	850.13(c)	With respect to a particular beryllium activity, the contractor in charge of the activity is responsible for complying with this part. If no contractor is responsible for a beryllium activity, DOE must ensure implementation of, and compliance with, this part.	Yes			Implied Commitment
75	Subpart C	Specific Program Requirements	Yes			
76	850.20	Baseline beryllium inventory.	Yes			

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77	850.20(a)	The responsible employer must develop a baseline inventory of the locations of beryllium operations and other locations of potential beryllium contamination, and identify the workers exposed or potentially exposed to beryllium at those locations.	Yes	CBDPP	CBDPP, Sec A: Baseline Beryllium Inventory	Maintained on internal beryllium safety program webpage.
78	850.20(b)	In conducting the baseline inventory, the responsible employer must:	Yes			DOE G, Sec 4.2.1
79	850.20(b)(1)	Review current and historical records;	Yes	CBDPP	CBDPP, Sec A: Baseline Beryllium Inventory Int Policy and Procedure	DOE G, Sec 4.2.1.1
80	850.20(b)(2)	Interview workers;	Yes	CBDPP	CBDPP, Sec A: Baseline Beryllium Inventory Int Policy and Procedure	DOE G, Sec 4.2.1.2
81	850.20(b)(3)	Document the characteristics and locations of beryllium at the facility; and	Yes	CBDPP	CBDPP, Sec A: Baseline Beryllium Inventory Int Policy and Procedure	DOE G, Sec 4.2.1.3
82	850.20(b)(4)	Conduct air, surface, and bulk sampling.	Yes	CBDPP	CBDPP, Sec A: Baseline Beryllium Inventory Int Policy and Procedure	DOE G, Sec 4.2.1.4
83	850.20(c)	The responsible employer must ensure that:	Yes	CBDPP		
84	850.20(c)(1)	The baseline beryllium inventory is managed by a qualified individual (e.g., a certified industrial hygienist); and	Yes	WSHP CBDPP	WSHP, Sec 4.2 CBDPP, Sec A: Baseline Beryllium Inventory	Text does not specify a "certified industrial hygienist"
85	850.20(c)(2)	The individuals assigned to this task have sufficient knowledge and experience to perform such activities properly.	Yes	CBDPP		
86	850.21	Hazard assessment.	Yes			DOE G, Sec 4.2.2

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87	850.21(a)	If the baseline inventory establishes the presence of beryllium, the responsible employer must conduct a beryllium hazard assessment that includes an analysis of existing conditions, exposure data, medical surveillance trends, and the exposure potential of planned activities. The exposure determinants, characteristics and exposure potential of activities must be prioritized so that the activities with the greatest risks of exposure are evaluated first.	Yes	CBDPP	CBDPP, Sec B: Hazard Assessment	DOE G, Sec 4.2.2.2
88	850.21(b)	The responsible employer must ensure that:	Yes			
89	850.21(b)(1)	The hazard assessment is managed by a qualified individual (e.g., a certified industrial hygienist); and	Yes	WSHP ES&H Man	WSHP, Sec 4.2 Qualified Workers ES&H Man 2.1, Sec 3.1.9	
90	850.21(b)(2)	The individuals assigned to this task have sufficient knowledge and experience to perform such activities properly.	Yes	WSHP ES&H Man	WSHP, Sec 4.2 Qualified Workers ES&H Man 2.1, Sec 3.1.6	Implied Commitment
91	850.22	Permissible exposure limit.	Yes			DOE G, Sec 4.2.3
92	850.22	The responsible employer must assure that no worker is exposed to an airborne concentration of beryllium greater than the permissible exposure limit established in 29 CFR 1910.1000, as measured in the worker's breathing zone by personal monitoring, or a more stringent TWA PEL that may be promulgated by the Occupational Safety and Health Administration as a health standard.	Yes	CBDPP ES&H Man	CBDPP, Sec C. Exposure Standards ES&H Man, Doc 14.4, Sec. 3.0	
93	850.23	Action Level.	Yes	CBDPP ES&H Man	CBDPP, Sec C. Exposure Standards ES&H Man, Doc 14.4, Sec. 3.0	DOE G, Sec 4.2.3
94	850.23(a)	The responsible employer must include in its CBDPP an action level that is no greater than 0.2 µg/m ³ , calculated as an 8-hour TWA exposure, as measured in the worker's breathing zone by personal monitoring.	Yes	CBDPP ES&H Man	CBDPP, Sec C. Exposure Standards ES&H Man, Doc 14.4, Sec. 3.0	

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95	850.23(b)	If an airborne concentration of beryllium is at or above the action level, the responsible employer must implement §§ 850.24(c) (periodic monitoring), 850.25 (exposure reduction and minimization), 850.26 (regulated areas), 850.27 (hygiene facilities and practices), 850.28 (respiratory protection), 850.29 (protective clothing and equipment), and 850.38 (warning signs) of this part.	Yes	CBDPP ES&H Man	CBDPP, Sec D: Exposure Monitoring CBDPP, Sec G and Appendix B. Exposure Reduction and Minimization Plan CBDPP, Sec H: Beryllium Areas - Regulated Beryllium Work Area CBDPP, Sec I: Hygiene Facilities and Practices CBDPP, Sec J: Personal Clothing and Equipment CBDPP, Sec Q: Warning Signs and Labels ES&H Man, Doc 14.4	Reference ES&H Man, Doc 14.4, Table 3: Beryllium Areas
96	850.24	Exposure Monitoring.	Yes			DOE G, Sec 4.2.4
97	850.24(a)	General. The responsible employer must ensure that:	Yes			
98	850.24(a)(1)	Exposure monitoring is managed by a qualified individual (e.g., a certified industrial hygienist); and	Yes	CBDPP	CBDPP, Sec D Exposure Monitoring	
99	850.24(a)(2)	The individuals assigned to this task have sufficient industrial hygiene knowledge and experience to perform such activities properly.	Yes	WSHP	WSHP, Sec 4.2	
100	850.24(b)	Initial monitoring. The responsible employer must perform initial monitoring in areas that may have airborne beryllium, as shown by the baseline inventory and hazard assessment. The responsible employer must apply statistically-based monitoring strategies to obtain a sufficient number of sample results to adequately characterize exposures, before reducing or terminating monitoring.	Yes	CBDPP Int Doc	CBDPP, Sec D Exposure Monitoring IH Policies and Procedures	IH PIM-89: Beryllium Program Requirements

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101	850.24(b)(1)	The responsible employer must determine workers' 8-hour TWA exposure levels by conducting personal breathing zone sampling.	Yes	Int Doc	IH Policies and Procedures	
102	850.24(b)(2)	Exposure monitoring results obtained within the 12 months preceding the effective date of this part may be used to satisfy this requirement if the measurements were made as provided in paragraph (b)(1) of this section.	Yes			Implied Commitment
103	850.24(c)	Periodic exposure monitoring. The responsible employer must conduct work in areas where airborne concentrations of beryllium are at or above the action level. The monitoring must be conducted in a manner and at a frequency necessary to represent workers' exposure, as specified in the CBDPP. This periodic exposure monitoring must be performed at least every 3 months (quarterly).	Yes	CBDPP Int Doc	CBDPP, Sec D Exposure Monitoring IH Policies and Procedures	IH PIM-89: Beryllium Program Requirements
104	850.24(d)	Additional exposure monitoring. The responsible employer must perform additional monitoring if operations, maintenance or procedures change, or when the responsible employer has any reason to suspect such a change has occurred.	Yes	Int Doc	IH Policies and Procedures	IH PIM-89: Beryllium Program Requirements
105	850.24(e)	Accuracy of monitoring. The responsible employer must use a method of monitoring and analysis that has an accuracy of not less than plus or minus 25 percent, with a confidence level of 95 percent, for airborne concentrations of beryllium at the action level.	Yes	CBDPP	CBDPP, Sec D Exposure Monitoring	
106	850.24(f)	Analysis. The responsible employer must have all samples collected to satisfy the monitoring requirements of this part analyzed in 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.	Yes	CBDPP Int Doc	CBDPP, Sec D Exposure Monitoring WSH Program Capability	AIHA laboratory accreditation

Item No.	10 CFR 850 Section	Subject	Applicable?	LLNL Impl Mechanism	LLNL ES&H Program Component	Implementation Guide/Comment
107	850.24(g)	Notification of monitoring results.	Yes	CBDPP ES&H Man Int Doc	CBDPP, Sec D Exposure Monitoring ES&H Man, Doc. 2.1, Sec. 2.1 IH Policies and Procedures	
108	850.24(g)(1)	The responsible employer must, within 10 working days after receipt of any monitoring results, notify the affected workers of monitoring results in writing. This notification of monitoring results must be:	Yes	CBDPP Int Doc	CBDPP, Sec D: Exposure Monitoring IH Policies and Procedures	
109	850.24(g)(1)(i)	Made personally to the affected worker; or	Yes	Not Defined	Not Defined.	
110	850.24(g)(1)(ii)	Posted in location(s) that is readily accessible to the affected worker, but in a manner that does not identify the individual to other workers.	Yes	Not Defined	Not Defined.	
111	850.24(g)(2)	If the monitoring results indicate that a worker's exposure is at or above the action level, the responsible employer must include in the notice:	Yes	CBDPP	CBDPP, Sec D: Exposure Monitoring	
112	850.24(g)(2)(i)	A statement that the action level has been met or exceeded; and	Yes	CBDPP	CBDPP, Sec D: Exposure Monitoring	
113	850.24(g)(2)(ii)	A description of the corrective action being taken by the responsible employer to reduce the worker's exposure to below the action level, if practicable.	Yes	CBDPP	CBDPP, Sec D: Exposure Monitoring	
114	850.24(g)(3)	If the monitoring results indicate that worker exposure is at or above the action level, the responsible employer must also notify DOE and the SOMD of these results within 10 working days after receipt.	Yes	CBDPP ES&H Man	CBDPP, Sec D: Exposure Monitoring ES&H Man, Doc 14.4, Sec 7.0	
115	850.25	Exposure reduction and minimization.	Yes			DOE G, Sec 4.2.5
116	850.25(a)	The responsible employer must ensure that no worker is exposed above the exposure limit prescribed in § 850.22.	Yes	CBDPP	CBDPP, Sec D: Exposure Monitoring	
117	850.25(b)	The responsible employer must, in addition:	Yes			

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118	850.25(b)(1)	Where exposure levels are at or above the action level, establish a formal exposure reduction and minimization program to reduce exposure levels to below the action level, if practicable. This program must be described in the responsible employer's CBDPP and must include:	Yes	CBDPP	CBDPP, Sec G and Appendix B: Exposure Reduction and Minimization Plan	
119	850.25(b)(1)(i)	Annual goals for exposure reduction and minimization;	Yes	CBDPP	CBDPP, Sec G and Appendix B: Exposure Reduction and Minimization Plan	
120	850.25(b)(1)(ii)	A rationale for and a strategy for meeting the goals;	Yes	CBDPP	CBDPP, Sec G and Appendix B: Exposure Reduction and Minimization Plan	
121	850.25(b)(1)(iii)	Actions that will be taken to achieve the goals; and	Yes	CBDPP	CBDPP, Sec G and Appendix B: Exposure Reduction and Minimization Plan	
122	850.25(b)(1)(iv)	A means of tracking progress towards meeting the goals or demonstrating that the goals have been met.	Yes	CBDPP	CBDPP, Sec G and Appendix B: Exposure Reduction and Minimization Plan	
123	850.25(b)(2)	Where exposure levels are below the action level, implement actions for reducing and minimizing exposures, if practicable. The responsible employer must include in the CBDPP a description of the steps to be taken for exposure reduction and minimization and a rationale for those steps.	Yes	CBDPP	CBDPP, Sec G and Appendix B: Exposure Reduction and Minimization Plan	
124	850.25(c)	The responsible employer must implement exposure reduction and minimization actions using the conventional hierarchy of industrial hygiene controls (i.e., engineering controls, administrative controls, and personal protective equipment in that order).	Yes	CBDPP ES&H Man	CBDPP, Sec G and Appendix B: Exposure Reduction and Minimization Plan ES&H Man, Doc 14.4, Sec 5.0 and Appendix B	
125	850.26	Regulated Areas.				DOE G, Sec 4.2.6

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126	850.26(a)	If airborne concentrations of beryllium in areas in DOE facilities are measured at or above the action level, the responsible employer must establish regulated areas for those areas.	Yes	CBDPP ES&H Man	CBDPP, Sec H: Beryllium Areas ES&H Man, Doc 14.4, Table 3	
127	850.26(b)	The responsible employer must demarcate regulated areas from the rest of the workplace in a manner that adequately alerts workers to the boundaries of such areas.	Yes	CBDPP ES&H Man	CBDPP, Sec H: Beryllium Areas ES&H Man, Doc 14.4, Table 3	
128	850.26(c)	The responsible employer must limit access to regulated areas to authorized persons.	Yes	CBDPP ES&H Man	CBDPP, Sec H: Beryllium Areas ES&H Man, Doc 14.4, Table 3	
129	850.26(d)	The responsible employer must keep records of all individuals who enter regulated areas. These records must include the name, date, time in and time out, and work activity.	Yes	CBDPP ES&H Man	CBDPP, Sec H: Beryllium Areas ES&H Man, Doc 14.4, Table 3	
130	850.27	Hygiene facilities and practices.	Yes			DOE G, Sec 4.2.7
131	850.27(a)	General. The responsible employer must assure that in areas where workers are exposed to beryllium at or above the action level, without regard to the use of respirators:	Yes			
132	850.27(a)(1)	Food or beverage and tobacco products are not used;	Yes	CBDPP	CBDPP, Sec I: Hygiene Facilities and Practices	
133	850.27(a)(2)	Cosmetics are not applied, except in change rooms or areas and shower facilities required under paragraphs (b) and (c) of this section; and	Yes	CBDPP	CBDPP, Sec I: Hygiene Facilities and Practices	
134	850.27(a)(3)	Beryllium workers are prevented from exiting areas that contain beryllium with contamination on their bodies or their personal clothing.	Yes	CBDPP ES&H Man	CBDPP, Sec I: Hygiene Facilities and Practices ES&H Man, Doc 14.4, Sec 5.2.2	
135	850.27(b)	Change rooms or areas. The responsible employer must provide clean change rooms or areas for beryllium workers who work in regulated areas.	Yes	CBDPP	CBDPP, Sec I: Hygiene Facilities and Practices	

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136	850.27(b)(1)	Separate facilities free of beryllium must be provided for beryllium workers to change into, and store, personal clothing, and clean protective clothing and equipment to prevent cross-contamination;	Yes	CBDPP ES&H Man	CBDPP, Sec I: Hygiene Facilities and Practices ES&H Man, Doc 14.4, Sec 5.2.2	
137	850.27(b)(2)	The change rooms or areas that are used to remove beryllium-contaminated clothing and protective equipment must be maintained under negative pressure or located so as to minimize dispersion of beryllium into clean areas; and	Yes	CBDPP ES&H Man	CBDPP, Sec I: Hygiene Facilities and Practices ES&H Man, Doc 14.4, Sec 5.2.2	
138	850.27(c)	Showers and handwashing facilities.	Yes			
139	850.27(c)(1)	The responsible employer must provide handwashing and shower facilities for beryllium workers who work in regulated areas.	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec 5.2.2 and Table 3	
140	850.27(c)(2)	The responsible employer must assure that beryllium workers who work in regulated areas shower at the end of the work shift.	Yes	CBDPP	CBDPP, Sec I: Hygiene Facilities and Practices	Administrative control should be identified in 14.4.
141	850.27(d)	Lunchroom facilities.	Yes			
142	850.27(d)(1)	The responsible employer must provide lunchroom facilities that are readily accessible to beryllium workers, and ensure that tables for eating are free of beryllium, and that no worker in a lunchroom facility is exposed at any time to beryllium at or above the action level.	Yes	CBDPP	CBDPP, Sec. I: Hygiene Facilities and Practices	
143	850.27(d)(2)	The responsible employer must assure that beryllium workers do not enter lunchroom facilities with protective work clothing or equipment unless the surface beryllium has been removed from clothing and equipment by HEPA vacuuming or other method that removes beryllium without dispersing it.	Yes	CBDPP	CBDPP, Sec. I: Hygiene Facilities and Practices	
144	850.27(e)	The change rooms or areas, shower and handwashing facilities, and lunchroom facilities must comply with 29 CFR 1910.141, Sanitation.	Yes			Implied Commitment Note: 13.3 Sanitation rescinded 2011.
145	850.28	Respiratory protection.				DOE G, Sec 4.2.8

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146	850.28(a)	The responsible employer must establish a respiratory protection program that complies with the respiratory protection program requirements of 29 CFR 1910.134, Respiratory Protection.	Yes	ES&H Man	ES&H Man, Doc 11.1, Sec 3.0	
147	850.28(b)	The responsible employer must provide respirators to, and ensure that they are used by, all workers who:	Yes	ES&H Man	ES&H Man, Doc 11.1, Sec 3.0	
148	850.28(b)(1)	Are exposed to an airborne concentration of beryllium at or above the action level, or	Yes	CBDPP ES&H Man	CBDPP, Sec J: Protective Clothing and Equipment ES&H Man, Doc 14.4, Sec 5.4	
149	850.28(b)(2)	Are performing tasks for which analyses indicate the potential for exposures at or above the action level.	Yes	CBDPP ES&H Man	CBDPP, Sec J: Protective Clothing and Equipment ES&H Man, Doc 14.4, Sec 5.4 and Appendix B	
150	850.28(c)	The responsible employer must include in the respiratory protection program any beryllium-associated worker who requests to use a respirator for protection against airborne beryllium, regardless of measured exposure levels.	Yes	CBDPP ES&H Man	CBDPP, Sec J: Protective Clothing and Equipment ES&H Man, Doc 14.4, Sec 5.4	
151	850.28(d)	The responsible employer must select for use by workers:	Yes			
152	850.28(d)(1)	Respirators approved by the National Institute for Occupational Safety and Health (NIOSH) if NIOSH-approved respirators exist for a specific DOE task; or	Yes	ES&H Man	ES&H Man, Doc 11.1, Sec 3.2	
153	850.28(d)(2)	Respirators that DOE has accepted under the DOE Respiratory Protection Acceptance Program if NIOSH-approved respirators do not exist for specific DOE tasks.	No			No respirators identified.
154	850.29	Protective clothing and equipment.	Yes			DOE G, Sec 4.2.9
155	850.29(a)	The responsible employer must provide protective clothing and equipment to beryllium workers and ensure its appropriate use and maintenance, where dispersible forms of beryllium may contact worker's skin, enter openings in workers' skin, or contact workers' eyes, including where:	Yes	CBDPP ES&H Man	CBDPP, Sec J: Protective Clothing and Equipment ES&H Man, Doc 14.4, Sec 5.4	

Item No.	10 CFR 850 Section	Subject	Applicable?	LLNL Impl Mechanism	LLNL ES&H Program Component	Implementation Guide/Comment
156	850.29(a)(1)	Exposure monitoring has established that airborne concentrations of beryllium are at or above the action level;	Yes	CBDPP ES&H Man	CBDPP, Sec J: Protective Clothing and Equipment ES&H Man, Doc 14.4, Sec 5.4	
157	850.29(a)(2)	Surface contamination levels measured or presumed prior to initiating work are above the level prescribed in § 850.30;	Yes	CBDPP ES&H Man	CBDPP, Sec J: Protective Clothing and Equipment ES&H Man, Doc 14.4, Sec 5.4	
158	850.29(a)(3)	Surface contamination levels results obtained to confirm housekeeping efforts are above the level prescribed in § 850.30; and	Yes	CBDPP ES&H Man	CBDPP, Sec J: Protective Clothing and Equipment ES&H Man, Doc 14.4, Sec 5.4	
159	850.29(a)(4)	Any beryllium-associated worker who requests the use of protective clothing and equipment for protection against airborne beryllium, regardless of measured exposure levels.	Yes	CBDPP ES&H Man	CBDPP, Sec J: Protective Clothing and Equipment ES&H Man, Doc 14.4, Sec 5.4	
160	850.29(b)	The responsible employer must comply with 29 CFR 1910.132, Personal Protective Equipment General Requirements, when workers use personal protective clothing and equipment.	Yes	ES&H Man	ES&H Man, Doc 11.1	
161	850.29(c)	The responsible employer must establish procedures for donning, doffing, handling, and storing protective clothing and equipment that:	Yes	ES&H Man	ES&H Man, Doc. 14.4, Sec 5.4	Implied commitment. No formal procedure.
162	850.29(c)(1)	Prevent beryllium workers from exiting areas that contain beryllium with contamination on their bodies or their personal clothing; and	Yes	ES&H Man	ES&H Man, Doc. 14.4, Sec 5.4	
163	850.29(c)(2)	Include beryllium workers exchanging their personal clothing for full-body protective clothing and footwear before they begin work in regulated areas.	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec 5.2.2	Implied commitment.

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164	850.29(d)	The responsible employer must ensure that no worker removes beryllium-contaminated protective clothing and equipment from areas that contain beryllium, except for workers authorized to launder, clean, maintain, or dispose of the clothing and equipment.	Yes	CBDPP ES&H Man	CBDPP, Sec F: Release Criteria ES&H Man, Doc 14.4, Sec 5.3.9 ES&H Man, Doc 21.5	IH PIM-84: Transfer and Release of Equipment/Property
165	850.29(e)	The responsible employer must prohibit the removal of beryllium from protective clothing and equipment by blowing, shaking, or other means that may disperse beryllium into the air.	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec 5.3.6 and 5.4	
166	850.29(f)	The responsible employer must ensure that protective clothing and equipment is cleaned, laundered, repaired, or replaced as needed to maintain effectiveness. The responsible employer must:	Yes			Disposable PPE utilized when there is a potential for dispersible beryllium.
167	850.29(f)(1)	Ensure that beryllium-contaminated protective clothing and equipment, when removed for laundering, cleaning, maintenance, or disposal, is placed in containers that prevent the dispersion of beryllium dust and that are labeled in accordance with § 850.38 of this part; and	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec 5.4	
168	850.29(f)(2)	Inform organizations that launder or clean DOE beryllium-contaminated protective clothing or equipment that exposure to beryllium is potentially harmful, and that clothing and equipment should be laundered or cleaned in a manner prescribed by the responsible employer to prevent the release of airborne beryllium.	Yes	ES&H Man Laboratory Procurement Policy and Standard Practices Manual	ES&H Man, Doc 2.5 Laboratory Procurement Policy and Standard Practices Manual	Controlled Service Items List
169	850.3	Housekeeping				DOE G, Sec 4.2.10

Item No.	10 CFR 850 Section	Subject	Applicable?	LLNL Impl Mechanism	LLNL ES&H Program Component	Implementation Guide/Comment
170	850.30(a)	Where beryllium is present in operational areas of DOE facilities, the responsible employer must conduct routine surface sampling to determine housekeeping conditions. Surfaces contaminated with beryllium dusts and waste must not exceed a removable contamination level of 3 µg/100 cm ² during non-operational periods. This sampling would not include the interior of installed closed systems such as enclosures, glove boxes, chambers, or ventilation systems.	Yes	CBDPP Int Doc	CBDPP, Sec E: Housekeeping IH Policies and Proc	IH PIM-89: Beryllium Program Requirements
171	850.30(b)	When cleaning floors and surfaces in areas where beryllium is present at DOE facilities, the responsible employer must clean beryllium-contaminated floors and surfaces using a wet method, vacuuming or other cleaning methods, such as sticky tack cloths, that avoid the production of airborne dust. Compressed air or dry methods must not be used for such cleaning.	Yes	CBDPP ES&H Man	CBDPP, Sec E: Housekeeping ES&H Man 14.4, Sec 5.3.8	
172	850.30(c)	The responsible employer must equip the portable or mobile vacuum units that are used to clean beryllium contaminated areas with HEPA filters, and change the filters as often as needed to maintain their capture efficiency.	Yes	CBDPP ES&H Man	CBDPP, Sec E: Housekeeping ES&H Man 14.4, Sec 5.3.8	
173	850.30(d)	The responsible employer must ensure that the cleaning equipment that is used to clean beryllium-contaminated surfaces is labeled, controlled, and not used for non-hazardous materials.	Yes	CBDPP ES&H Man	CBDPP, Sec E: Housekeeping ES&H Man 14.4, Sec 5.3.9	
174	850.31	Release criteria.	Yes			DOE G, Sec 4.2.11
175	850.31(a)	The responsible employer must clean beryllium-contaminated equipment and other items to the lowest contamination level practicable, but not to exceed the levels established in paragraphs (b) and (c) of this section, and label the equipment or other items, before releasing them to the general public or a DOE facility for non-beryllium use, or to another facility for work involving beryllium.	Yes	CBDPP ES&H Man	CBDPP, Sec E: Housekeeping ES&H Man, Doc 14.4, Sec 5.3.9	IH PIM-84: Transfer and Release of Equipment/ Property

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176	850.31(b)	Before releasing beryllium contaminated equipment or other items to the general public or for use in a non-beryllium area of a DOE facility, the responsible employer must ensure that:	Yes			Institutional process defined in ES&H Man 21.5
177	850.31(b)(1)	The removable contamination level of equipment or item surfaces does not exceed the higher of 0.2 µg/100 cm ² or the concentration level of beryllium in soil at the point or release, whichever is greater;	Yes	CBDPP ES&H Man	CBDPP, Sec F: Release Criteria ES&H Man, Doc 14.4, Sec 5.3.9	
178	850.31(b)(2)	The equipment or item is labeled in accordance with § 850.38(b); and	Yes	CBDPP ES&H Man	CBDPP, Sec F: Release Criteria ES&H Man, Doc 14.4, Sec 5.3.9	
179	850.31(b)(3)	The release is conditioned on the recipient's commitment to implement controls that will prevent foreseeable beryllium exposure, considering the nature of the equipment or item and its future use and the nature of the beryllium contamination.	Yes	CBDPP ES&H Man	CBDPP, Sec F: Release Criteria ES&H Man, Doc 14.4, Sec 5.3.9	
180	850.31(c)	Before releasing beryllium contaminated equipment or other items to another facility performing work with beryllium, the responsible employer must ensure that:	Yes			
181	850.31(c)(1)	The removable contamination level of equipment or item surfaces does not exceed 3 mg/100 cm ² ;	Yes	CBDPP ES&H Man	CBDPP, Sec F: Release Criteria ES&H Man, Doc 14.4, Sec 5.3.9	
182	850.31(c)(2)	The equipment or item is labeled in accordance with § 850.38(b); and	Yes	CBDPP ES&H Man	CBDPP, Sec F: Release Criteria ES&H Man, Doc 14.4, Sec 5.3.9	

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183	850.31(c)(3)	The equipment or item is enclosed or placed in sealed, impermeable bags or containers to prevent the release of beryllium dust during handling and transportation.	Yes	CBDPP ES&H Man	CBDPP, Sec F: Release Criteria ES&H Man, Doc 14.4, Sec 5.3.9	
184	850.32	Waste disposal.	Yes			DOE G, Sec 4.2.12
185	850.32(a)	The responsible employer must control the generation of beryllium containing waste, and beryllium contaminated equipment and other items that are disposed of as waste, through the application of waste minimization principles.	Yes	CBDPP ES&H Man	CBDPP, Sec K: Waste Disposal ES&H Man, Doc 14.4, Sec 5.3.10 ES&H Man, Doc 36.1, Sec 3.2	
186	850.32(b)	Beryllium-containing waste, and beryllium-contaminated equipment and other items that are disposed of as waste, must be disposed of in sealed, impermeable bags, containers, or beryllium dust during handling and transportation. The bags, containers, and enclosures that are used for disposal of beryllium waste must be labeled according to § 850.38.	Yes	CBDPP ES&H Man	CBDPP, Sec K: Waste Disposal ES&H Man, Doc 14.4, Sec 5.3.10 ES&H Man, Doc 36.1, Sec 3.2	RHWM Proc: DIS 110; WIC 153; WPT 108
187	850.33	Beryllium emergencies.				DOE G, Sec 4.2.13
188	850.33(a)	The responsible employer must comply with 29 CFR 1910.120(l) for handling beryllium emergencies related to decontamination and decommissioning operations.	Yes	CBDPP ES&H Man	CBDPP, Sec L: Emergencies ES&H Man, Doc 22.1	LLNL Emergency Plan (rev. 16), Sect. 3.3 Emergency Management Operations and Personnel
189	850.33(b)	The responsible employer must comply with 29 CFR 1910.120(q) for handling beryllium emergencies related to all other operations.	Yes	CBDPP ES&H Man	CBDPP, Sec L: Emergencies ES&H Man, Doc 22.1	
190	850.34	Medical surveillance.	Yes			DOE G, Sec 4.2.14
191	850.34(a)	General	Yes			

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192	850.34(a)(1)	The responsible employer must establish and implement a medical surveillance program for beryllium-associated workers who voluntarily participate in the program.	Yes	CBDPP ES&H Man	CBDPP, Sec M: Medical Surveillance ES&H Man 10.1, Sec 2.10 ES&H Man 14.4, Sec 6.0	
193	850.34(a)(2)	The responsible employer must designate a Site Occupational Medical Director (SOMD) who is responsible for administering the medical surveillance program.	Yes	CBDPP ES&H Man	CBDPP, Sec M: Medical Surveillance ES&H Manual 10.1, Sec 1.1	
194	850.34(a)(3)	The responsible employer must ensure that the medical evaluations and procedures required by this section are performed by, or under the supervision of, a licensed physician who is familiar with the health effects of beryllium.	Yes	ES&H Man	ES&H Manual 10.1, Sec 1	
195	850.34(a)(4)	The responsible employer must establish, and maintain, a list of beryllium-associated workers who may be eligible for protective measures under this part. The list must be:	Yes	CBDPP	CBDPP, Sec M: Medical Surveillance	
196	850.34(a)(4)(i)	Based on the hazard assessment, exposure records, and other information regarding the identity of beryllium associated workers; and	Yes	CBDPP ES&H Man	CBDPP, Sec M: Medical Surveillance ES&H Man, Doc 14.4, Sec 5.3.2	
197	850.34(a)(4)(ii)	Adjusted at regular intervals based on periodic evaluations of beryllium associated workers performed under paragraph (b)(2) of this section;	Yes	CBDPP ES&H Man	CBDPP, Sec M: Medical Surveillance ES&H Man, Doc 10.1 Sec 2.10	
198	850.34(a)(5)	The responsible employer must provide the SOMD with the information needed to operate and administer the medical surveillance program, including the:	Yes			
199	850.34(a)(5)(i)	List of beryllium-associated workers required by paragraph (a)(4) of this section;	Yes	CBDPP ES&H Man	CBDPP, Sec M: Medical Surveillance ES&H Man, Doc 14.4, Sec 5.3.2	

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200	850.34(a)(5)(ii)	Baseline inventory;	Yes	CBDPP	CBDPP, Sec A: Baseline Inventory and Sec M: Medical Surveillance	
201	850.34(a)(5)(iii)	Hazard assessment and exposure monitoring data;	Yes	CBDPP ES&H Man Int Doc	CBDPP, Sec B: Hazard Assessment and Sec D: Exposure Monitoring ES&H Man, Doc 14.4, Sec 5.3.2 and 6.0 IH Policies and Procedures	
202	850.34(a)(5)(iv)	Identity and nature of activities or operations on the site that are covered under the CBDPP, related duties of beryllium-associated workers; and	Yes	CBDPP ES&H Man	CBDPP, Sec B: Hazard Assessment ES&H Man, Doc 2.2	
203	850.34(a)(5)(v)	Type of personal protective equipment used.	Yes	CBDPP ES&H Man	CBDPP, Sec B: Hazard Assessment ES&H Man, Doc 2.2	
204	850.34(a)(6)	The responsible employer must provide the following information to the SOMD and the examining physician:	Yes			
205	850.34(a)(6)(i)	A copy of this rule and its preamble;	Yes	Int Doc	HSD Policies and Procedures	
206	850.34(a)(6)(ii)	A description of the worker's duties as they pertain to beryllium exposure;	Yes	ES&H Man Int Doc	ES&H Man, Doc 2.2 IH Policies and Procedures	
207	850.34(a)(6)(iii)	Records of the worker's beryllium exposure; and	Yes	CBDPP ES&H Man Int Doc	CBDPP, Sec B: Hazard Assessment and Sec D: Exposure Monitoring IH Policies and Procedures	
208	850.34(a)(6)(iv)	A description of the personal protective and respiratory protective equipment used by the worker in the past, present, or anticipated future use.	Yes	CBDPP ES&H Man Int Doc	CBDPP, Sec B: Hazard Assessment ES&H Man, Doc 14.4, Sec 4.0 and 5.4 IH Policies and Procedures	

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209	850.34(b)	Medical evaluations and procedures. The responsible employer must provide, to beryllium-associated workers who voluntarily participate in the medical surveillance program, the medical evaluations and procedures required by this section at no cost and at a time and place that is reasonable and convenient to the worker.	Yes	CBDPP	CBDPP, Sec M: Medical Surveillance	Implied commitment: No explicit statement concerning "place that is reasonable..."
210	850.34(b)(1)	Baseline medical evaluation. The responsible employer must provide a baseline medical evaluation to beryllium-associated workers. This evaluation must include:	Yes			
211	850.34(b)(1)(i)	A detailed medical and work history with emphasis on past, present, and anticipated future exposure to beryllium;	Yes	Int Doc	HSD Policies and Procedures	
212	850.34(b)(1)(ii)	A respiratory symptoms questionnaire;	Yes	Int Doc	HSD Policies and Procedures	
213	850.34(b)(1)(ii)	A physical examination with special emphasis on the respiratory system, skin and eyes;	Yes	Int Doc	HSD Policies and Procedures	
214	850.34(b)(1)(iv)	A chest radiograph (posterior anterior, 14 x 17 inches) interpreted by a National Institute for Occupational Safety and Health (NIOSH) B-reader of pneumoconiosis or a board-certified radiologist (unless a baseline chest radiograph is already on file);	Yes	Int Doc	HSD Policies and Procedures	
215	850.34(b)(1)(v)	Spirometry consisting of forced vital capacity (FVC) and forced expiratory volume at 1 second (FEV1);	Yes	Int Doc	HSD Policies and Procedures	
216	850.34(b)(1)(vi)	A Be-LPT; and	Yes	Int Doc	HSD Policies and Procedures	
217	850.34(b)(1)(vii)	Any other tests deemed appropriate by the examining physician for evaluating beryllium-related health effects.	Yes	Int Doc	HSD Policies and Procedures	
218	850.34(b)(2)	Periodic evaluation.	Yes	CBDPP	CBDPP, Sec M: Medical Surveillance	

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219	850.34(b)(2)(i)	The responsible employer must provide to beryllium workers a medical evaluation annually, and to other beryllium associated workers a medical evaluation every three years. The periodic medical evaluation must include:	Yes	Int Doc	HSD Policies and Procedures	Implied commitment in CBDPP.
220	850.34(b)(2)(i)(A)	A detailed medical and work history with emphasis on past, present, and anticipated future exposure to beryllium;	Yes	Int Doc	HSD Policies and Procedures	
221	850.34(b)(2)(i)(B)	A respiratory symptoms questionnaire;	Yes	Int Doc	HSD Policies and Procedures	
222	850.34(b)(2)(i)(C)	A physical examination with emphasis on the respiratory system;	Yes	Int Doc	HSD Policies and Procedures	
223	850.34(b)(2)(i)(D)	A Be-LPT; and	Yes	Int Doc	HSD Policies and Procedures	
224	850.34(b)(2)(i)(E)	Any other medical evaluations deemed appropriate by the examining physician for evaluating beryllium related health effects.	yes	Int Doc	HSD Policies and Procedures	
225	850.34(b)(2)(ii)	The responsible employer must provide to beryllium-associated workers a chest radiograph every five years.	yes	Int Doc	HSD Policies and Procedures	
226	850.34(b)(3)	Emergency evaluation. The responsible employer must provide a medical evaluation as soon as possible to any worker who may have been exposed to beryllium because of a beryllium emergency. The medical evaluation must include the requirements of paragraph (b)(2) of this section.	yes	CBDPP	CBDPP, Sec M: Medical Surveillance	
227	850.34(c)	Multiple physician review. The responsible employer must establish a multiple physician review process for beryllium-associated workers that allows for the review of initial medical findings, determinations, or recommendations from any medical evaluation conducted pursuant to paragraph (b) of this section.	Yes	Int Doc	HSD Policies and Procedures	
228	850.34(c)(1)	If the responsible employer selects the initial physician to conduct any medical examination or consultation provided to a beryllium-associated worker, the worker may designate a second physician to:	Yes	Int Doc	HSD Policies and Procedures	

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229	850.34(c)(1)(i)	Review any findings, determinations, or recommendations of the initial physician; and	Yes	Int Doc	HSD Policies and Procedures	
230	850.34(c)(1)(ii)	Conduct such examinations, consultations and laboratory tests, as the second physician deems necessary to facilitate this review.	Yes	Int Doc	HSD Policies and Procedures	
231	850.34(c)(2)	The responsible employer must promptly notify a beryllium-associated worker in writing of the right to seek a second medical opinion after the initial physician provided by the responsible employer conducts a medical examination or consultation.	Yes	CBDPP Int Doc	CBDPP, Sec M: Medical Surveillance HSD Policies and Procedures	CBDPP - Overarching commitment to second medical opinion.
232	850.34(c)(3)	The responsible employer may condition its participation in, and payment for, multiple physician review upon the beryllium-associated worker doing the following within fifteen (15) days after receipt of the notice, or receipt of the initial physician's written opinion, whichever is later:	Yes	Int Doc	HSD Policies and Procedures	
233	850.34(c)(3)(i)	Informing the responsible employer in writing that he or she intends to seek a second medical opinion; and	Yes	Int Doc	HSD Policies and Procedures	
234	850.34(c)(3)(ii)	Initiating steps to make an appointment with a second physician.	yes	Int Doc	HSD Policies and Procedures	
235	850.34(c)(4)	If the findings, determinations, or recommendations of the second physician differ from those of the initial physician, then the responsible employer and the beryllium-associated worker must make efforts to encourage and assist the two physicians to resolve any disagreement.	Yes	Int Doc	HSD Policies and Procedures	
236	850.34(c)(5)	If, despite the efforts of the responsible employer and the beryllium-associated worker, the two physicians are unable to resolve their disagreement, then the responsible employer and the worker, through their respective physicians, must designate a third physician to:	Yes	Int Doc	HSD Policies and Procedures	
237	850.34(c)(5)(i)	Review any findings, determinations, or recommendations of the other two physicians; and	Yes	Int Doc	HSD Policies and Procedures	

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238	850.34(c)(5)(ii)	Conduct such examinations, consultations, laboratory tests, and consultations with the other two physicians, as the third physician deems necessary to resolve the disagreement among them.	Yes	Int Doc	HSD Policies and Procedures	
239	850.34(c)(6)	The SOMD must act consistently with the findings, determinations, and recommendations of the third physician, unless the SOMD and the beryllium-associated worker reach an agreement that is consistent with the recommendations of at least one of the other two physicians.	Yes	Int Doc	HSD Policies and Procedures	
240	850.34(d)	Alternate physician determination. The responsible employer and the beryllium-associated worker or the worker's designated representative may agree upon the use of any alternate form of physician determination in lieu of the multiple physician review process provided by paragraph (c) of this section, so long as the alternative is expeditious and at least as protective of the worker.	Yes	CBDPP	CBDPP, Sec M: Medical Surveillance	
241	850.34(e)	Written medical opinion and recommendation.	Yes			
242	850.34(e)(1)	Within two weeks of receipt of results, the SOMD must provide to the responsible employer a written, signed medical opinion for each medical evaluation performed on each beryllium-associated worker. The written opinion must take into account the findings, determinations and recommendations of the other examining physicians who may have examined the beryllium-associated worker. The SOMD's opinion must contain:	Yes	CBDPP Int Doc	CBDPP, Sec M: Medical Surveillance HSD Policies and Procedures	
243	850.34(e)(1)(i)	The diagnosis of the worker's condition relevant to occupational exposure to beryllium, and any other medical condition that would place the worker at increased risk of material impairment to health from further exposure to beryllium;	Yes	Int Doc	HSD Policies and Procedures	
244	850.34(e)(1)(ii)	Any recommendation for removal of the worker from DOE beryllium activities, or limitation on the worker's activities or duties or use of personal protective equipment, such as a respirator; and	Yes	Int Doc	HSD Policies and Procedures	

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245	850.34(e)(1)(iii)	A statement that the SOMD or examining physician has clearly explained to the worker the results of the medical evaluation, including all tests results and any medical condition related to beryllium exposure that requires further evaluation or treatment.	Yes	Int Doc	HSD Policies and Procedures	
246	850.34(e)(2)	The SOMD's written medical opinion must not reveal specific records, findings, and diagnoses that are not related to medical conditions that may be affected by beryllium exposure.	Yes	Int Doc	HSD Policies and Procedures	
247	850.34(f)	Information provided to the beryllium-associated worker.	Yes			
248	850.34(f)(1)	The SOMD must provide each beryllium associated worker with a written medical opinion containing the results of all medical tests or procedures, an explanation of any abnormal findings, and any recommendation that the worker be referred for additional testing for evidence of CBD, within 10 working days after the SOMD's receipt of the results of the medical tests or procedures.	Yes	CBDPP Int Doc	CBDPP, Sec M: Medical Surveillance HSD Policies and Procedures	
249	850.34(f)(2)	The responsible employer must, within 30 days after a request by a beryllium-associated worker, provide the worker with the information the responsible employer is required to provide the examining physician under paragraph (a)(6) of this section.	Yes	Int Doc	HSD Policies and Procedures	
250	850.34(g)	Reporting. The responsible employer must report on the applicable OSHA reporting form beryllium sensitization, CBD, or any other abnormal condition or disorder of workers caused or aggravated by occupational exposure to beryllium.	Yes	WSHP	WSHP, Sec 11: Recordkeeping and Reporting	Note: Since 2002, DOE no longer requires OSHA reporting of sensitization.
251	850.34(h)	Data analysis.	Yes			
252	850.34(h)(1)	The responsible employer must routinely and systematically analyze medical, job, and exposure data with the aim of identifying individuals or groups of individuals potentially at risk for CBD and working conditions that are contributing to that risk.	Yes	CBDPP	CBDPP Section M: Medical Surveillance and Section S: Performance Feedback	CBDPP does not include "jobs" in text but commitment is implied.

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253	850.34(h)(2)	The responsible employer must use the results of these analyses to identify additional workers to whom the responsible employer must provide medical surveillance and to determine the need for additional exposure controls.	Yes	CBDPP	CBDPP Section M: Medical Surveillance Section S: Performance Feedback	ES&H Manual 14.4 App B lists types of tasks with potential exposure.
254	850.35	Medical Removal.				DOE G, Sec 4.2.15
255	850.35(a)	Medical removal protection. The responsible employer must offer a beryllium-associated worker medical removal from exposure to beryllium if the SOMD determines in a written medical opinion that it is medically appropriate to remove the worker from such exposure. The SOMD's determination must be based on one or more positive Be-LPT results, chronic beryllium disease diagnosis, an examining physician's recommendation, or any other signs or symptoms that the SOMD deems medically sufficient to remove a worker.	Yes	CBDPP LLNL Pers Policy and Proc Man ES&H Man	CBDPP, Sec N. Medical Removal LLNL Pers Policy and Proc Man, Sec M. ESH Manual 14.4 Sec 6.0	
256	850.35(a)(1)	Temporary removal pending final medical determination. The responsible employer must offer a beryllium-associated worker temporary medical removal from exposure to beryllium on each occasion that the SOMD determines in a written medical opinion that the worker should be temporarily removed from such exposure pending a final medical determination of whether the worker should be removed permanently.	Yes	ES&H Man LLNL Pers Policy and Proc Man	ES&H Man, Doc. 10.1, Secs 4.0 and 5.0 LLNL Pers Policy and Proc Man, Sec M.	
257	850.35(a)(1)(i)	In this section, "final medical determination" means the outcome of the multiple physician review process or the alternate medical determination process provided for in paragraphs (c) and (d) of § 850.34.	Yes	ES&H Man LLNL Pers Policy and Proc Man	ES&H Man, Doc. 10.1, Secs 4.0 and 5.0 LLNL Pers Policies and Proc Man, Sec M	
258	850.35(a)(1)(ii)	If a beryllium-associated worker is temporarily removed from beryllium exposure pursuant to this section, the responsible employer must transfer the worker to a comparable job for which the worker is qualified (or for which the worker can be trained in a short period) and where beryllium exposures are as low as possible, but in no event at or above the action level.	Yes	CBDPP LLNL Pers Policy and Proc Man	CBDPP, Sec N: Medical Removal LLNL Pers Policies and Proc Man, Sec M	

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259	850.35(a)(1)(iii)	The responsible employer must maintain the beryllium-associated worker's total normal earnings, seniority, and other worker rights and benefits as if the worker had not been removed.	Yes	CBDPP	CBDPP, Sec N: Medical Removal	
260	850.35(a)(1)(iv)	If there is no such job available, the responsible employer must provide to the beryllium-associated worker the medical removal protection benefits specified in paragraph (b)(2) of this section, until a job becomes available or for one year, whichever comes first.	Yes	CBDPP LLNL Pers Policy and Proc Man	CBDPP, Sec N: Medical Removal LLNL Pers Policies and Proc Man, Sec M	
261	850.35(a)(2)	Permanent medical removal.	Yes			
262	850.35(a)(2)(i)	The responsible employer must offer a beryllium-associated worker permanent medical removal from exposure to beryllium if the SOMD determines in a written medical opinion that the worker should be permanently removed from exposure to beryllium.	Yes	CBDPP LLNL Pers Policy and Proc Man	CBDPP, Sec N: Medical Removal LLNL Pers Policies and Proc Man, Sec M	
263	850.35(a)(2)(ii)	If a beryllium-associated worker is removed permanently from beryllium exposure based on the SOMD's recommendation pursuant to this section, the responsible employer must provide the worker the medical removal protection benefits specified in paragraph (b) of this section.	Yes	CBDPP LLNL Pers Policy and Proc Man	CBDPP, Sec N: Medical Removal LLNL Pers Policies and Proc Man, Sec M	
264	850.35(a)(3)	Worker consultation before temporary or permanent medical removal. If the SOMD determines that a beryllium-associated worker should be temporarily or permanently removed from exposure to beryllium, the SOMD must:	Yes	CBDPP LLNL Pers Policy and Proc Man	CBDPP, Sec N: Medical Removal LLNL Pers Policies and Proc Man, Sec M	
265	850.35(a)(3)(i)	Advise the beryllium-associated worker of the determination that medical removal is necessary to protect the worker's health;	Yes	Int Proc	HSD Policies and Proc	
266	850.35(a)(3)(ii)	Provide the beryllium-associated worker with a copy of this rule and its preamble, and any other information the SOMD deems necessary on the risks of continued exposure to beryllium and the benefits of removal;	Yes	Int Proc	HSD Policies and Proc	

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267	850.35(a)(3)(iii)	Provide the beryllium-associated worker the opportunity to have any questions concerning medical removal answered; and	Yes	Int Proc	HSD Policies and Proc	
268	850.35(a)(3)(iv)	Obtain the beryllium-associated worker's signature acknowledging that the worker has been advised to accept medical removal from beryllium exposure as provided in this section, and has been provided with the information specified in this paragraph, on the benefits of removal and the risks of continued exposure to beryllium.	Yes	Int Proc	HSD Policies and Proc	
269	850.35(a)(4)	Return to work after medical removal.	Yes			
270	850.35(a)(4)(i)	The responsible employer, subject to paragraph (a)(4)(ii) of this section, must not return a beryllium-associated worker who has been permanently removed under this section to the worker's former job status unless the SOMD first determines in a written medical opinion that continued medical removal is no longer necessary to protect the worker's health.	Yes	Int Proc	HSD Policies and Proc	
271	850.35(a)(4)(ii)	Notwithstanding paragraph (a)(4) of this section, if, in the SOMD's opinion, continued exposure to beryllium will not pose an increased risk to the beryllium-associated worker's health, and medical removal is an inappropriate remedy in the circumstances, the SOMD must fully discuss these matters with the worker and then, in a written determination, may authorize the responsible employer to return the worker to his or her former job status. Thereafter, the returned beryllium-associated worker must continue to be provided with medical surveillance under § 850.34 of this part.		Int Proc	HSD Policies and Proc	
272	850.35(b)	Medical removal protection benefits.	Yes			
273	850.35(b)(1)	If a beryllium-associated worker has been permanently removed from beryllium exposure pursuant to paragraph (a)(2) of this section, the responsible employer must provide the beryllium-associated worker:	Yes			

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274	850.35(b)(1)(i)	The opportunity to transfer to another position which is available, or later becomes available, for which the beryllium-associated worker is qualified (or for which the worker can be trained in a short period) and where beryllium exposures are as low as possible, but in no event at or above the action level; or	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policies and Proc Man, Sec M	
275	850.35(b)(1)(ii)	If the beryllium-associated worker cannot be transferred to a comparable job where beryllium exposures are below the action level, a maximum of 2 years of permanent medical removal protection benefits (specified in paragraph (b)(2) of this section).	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policies and Proc Man, Sec M	
276	850.35(b)(2)	If required by this section to provide medical removal protection benefits, the responsible employer must maintain the removed worker's total normal earnings, seniority and other worker rights and benefits, as though the worker had not been removed.	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policies and Proc Man, Sec M	
277	850.35(b)(3)	If a removed beryllium-associated worker files a claim for workers' compensation payments for a beryllium-related disability, then the responsible employer must continue to provide medical removal protection benefits pending disposition of the claim. The responsible employer must receive no credit for the workers' compensation payments received by the worker for treatment related expenses.	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policies and Proc Man, Sec M	Implied commitment.
278	850.35(b)(4)	The responsible employer's obligation to provide medical removal protection benefits to a removed beryllium-associated worker is reduced to the extent that the worker receives compensation for earnings lost during the period of removal either from a publicly- or employer-funded compensation program, or from employment with another employer made possible by virtue of the worker's removal.	Yes			Implied commitment.

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279	850.35(b)(5)	For the purposes of this section, the requirement that a responsible employer provide medical removal protection benefits is not intended to expand upon, restrict, or change any rights to a specific job classification or position under the terms of an applicable collective bargaining agreement.	Yes			Implied commitment.
280	850.35(b)(6)	The responsible employer may condition the provision of medical removal protection benefits upon the beryllium-associated worker's participation in medical surveillance provided in accordance with § 850.34 of this part.	Yes			Implied commitment.
281	850.36	Medical consent.	Yes			DOE G, Sec 4.2.16
282	850.36(a)	The responsible employer must provide each beryllium-associated worker with a summary of the medical surveillance program established in § 850.34 at least one week before the first medical evaluation or procedure or at any time requested by the worker. This summary must include:	Yes	CBDPP	CBDPP, Sec O: Medical Consent	
283	850.36(a)(1)	The type of data that will be collected in the medical surveillance program;	Yes	CBDPP	CBDPP, Sec O: Medical Consent	
284	850.36(a)(2)	How the data will be collected and maintained;	Yes	CBDPP	CBDPP, Sec O: Medical Consent	
285	850.36(a)(3)	The purpose for which the data will be used; and	Yes	CBDPP	CBDPP, Sec O: Medical Consent	
286	850.36(a)(4)	A description of how confidential data will be protected.	Yes	CBDPP	CBDPP, Sec O: Medical Consent	
287	850.36(b)	Responsible employers must also provide each beryllium-associated worker with information on the benefits and risks of the medical tests and examinations available to the worker at least one week prior to any such examination or test, and an opportunity to have the worker's questions answered.	Yes	CBDPP	CBDPP, Sec O: Medical Consent	
288	850.36(c)	The responsible employer must have the SOMD obtain a beryllium-associated worker's signature on the informed consent form found in Appendix A to this part, before performing medical evaluations or any tests.	Yes	CBDPP	CBDPP, Sec O: Medical Consent	

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289	850.37	Training and counseling.	Yes			DOE G, Sec 4.2.17
290	850.37(a)	The responsible employer must develop and implement a beryllium training program and ensure participation for:	Yes	ES&H Man	ES&H Man, Doc 40.1	
291	850.37(a)(1)	Beryllium-associated workers;	Yes	CBDPP	CBDPP, Sec P: Training and Counseling	
292	850.37(a)(2)	All other individuals who work at a site where beryllium activities are conducted.	Yes	CBDPP	CBDPP, Sec P: Training and Counseling	
293	850.37(b)	The training provided for workers identified in paragraph (a)(1) of this section, must:	Yes			
294	850.37(b)(1)	Be in accordance with 29 CFR 1910.1200, Hazard Communication;	Yes			Implied commitment.
295	850.37(b)(2)	Include the contents of the CBDPP; and	Yes	ES&H Man	ES&H Man, Doc 40.1, Sec 8.2.1 Training Materials	
296	850.37(b)(3)	Include potential health risks to beryllium worker family members and others who may come in contact with beryllium on beryllium workers or beryllium workers' personal clothing or other personal items as the result of a beryllium control failure at a DOE facility.	Yes	ES&H Man	ES&H Man, Doc 40.1, Sec 8.2.1 Training Materials and Appendix A: Course Development	
297	850.37(c)	The training provided for workers identified in paragraph (a)(2) of this section must consist of general awareness about beryllium hazards and controls.	Yes	ES&H Man	ES&H Man, Doc 40.1, Sec 8.2.1 Training Materials and Appendix A: Course Development	
298	850.37(d)	The responsible employer must provide the training required by this section before or at the time of initial assignment and at least every two years thereafter.	Yes	ES&H Man	ES&H Man, Doc 40.1, Sec 8.2.1 Training Materials and Appendix A: Course Development	
299	850.37(e)	The employer must provide retraining when the employer has reason to believe that a beryllium worker lacks the proficiency, knowledge, or understanding needed to work safely with beryllium, including at least the following situations:	Yes	ES&H Man	ES&H Man, Doc 40.1, Sec 8.2.1 Training Materials and Appendix A: Course Development	

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300	850.37(e)(1)	To address any new beryllium hazards resulting from a change to operations, procedures, or beryllium controls about which the beryllium worker was not previously trained; and	Yes	ES&H Man	ES&H Man, Doc 40.1, Sec 8.2.1 Training Materials and Appendix A: Course Development	
301	850.37(e)(2)	If a beryllium worker's performance involving beryllium work indicates that the worker has not retained the requisite proficiency.	Yes	CBDPP	CBDPP, Sec P: Training and Counseling	
302	850.37(f)	The responsible employer must develop and implement a counseling program to assist beryllium-associated workers who are diagnosed by the SOMD to be sensitized to beryllium or to have CBD. This counseling program must include communicating with beryllium-associated workers concerning:	Yes	CBDPP ES&H Man	CBDPP, Sec P: Training and Counseling ES&H Man, Doc 10.1, Sec 10	Beryllium Support Group
303	850.37(f)(1)	The medical surveillance program provisions and procedures;	Yes	CBDPP ES&H Man Int Doc	CBDPP, Sec P: Training and Counseling ES&H Man, Doc 10.1 ES&H Man, 14.4 Sec 6.0 HSD Policies and Proc	
304	850.37(f)(2)	Medical treatment options;	Yes	CBDPP ES&H Man Int Doc	CBDPP, Sec P: Training and Counseling ES&H Man, Doc 10.1 ES&H Man, 14.4 Sec 6.0 HSD Policies and Proc	
305	850.37(f)(3)	Medical, psychological, and career counseling;	Yes	CBDPP ES&H Man Int Doc	CBDPP, Sec P: Training and Counseling ES&H Man, Doc 10.1 ES&H Man, 14.4 Sec 6.0 HSD Policies and Proc	
306	850.37(f)(4)	Medical benefits;	Yes	CBDPP ES&H Man Int Doc	CBDPP, Sec P: Training and Counseling ES&H Man, Doc 10.1 ES&H Man, 14.4 Sec 6.0 HSD Policies and Proc	

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307	850.37(f)(5)	Administrative procedures and workers rights under applicable Workers' Compensation laws and regulations;	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policy and Proc Man	HSD serves as a link to resources, e.g., EEOICPA.
308	850.37(f)(6)	Work practice procedures limiting beryllium-associated worker exposure to beryllium; and	Yes	ES&H Man	ES&H Man, Doc 10.1, Secs 4.5 and 5.0	
309	850.37(f)(7)	The risk of continued beryllium exposure after sensitization.	Yes	LLNL Pers Policy and Proc Man Int Doc	LLNL Pers Policy and Proc Man, Secs III.1-III.2 and IV HSD Policies and Proc	
310	850.38	Warning signs and labels.	Yes			DOE G, Sec 4.2.18
311	850.38(a)	Warning signs. The responsible employer must post warning signs at each access point to a regulated area with the following information: DANGER; BERYLLIUM CAN CAUSE LUNG DAMAGE; CANCER HAZARD; AUTHORIZED PERSONNEL ONLY	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec 5.3.3 and Table 3	Information in sign amended for improved integration into LLNL program.
312	850.38(b)	Warning labels.	Yes			
313	850.38(b)(1)	The responsible employer must affix warning labels to all containers of beryllium, beryllium compounds, or beryllium-contaminated clothing, equipment, waste, scrap, or debris.	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec 5.3.6	
314	850.38(b)(2)	Warning labels must contain the following information: DANGER; CONTAMINATED WITH BERYLLIUM; DO NOT REMOVE DUST BY BLOWING OR SHAKING; CANCER AND LUNG DISEASE HAZARD	Yes	ES&H Man	ES&H Man, Doc 14.4, Sec 5.3.6 and Table 4	
315	850.38(c)	Warning signs and labels must be in accordance with 29 CFR 1910.1200, Hazard Communication.	Yes			Implied commitment. ANSI Z136.1 – 1993
316	850.39	Recordkeeping and use of information.	Yes			DOE G, Sec 4.2.19

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317	850.39(a)	The responsible employer must establish and maintain accurate records of all beryllium inventory information, hazard assessments, exposure measurements, exposure controls, and medical surveillance.	Yes	CBDPP Int Doc	CBDPP, Sec R: Recordkeeping HSD Policies and Proc IH Policies and Proc	
318	850.39(b)	Heads of DOE Departmental Elements must:	Yes			
319	850.39(b)(1)	Designate all record series as required under this rule as agency records and, therefore, subject to all applicable agency records management and access laws; and	Yes			
320	850.39(b)(2)	Ensure that these record series are retained for a minimum of seventy-five years.	Yes	CBDPP	CBDPP, Sec R: Recordkeeping	
321	850.39(c)	The responsible employer must convey to DOE or its designee all record series required under this rule if the employer ceases to be involved in the CBDPP.	Yes			Implied commitment.
322	850.39(d)	The responsible employer must link data on workplace conditions and health outcomes in order to establish a basis for understanding the beryllium health risk.	Yes	CBDPP	CBDPP, Sec R: Recordkeeping and Sec S: Performance Feedback	
323	850.39(e)	The responsible employer must ensure the confidentiality of all work-related records generated under this rule by ensuring that:	Yes	CBDPP	CBDPP, Sec R: Recordkeeping	DOE-STD-1187-2007
324	850.39(e)(1)	All records that are transmitted to other parties do not contain names, social security numbers or any other variables, or combination of variables, that could be used to identify particular individuals; and	Yes	CBDPP	CBDPP, Sec M: Medical Surveillance and Sec R: Recordkeeping	DOE-STD-1187-2007
325	850.39(e)(2)	Individual medical information generated by the CBDPP is:	Yes			
326	850.39(e)(2)(i)	Either included as part of the worker's site medical records and maintained by the SOMD, or is maintained by another physician designated by the responsible employer;	Yes	CBDPP	CBDPP, Sec R: Recordkeeping	DOE-STD-1187-2007

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327	850.39(e)(2)(ii)	Maintained separately from other records; and	Yes	CBDPP	CBDPP, Sec R: Recordkeeping	DOE-STD-1187-2007
328	850.39(e)(2)(iii)	Used or disclosed by the responsible employer only in conformance with any applicable requirements imposed by the Americans with Disabilities Act, the Privacy Act of 1974, the Freedom of Information Act, and any other applicable law.	Yes	LLNL Pers Policy and Proc Man	LLNL Pers Policy and Proc Man	DOE-STD-1187-2007
329	850.39(f)	The responsible employer must maintain all records required by this part in current and accessible electronic systems, which include the ability readily to retrieve data in a format that maintains confidentiality.	Yes	CBDPP	CBDPP, Sec R: Recordkeeping	DOE-STD-1187-2007
330	850.39(g)	The responsible employer must transmit all records generated as required by this rule, in a format that protects the confidentiality of individuals, to the DOE Assistant Secretary for Environment, Safety and Health on request.	Yes	CBDPP	CBDPP, Sec R: Recordkeeping	DOE-STD-1187-2007
331	850.39(h)	The responsible employer must semi-annually transmit to the DOE Office of Epidemiologic Studies within the Office of Environment, Safety and Health an electronic registry of beryllium-associated workers that protects confidentiality, and the registry must include, but is not limited to, a unique identifier, date of birth, gender, site, job history, medical screening test results, exposure measurements, and results of referrals for specialized medical evaluations.	Yes	CBDPP Int Doc	CBDPP, Sec M: Medical Surveillance and Sec R: Recordkeeping HSD Policies and Proc IH Policies and Proc	DOE-STD-1187-2007
332	850.40	Performance feedback.	Yes			DOE G, Sec 4.2.20
333	850.40(a)	The responsible employer must conduct periodic analyses and assessments of monitoring activities, hazards, medical surveillance, exposure reduction and minimization, and occurrence reporting data.	Yes	CBDPP Int Doc	CBDPP, Sec S: Performance Feedback	Internal document or tool to be developed.

Item No.	10 CFR 850 Section	Subject	Applicable?	LLNL Impl Mechanism	LLNL ES&H Program Component	Implementation Guide/Comment
334	850.40(b)	To ensure that information is available to maintain and improve all elements of the CBDPP continuously, the responsible employer must give results of periodic analyses and assessments to the line managers, planners, worker protection staff, workers, medical staff, and labor organizations representing beryllium-associated workers who request such information.	Yes	CBDPP Int Doc	CBDPP, Sec S: Performance Feedback	Internal document or tool to be developed.

KEY TO ABBREVIATIONS AND ACRONYMS

App	Appendix
CBDPP	Chronic Beryllium Disease Prevention Program
DIS	Disposal
DOE G	Department of Energy Guide
DOE STD	Department of Energy Standard
EEOICPA	Energy Employees Occupational Illness Compensation Program Act
HSD	Health Services Department
IH	Industrial Hygiene
Impl	Implementation
Impl Guide	10 CFR 850 Implementation Guide
Int	Internal
Man	Manual
Pers	Personnel
PIM	Policy and Information Manual
Pol	Policy
Proc	Procedure
RHWM	Radiological and Hazardous Waste Management
Sec	Section
Secs	Sections
WIC	Waste Identification and Characterization
WPT	Waste Packaging and Transfer
WSHP	Worker Safety and Health Program