

**Crosswalk of the 2007 Requirements in 10 CFR part 851
And the 2018 Incorporation by Reference Technical Amendment Requirements**

NOTE: In December 2002, Congress directed DOE to promulgate regulations on worker safety and health regulations to cover contractors with Price-Anderson indemnification agreements in their contracts. Specifically, section 3173 of the National Defense Authorization Act (NDAA) amended the Atomic Energy Act (AEA) to add section 234C (codified as 42 U.S.C. 2282c), which requires DOE to promulgate worker safety and health regulations that maintain “the level of protection currently provided to * * *workers.” These regulations are to include flexibility to tailor implementation to reflect activities and hazards associated with a particular work environment; to take into account special circumstances for facilities permanently closed or demolished, or which title is expected to be transferred; and to achieve national security missions in an efficient and timely manner (42 U.S.C. 2282c(3)).

10 CFR part 851 codified the Department’s worker protection program requirements established in DOE Order 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees*. Consistent with the intent of Congress, DOE Order 440.1A forms the basis for the rule’s substantive requirements. The Conference Committee for the National Defense Authorization Act recognized that contractors currently operate under this order, “which provides an adequate level of safety.”

In the preamble to the 2006 final rule Table 1 shows a crosswalk of the requirements in DOE O 440.1B and the requirements in the 2007 Final Rule for 10 CFR part 851 (See page 6861).

2006 Section	2006 10 CFR part 851 Requirement	2017 Section	2017 10 CFR part 851 IBR Requirement	Notes
851.23	Safety and health standards.	851.23	Safety and health standards.	
(a)	DOE contractors must comply with the following safety and health standards that are applicable to the hazards at their covered workplace:	(a)	DOE contractors to comply with the following safety and health standards that are applicable to the hazards at their covered workplace:	
(a)(1)	10 CFR Part 850, Chronic Beryllium Disease Prevention Program (CBDPP)	(a)(1)	10 CFR Part 850, CBDPP	
(a)(2)	29 CFR Parts 1904.4 thru 1904.11, 1904.29 thru 1904.33, 1904.44 and 1904.46, <i>Recording and Reporting Occupational Injuries and Illnesses</i>	(a)(2)	29 CFR Part 1904.4 thru 1904.11, 1904.29 thru 1904.33 and 1904.46	Deleted 1904.44.
(a)(3)	29 CFR Part 1910, Occupational Safety and Health Standards, excluding 1910.96, <i>Ionizing Radiation</i> and 10 CFR 1910.1000, <i>Beryllium</i>	(a)(3)	29 CFR Part 1910, Occupational Safety and Health Standards, excluding 1910.96, <i>Ionizing Radiation</i> and 10 CFR 1910.1000, <i>Beryllium</i>	11/10/2015 Tech amendment excluded beryllium.
(a)(4)	29 CFR Part 1910.15, <i>Shipyard Employment</i>	(a)(4)	29 CFR 1910.15, <i>Shipyard Employment</i>	
(a)(5)	29 CFR Part 1917, <i>Marine Terminals</i>	(a)(5)	29 CFR Part 1917, <i>Marine Terminals</i>	

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(a)(6)	29 CFR Part 1918, <i>Safety and Health Regulations for Longshoring</i>	(a)(6)	29 CFR Part 1918, <i>Safety and Health Regulations for Longshoring</i>	
(a)(7)	29 CFR Part 1026, <i>Safety and Health Regulations for Construction</i>	(a)(7)	29 CFR Part 1026, <i>Safety and Health Regulations for Construction</i>	
(a)(8)	29 CFR Part 1928, <i>Occupational Safety and Health Standards for Agriculture</i>	(a)(8)	29 CFR Part 1928, <i>Occupational Safety and Health Standards for Agriculture</i>	.
(a)(9)	American Conference of Governmental Industrial Hygienists (ACGIH), <i>Threshold Limit Values (TLVs) for Chemical Substances and Physical Agents and Biological Indices, 2005</i>	(a)(9)	ACGIH, <i>TLVs for Chemical Substances and Physical Agents and Biological Indices, 2016</i>	
(a)(10)	American National Standards Institute (ANSI), <i>Z88.2, American National Standard for Respiratory Protection, 1992</i>	(a)(10)	ANSI, <i>Z88.2, American National Standard for Respiratory Protection, 2015</i>	
(a)(11)	ANSI Z136 1, <i>Safe Use of Lasers, 2000</i>	(a)(11)	ANSI Z136 1, <i>Safe Use of Lasers, 2014</i>	
(a)(12)	ANSI Z49, <i>Safety in Welding, Cutting and Allied Processes, Sections 4.3 and E4.3, 1999</i>	(a)(12)	ANSI Z49, <i>Safety in Welding, Cutting and Allied Processes, Sections 4.3 and E4.3, 2012</i>	
(a)(13)	Nation Fire Protection Association (NFPA) 70, National Electrical Code, 2005	(a)(13)	Nation Fire Protection Association (NFPA) 70, <i>National Electrical Code, 2017</i>	
(a)(14)	NFPA 70 E, <i>Standard for Electrical Safety in Workplaces, 2004</i>	(a)(14)	NFPA 70 E, <i>Standard for Electrical Safety in Workplaces, 2015</i>	
851.26	Recordkeeping and reporting.	851.26	Recordkeeping and reporting.	
(a)(2)	Ensure that the work-related injuries and illnesses of its workers and subcontractor workers are recorded and reported accurately and consistent with DOE Manual 231.1-1A, Environment, Safety and Health Reporting Manual, September 9, 2004 (incorporated by reference, see § 851.27).	(a)(2)	Ensure that the work-related injuries and illnesses of its workers and subcontractor workers are recorded and reported accurately and consistent with the appropriate DOE recordkeeping directive	Removed: “DOE Manual 231.1-1A, Environment, Safety and Health Reporting Manual, September 9, 2004 (incorporated by reference, see § 851.27)

2006 Section	2006 10 CFR part 851 Requirement	2017 Section	2017 10 CFR part 851 IBR Requirement	Notes
(a)(3)	Comply with the applicable occupational injury and illness recordkeeping and reporting workplace safety and health standards in § 851.23 at their site, unless otherwise directed in DOE Manual 231.1–1A.	(a)(3)	Comply with the applicable occupational injury and illness recordkeeping and reporting workplace safety and health standards in § 851.23 at their site, unless otherwise directed by DOE.	Removed: DOE Manual 231.1–1A
(b)(2)	Analyze related data for trends and lessons learned (reference DOE Order 225.1A, Accident Investigations, November 26, 1997).	(b)(2)	Analyze related data for trends and lessons learned.	Removed: (reference DOE Order 225.1A, Accident Investigations, November 26, 1997)
851.27	Reference source.	851.27	Materials incorporated by reference.	Entire section revised per Federal Register Manual for IBRs.
(a) (1)	<i>Materials incorporated by reference</i> —(1) <i>General</i> . The following standards which are not otherwise set forth in part 851 are incorporated by reference and made a part of part 851. The standards listed in this section have been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.	(a)	General. We incorporate by reference the following standards into part 851. The material has been approved for incorporation by the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to a standard by the standard-setting organization will not affect the DOE regulations unless and until amended by DOE. Material is incorporated as it exists on the date of the approval. To use a subsequent amendment to a standard, DOE must publish a document in the Federal Register and the material must be available to the public. All approved material is available for inspection at the U.S. Department of Energy, Office of Environment, Health, Safety and Security, Office of Worker Safety and Health Policy, 1000 Independence Ave. SW, Washington, DC 20585. 301–903–6061. The material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030 or go to:	Standard language must be use for an IBR per Director of the Federal Register.

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			www.archives.gov/federalregister/cfr/ibr-locations.html . Standards can be obtained from the sources listed below.	
(2)	<i>Availability of standards.</i> The standards incorporated by reference are available for inspection at:			
(i)	National Archives and Records Administration (NARA). For more information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federalregister/codof/federalregulations/ibrlocations.html			
(ii)	U.S. Department of Energy, Office of Health, Safety and Security, Forrestal Building, 1000 Independence Ave., SW., Washington, DC 20585.			
(iii)	American National Standards Institute Headquarters, 25 West 43 rd Street, New York, NY 10036. Telephone number: 212-642-4980, or go to: http://www.ansi.org .	(c)	<i>ANSI.</i> American National Standards Institute, 1899 L Street NW, 11th Floor, Washington, DC 20036. Telephone number: 202-293-8020, or go to: http://www.ansi.org .	
(iv)	National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169. Telephone: 617 770-3000, or go to: http://www.nfpa.org .	(e)	<i>NFPA.</i> The National Fire Protection Association, One Batterymarch Park, Quincy, MA 02169. Telephone: 617-984-7423, or go to: http://www.nfpa.org .	
(v)	American Conference of Governmental Industrial Hygienist (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, OH 45240. Telephone number 513-742-2020, or go to: http://www.acgih.org .	(b)	ACGIH. American Conference of Governmental Industrial Hygienist, 1330 Kemper Meadow Drive, Cincinnati, OH 45240. Telephone number: 513-742-2020, or go to: http://www.acgih.org .	
(vi)	American Society of Mechanical Engineers (ASME), P.O. Box 2300 Fairfield, NJ 07007. Telephone: 800-843-2763, or got to: http://www.asme.org .	(d)	<i>ASME.</i> American Society of Mechanical Engineers, P.O. Box 2300, Fairfield, NJ 07007. Telephone: 800-843-2763, or got to: http://www.asme.org .	
(b)	List of standards Incorporated by reference.			

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(b)(1)	American National Standards Institute (ANSI) Z88.2, “American National Standard for Respiratory Protection,” (1992).	(c)(2)	ANSI/ASSE Z88.2–2015, <i>American National Standard Practices for Respiratory Protection</i> , ANSI approved March 4, 2015, IBR approved for § 851.23.	
(b)(2)	ANSI Z136.1, “Safe Use of Lasers,” (2000).	(c)(3)	ANSI Z136.1–2014, <i>American National Standard for Safe Use of Lasers</i> , ANSI approved December 10, 2013, IBR approved for § 851.23.	
(b)(3)	ANSI Z49.1, “Safety in Welding, Cutting and Allied Processes,” sections 4.3 and E4.3, (1999)	(c)(1)	ANSI Z49.1–2012, <i>American National Standard Safety in Welding, Cutting and Allied Processes</i> , sections 4.3 and E4.3, ANSI approved March 9, 2012, IBR approved for § 851.23.	
(b)(4)	National Fire Protection Association (NFPA) 70, “National Electrical Code,” (2005).	(e)(i)	NFPA 70, <i>National Electric Code</i> , (2017), issued August 4, 2016; IBR approved for § 851.23	
(b)(5)	NFPA 70E, “Standard for Electrical Safety in the Workplace,” (2004)	(e)(ii)	NFPA 70E, <i>Standard for Electrical Safety in the Workplace</i> , (2015 edition), issued July 14, 2014; IBR approved for § 851.23.	
(b)(6)	American Conference of Governmental Industrial Hygienists, “Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices,” (2005).	(b)(1)	ACGIH, <i>Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices</i> , 2016; IBR approved for § 851.23.	
(b)(7)	American Society of Mechanical Engineers (ASME) Boilers and Pressure Vessel Code, sections I through XII including applicable Code Cases, (2004).	(d)(1)	ASME Boilers and Pressure Vessel Codes (BPVC) as follows:	
		(d)(1)(i)	BPVC.I–2015, <i>Section I—Rules for Construction of Power Boilers</i> , 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(ii)	BPVC.II.A–2015, <i>Section II—Materials, Part A—Ferrous Material Specifications (Beginning to SA–450)</i> , 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(iii)	BPVC.II.A–2015, <i>Section II—Materials, Part A—Ferrous Material Specifications (SA–451 to End)</i> , 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(iv)	BPVC.II.B–2015, <i>Section II—Materials, Part B—Nonferrous Material Specifications</i> , 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	

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		(v)	BPVC.II.C–2015, <i>Section II—Materials, Part C—Specification for Welding Rods; Electrodes, and Filler Metals</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(vi)	BPVC.II.D.C–2015, <i>Section II—Materials, Part D—Properties (Customary)</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(vii)	BPVC.II.D.M–2015, <i>Section II—Materials, Part D—Properties (Metric)</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(viii)	BPVC.III.A–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Appendices</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(ix)	BPVC.III.1.NB–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division I—Subsection NB, Class 1 Components</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(x)	BPVC.III.1.NC–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division I—Subsection NC, Class 2 Components</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(xi)	BPVC.III.1.ND–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division I—Subsection ND, Class 3 Components</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(xii)	BPVC.III.1.NE–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division I— Subsection NE, Class MC Components</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	

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		(xiii)	BPVC.III.1.NF–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division I—Subsection NF, Supports</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(xiv)	BPVC.III.1.NG–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division I—Subsection NG, Core Support Structures</i> ; 2015 edition, issued July 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xv)	BPVC.III.1.NH–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division I—Subsection NH, Class 1 Components in Elevated Temperature Service</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(xvi)	BPVC.III.NCA–2015, <i>Section III—Rules for Construction of Nuclear Facility; Components, Subsection NCA, General Requirements for Division 1 and Division 2</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xvii)	BPVC.III.2–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division 2, Code for Concrete Containments</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(xviii)	BPVC.III.3–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division 3, Containments for Transportation and Storage of Spent Nuclear Fuel and High Level Radioactive Material and Waste</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(xix)	BPVC.III.5–2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division 5, High Temperature Reactors</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	

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		(xx)	BPVC.IV–2015, <i>Section IV, Rules for Construction of Heating Boilers</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxi)	BPVC.V–2015, <i>Section V, Nondestructive Examination</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety;	
		(xxii)	BPVC.VI–2015, <i>Section VI, Recommended Rules for the Care and Operation of Heating Boilers</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxiii)	BPVC.VII–2015, <i>Section VII, Recommended Guidelines for the Care of Power Boilers</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxiv)	BPVC.VIII.1–2015, <i>Section VIII—Rules for Construction of Pressure Vessels, Division 1</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxv)	BPVC.VIII.2–2015, <i>Section VIII—Rules for Construction of Pressure Vessels, Division 2, Alternative Rules</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxvi)	BPVC.VIII.3–2015, <i>Section VIII—Rules for Construction of Pressure Vessels, Division 3, Alternative Rules for Construction of High Pressure Vessels</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxvii)	BPVC.IX–2015, <i>Section IX—Welding, Brazing and Fusing Qualifications, Qualification Standard for Welding, Brazing, and Fusing Procedures; Welders; Brazers; and Welding, Brazing, and Fusing Operators</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxviii)	BPVC.X–2015, <i>Section X, Fiber—Reinforced Plastic Pressure Vessels</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	

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		(xxix)	BPVC.XI–2015, <i>Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxx)	BPVC.XII–2015, <i>Section XII, Rules for Construction and Continued Service of Transport Tanks</i> ; issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxxii)	BPVC.CC.BPV–2015, <i>Code Cases, Boilers and Pressure Vessels</i> ; 2015 edition, issued July 1, 2015; IBR approved for appendix A, section 4, Pressure Safety	
		(xxxiii)	BPVC.CC.NC–2015, <i>Code Cases, Nuclear Components</i> ; issued July 1, 2015, IBR approved for appendix A, section 4, Pressure Safety	
(b)(8)	ASME B31 (ASME Code for Pressure Piping) as follows:	(d)(2)	ASME B31 codes for pressure piping as follows:	
(b)(8)(i)	B31.1—2001—Power Piping, and B31.1a—2002—Addenda to ASME B31.1—2001;	(i)	B31.1–2016, <i>Power Piping, ASME Code for Pressure Piping, B31</i> , issued June 30, 2016; IBR approved for appendix A, Section 4, Pressure Safety;	No Addenda to B31.1, 2016.
(ii)	B31.2—1968—Fuel Gas Piping			B31.2—1968, Fuel Gas Piping Standard withdrawn. Replaced by ANSI/ NFPA Z223.1. Not included in the IBR. Requires notice and comment in the Federal Register to IBR new standard.
(iii)	B31.3—2002—Process Piping	(ii)	B31.3–2014, <i>Process Piping, ASME Code for Pressure Piping, B31</i> , issued February 27, 2015; IBR approved for appendix A, Section 4, Pressure Safety	

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(iv)	B31.4—2002—Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids	(iii)	B31.4—2016, <i>Pipeline Transportation Systems for Liquids and Slurries, ASME Code for Pressure Piping, B31</i> , issued March 31, 2016; IBR approved for appendix A, Section 4, Pressure Safety	
(v)	B31.5—2001—Refrigeration Piping and Heat Transfer Components, and B31.5a—2004, Addenda to ASME B31.5—2001;	(iv)	B31.5—2016, <i>Refrigeration Piping and Heat Transfer Components, ASME Code for Pressure Piping, B31</i> , issued June 29, 2016; IBR approved for appendix A, Section 4, Pressure Safety	
(vi)	B31.8—2003—Gas Transmission and Distribution Piping Systems	(v)	B31.8—2016, <i>Gas Transmission and Distribution Piping Systems, ASME Code for Pressure Piping, B31</i> , issued September 30, 2014; IBR approved for appendix A, Section 4, Pressure Safety	
(vii)	B31.8S—2001—Managing System Integrity of Gas Pipelines;	(vi)	B31.8S—2014, <i>Managing System Integrity of Gas Pipelines, ASME Code for Pressure Piping, B31, Supplement to ASME B31.8</i> , issued September 30, 2014; IBR approved for appendix A, Section 4, Pressure Safety;	
(viii)	B31.9—1996—Building Services Piping;	(vii)	B31.9—2014, <i>Building Services Piping, ASME Code for Pressure Piping, B31</i> , issued April 28, 2014; IBR approved for appendix A, Section 4, Pressure Safety;	
(ix)	B31.11—2002—Slurry Transportation Piping Systems;			Standard was incorporated into B31.4—2016—Pipeline Transportation Systems for Liquids and Slurries
(x)	B31G—1991—Manual for Determining Remaining Strength of Corroded Pipelines.	(viii)	B31G—2012, <i>Manual for Determining the Remaining Strength of Corroded Pipelines, Supplement to ASME B31 Code for Pressure Piping</i> , issued October 24, 2012; IBR approved for appendix A, Section 4, Pressure Safety.	

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(9)	DOE Manual 231.1-1A, Environment, Safety and Health Reporting Manual, September 9, 2004			Removed: DOE Manual 231.1-1A
(10)	DOE Manual 440.1-1A, DOE Explosives Safety Manual, Contractor Requirements Document (Attachment 2), January 9, 2006.			Removed: DOE Manual 440.1-1A
	Appendix A, Worker Safety and Health Functional Areas, Section 3—Explosives		Appendix A, Worker Safety and Health Functional Areas, Section 3—Explosives	
(b)	Contractors must comply with the policy and requirements specified in the DOE Manual 440.1-1A, DOE Explosives Safety Manual, Contractor Requirements Document (Attachment 2), January 9, 2006 (incorporated by reference, see § 851.27). A Contractor may choose a successor version, if approved by DOE.	(b)	Contractors must comply with the policy and requirements specified in the appropriate explosives safety technical standard .	Deleted obsolete Explosives Safety Manual, DOE Manual 440.1-1A
	Appendix A, Worker Safety and Health Functional Areas, Section 4—Pressure safety		Appendix A, Worker Safety and Health Functional Areas, Section 4—Pressure safety	
(b)(1)	American Society of Mechanical Engineers (ASME) Boilers and Pressure Vessel Code, 2004, Sections I thru XII including applicable code cases	(b)(1)	American Society of Mechanical Engineers (ASME) Boilers and Pressure Vessel Code, 2015	Federal Register requires a list of all standards included in Sections I thru XII, and the code cases. Resulting in new paragraphs being added in the 2018 version. No new requirements added. Standards and code cases

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				changed from 2004 to 2015 version.
		(b)(1)(i)	BPVC.1-2015, Section 1— <i>Rules for Construction of Power Boilers</i>	
		(b)(1)(ii)	BPVC.II.A-2015, Section II— <i>Materials, Part A-Ferrous Material Specifications (Beginning to SA-450)</i>	
		(b)(1)(iii)	BPVC.II.A-2015, Section II— <i>Materials, Part A-Ferrous Material Specifications (SA-451 to End)</i>	
		(b)(1)(iv)	BPVC.II.B-2015, Section II— <i>Materials, Part B-Nonferrous Material Specifications</i>	
		(b)(1)(v)	BPVC.II.C-2015, Section II— <i>Materials, Part C-Specification for Welding Rods; Electrodes, and Filler Metals</i>	
		(b)(1)(vi)	BPVC.II.D.C-2015, Section II— <i>Materials, Part D-Properties (Customary)</i>	
		(b)(1)(vii)	BPVC.II.D.M-2015, Section II— <i>Materials, Part D-Properties (Metric)</i>	
		(b)(1)(vii)	BPVC.III.A-2015, Section III— <i>Rules for Construction of Nuclear Facility Components, Appendices</i>	
		(b)(1)(ix)	BPVC.III.1.NB-2015, Section III— <i>Rules for Construction of Nuclear Facility Components, Division I—Subsection NB, Class 1 Components</i>	
		(b)(1)(x)	BPVC.III.1.NC-2015, Section III— <i>Rules for Construction of Nuclear Facility Components, Division I—Subsection NC, Class 2 Components</i>	
		(b)(1)(xi)	BPVC.III.1.ND-2015, Section III— <i>Rules for Construction of Nuclear Facility Components, Division I—Subsection ND, Class 3 Components</i>	
		(b)(1)(xii)	BPVC.III.1.NE-2015, Section III— <i>Rules for Construction of Nuclear Facility Components, Division I—Subsection NE, Class MC Components</i>	
		(b)(1)(xiii)	BPVC.III.1.NF-2015, Section III— <i>Rules for Construction of Nuclear Facility Components, Division I—Subsection NF, Supports</i>	
		(b)(1)(xiv)	BPVC.III.1.NG-2015, Section III— <i>Rules for Construction of Nuclear Facility Components, Division I—Subsection NG, Core Support Structures</i>	

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		(b)(1) (xv)	BPVC.III.1.NH-2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division I—Subsection NH, Class 1 Components in Elevated Temperature Service</i>	
		(b)(1) (xvi)	BPVC.III.NCA-2015, <i>Section III—Rules for Construction of Nuclear Facility; Components, Subsection NCA, General Requirements for Division 1 and Division 2</i>	
		(b)(1) (xvii)	BPVC.III.2-2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division 2, Code for Concrete Containments</i>	
		(b)(1) (xviii)	BPVC.III.3-2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division 3, Containments for Transportation and Storage of Spent Nuclear Fuel and High Level Radioactive Material and Waste</i>	
		(b)(1) (xix)	BPVC.III.5-2015, <i>Section III—Rules for Construction of Nuclear Facility Components, Division 5, High Temperature Reactors</i>	
		(b)(1) (xx)	BPVC.IV-2015, <i>Section IV—Rules for Construction of Heating Boilers</i>	
		(b)(1) (xxi)	BPVC.V-2015, <i>Section V—Nondestructive Examination</i>	
		(b)(1) (xxii)	BPVC.VI-2015, <i>Section VI—Recommended Rules for the Care and Operation of Heating Boilers</i>	
		(b)(1) (xxiii)	BPVC.VII-2015, <i>Section VII—Recommended Guidelines for the Care of Power Boilers</i>	
		(b)(1) (xxiv)	BPVC.VIII.1-2015, <i>Section VIII—Rules for Construction of Pressure Vessels, Division 1</i>	
		(b)(1) (xxv)	BPVC.VIII.2-2015, <i>Section VIII—Rules for Construction of Pressure Vessels, Division 2, Alternative Rules</i>	
		(b)(1) (xxvi)	BPVC.VIII.3-2015, <i>Section VIII—Rules for Construction of Pressure Vessels, Division 3, Alternative Rules for Construction of High Pressure Vessels</i>	

2006 Section	2006 10 CFR part 851 Requirement	2017 Section	2017 10 CFR part 851 IBR Requirement	Notes
		(b)(1) (xxvii)	BPVC.IX-2015, <i>Section IX—Welding, Brazing and Fusing Qualifications, Qualification Standard for Welding, Brazing, and Fusing Procedures; Welders; Brazers; and Welding, Brazing, and Fusing Operators</i>	
		(b)(1) (xxviii)	BPVC.X-2015, <i>Section X—Fiber-Reinforced Plastic Pressure Vessels</i>	
		(b)(1) (xxix)	BPVC.XI-2015, <i>Section XI—Rules for Inservice Inspection of Nuclear Power Plant Components</i>	
		(b)(1) (xxx)	BPVC.XII-2015, <i>Section XII—Rules for Construction and Continued Service of Transport Tanks;</i>	
		(b)(1) (xxxi)	BPVC. CC. BPV-2015, <i>Codes Cases Boilers and Pressure Vessels</i>	
		(b)(1) (xxxii)	BPVC. CC. NC-2015, <i>Code Cases, Nuclear Components</i>	
(b)(2)	Applicable American Society for Mechanical Engineers (ASME) B31 codes for pressure piping	(b)(2)	Applicable ASME B31 codes for pressure piping	
(b)(2)(i)	B31.1— 2001 , <i>Power Piping</i> , B31.1a—2002, Addenda to B-31.1—2001	(b)(2)(i)	B31.1— 2016 , <i>Power Piping</i>	No Addenda to B31.1, 2016.
(b)(2)(ii)	B31.2— 1968 , <i>Fuel Gas Piping</i>			B31.2—1968, Fuel Gas Piping Standard withdrawn. Replaced by ANSI/ NFPA Z223.1. Not included in the IBR. Requires notice and comment in the Federal Register to IBR new standard.

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(b)(2)(iii)	B31.3— 2002 , <i>Process Piping</i>	(b)(2)(ii)	B31.3— 2014 , <i>Process Piping</i>	
(b)(2)(iv)	B31.4— 2002 , <i>Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids</i>	(b)(2)(iii)	B31.4— 2016 — <i>Pipeline Transportation Systems for Liquids and Slurries</i>	
(b)(2)(v)	B31.5— 2001 , <i>Refrigeration Piping and Heat Transfer Components</i> ; B31.5a—2004 Addenda to ASME B31.5-2001	(b)(2)(iv)	B31.5— 2016 , <i>Refrigeration Piping and Heat Transfer Components</i>	No Addenda to B31.5, 2016
(b)(2)(vi)	B31.8— 2003 , <i>Gas Transmission and Distribution Piping Systems</i>	(b)(2)(v)	B31.8— 2014 , <i>Gas Transmission and Distribution Piping Systems</i>	
(b)(2)(vii)	B31.8S— 2001 , <i>Managing System Integrity of Gas Pipelines</i>	(b)(2)(vi)	B31.8S— 2014 , <i>Managing System Integrity of Gas Pipelines</i>	
(b)(2)(viii)	B31.9— 1996 , <i>Building Services Piping</i>	(b)(2)(vii)	B31.9— 2014 , <i>Building Services Piping</i>	
(b)(2)(ix)	B31.11— 2002 , <i>Slurry Transportation Piping Systems</i>			Standard was incorporated into B31.4— 2016 — <i>Pipeline Transportation Systems for Liquids and Slurries</i>
(b)(2)(x)	B31G— 1991 , <i>Manual for Determining the Remaining Strength of Corroded Pipelines</i>	(b)(2)(viii)	B31G— 2012 , <i>Manual for Determining the Remaining Strength of Corroded Pipelines</i>	

2006 Section	2006 10 CFR part 851 Requirement	2017 Section	2017 10 CFR part 851 IBR Requirement	Notes
	Appendix A, Worker Safety and Health Functional Areas, Section 6—Industrial Hygiene		Appendix A, Worker Safety and Health Functional Areas, Section 6—Industrial Hygiene	
(f)	Use of respiratory protection equipment tested under the DOE Respirator Acceptance Program for Supplied-air Suits (DOE-Technical Standard-1167–2003) when National Institute for Occupational Safety and Health approved respiratory protection does not exist for DOE tasks that require such equipment. For security operations conducted in accordance with Presidential Decision Directive 39, U.S. POLICY ON COUNTER TERRORISM, use of Department of Defense military type masks for respiratory protection by security personnel is acceptable.	(f)	Use of respiratory protection equipment tested under the DOE Respirator Acceptance Program for Supplied-Air Suits when the National Institute for Occupational Safety and Health-approved respiratory protection does not exist for DOE tasks that require such equipment. For security operations military type masks for respiratory protection by security personnel is acceptable.	Deleted: (DOE- Technical Standard- 1167–2003); Presidential Decision Directive 39, U.S. POLICY ON COUNTER TERRORIS M