

Revision 1 to Revision 2 Change List

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Chapter 11 Acronym List	Editorial change to delete acronym CBHVAC and Control Building HVAC per Gehrig Austin email, HVAC Related Acronym Revisions, 10/11/2006
2	Chapter 11 Acronym List	Editorial change to correct acronym for CONAVS per Gehrig Austin email, HVAC Related Acronym Revisions, 10/11/2006
3	Chapter 11 Acronym List	Editorial change to incorporate correction to acronym list for REPAVS (email from Gehrig Austin, HVAC Related Acronym Revisions, 10/11/2006)
4	S11.01.01, 1 st para., 3 rd sent.	Editorial: replaced 'immediate' with 'rapid'
5	S11.01.01, 3 rd para., 2 nd sent.	Editorial: removal of speculative comment
6	S11.01.01, 6 th para., 1 st sent.	Editorial: removal of 'all'
7	S11.01.01, 6 th para., 4 th sent.	Editorial: removal of a space
8	S11.01.01, 6 th para., 7 th sent.	Editorial: addition of carryover reference [(Reference 11.1-1) to ANS 18-1, 1999 Table 8 for class 3 and 6 elements]
9	S11.01.01, 6 th para., 8 th sent.	Editorial: addition of carryover reference [(Reference 11.1-1) to ANS 18-1, 1999 Table 8 for class 3 and 6 elements]
10	S11.01.02, 1 st para., 7 th sent.	Editorial: clarification of estimated carbon-15 concentration
11	S11.01.02, 3 rd para., 5 th sent.	Editorial: addition of reference to ANS 18.1-1999
12	S11.01.02, 4 th para., 3 rd sent.	Editorial: addition of reference for tritium removal [ANS 18.1-1999, Table 8, note f]
13	S11.01.02, 4 th para., 4 th sent.	Editorial: removal of 'All.'
14	S11.01.05, 1 st para., 3 rd sent.	Editorial correction: clarified original intent by replacing the word 'significant' with 'insignificant.'
15	S11.01.05, 3 rd para., 2 nd sent.	Editorial correction to CONAVS (DCD Section 9.4.6.2) to describe drywell purge.
16	S11.01.05, 4 th para., 2 nd sent.	Editorial correction from Dominion comment, "Correct typo in section reference," spence2, 10/16/2006, 2:32:21 PM
17	T11.01-01, Column 1, R2	Added, "design basis" [RAI 11.1-2]

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18	T11.01-01, Column 1, R7	Added, “(design basis same as normal operation)” [RAI 11.1-2]
19	T11.01-01, Column 2, R8	Replaced 53 with 54 [RAI 11.1-2]
20	T11.01-01, Column 1, R9	Added, “Normal operational Argon 41 release rate.”
21	T11.01-01, Column 2, R9	Added, “0.4 MBq/sec (11 μ Ci/sec)” [RAI 11.1-2]
22	T11.01-02B	Added, table. [RAI 11.1-2]
23	T01.01-03 Column 3, R 4	Replaced “6.74” with “3.06” [RAI 12.2-10]
24	T11.01-03 Column 3, R 5	Replaced “1.93” with “8.76,” Replaced “+5” with “+4” [RAI 12.2-10]
25	T11.01-03 Column 3, R 6	Replaced “1.9” with “8.76;” replaced “+7” with “+ 6” [RAI 12.2-10]
26	T11.01-04b	Added table, “Normal Operational Iodine Radioisotopes in Reactor Water and Steam” [RAI 11.1-2]
27	T11.01-05b	Added table, “Design Basis Non-volatile Fission Products In Reactor Water” [RAI 11.1-2]
28	T11.01-06	Added, “***” [RAI 11.1-2]
29	T11.01-06	Added, “*** Normal operational concentrations are the same as design basis concentrations” [RAI 11.1-2]
30	T11.01-07b	Added table, “Normal Operational Non-coolant Activation Products in Reactor Water” [RAI 11.1-2]
31	S11.02, 3rd para., new 2nd sent.	Added, “A LWMS Process Stream Information Directory and simplified flow diagram is provided in Figure 11.2-2.” [RAI 11.2.11]
32	S11.02, new 6th para.	Added, “The LWMS complies with Regulatory Guide 1.143 guidance regarding liquid radwaste treatment systems,” [RAI 11.2-9, RAI 11.2-10]
33	S11.02.02.02, 2 nd para.	Editorial: Rewrote the paragraph to remove the restriction of specific mobile equipment and provide the philosophy for using appropriate mobile processing equipment.

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34	S11.02.02.02, 3 rd para., deleted	Editorial: Rewrote the paragraph to remove the restriction of having only one mobile chemical agent addition for specific pieces of equipment. Allows treatment specific mobile chemical agent addition systems for equipment drain, floor drain, chemical drain and detergent drain subsystems. Deleted and moved paragraph to Section 11.2.2.3 under "Mobile Systems for chemical agent addition."
35	S11.02.02.02, 6 th para., 1 st sent.	Editorial: Removed the restriction of HFF and generalized to unit operations.
36	S11.02.02.02, 6 th para., 2 nd sent.	Editorial: Generalized the phase separator
37	S11.02.02.02, 6 th para., 3 rd sent.	Editorial: Added the option to send spent resin directly to a cask
38	S11.02.02.02, 8 th para., 1 st sent.	Editorial: Removed the restriction of specific mobile equipment and provided the philosophy for using appropriate mobile processing equipment.
39	S11.02.02.02, 12 th para., 1 st sent.	Editorial: Removed the restriction of concentrating liquid waste and concentrating it in an RO unit
40	S11.02.02.02, 15 th para., 1 st sent.	Editorial: Removed the restriction of specific mobile equipment and provided the philosophy for using appropriate mobile processing equipment.
41	S11.02.02.02, 15 th para., 2 nd sent.	Editorial: Removed the restriction of specific mobile equipment and provided the philosophy for using appropriate mobile processing equipment.
42	S11.02.02.02, 15 th para., 3 rd sent.	Editorial: Revised sentence structure due to prior editorial changes making sentence unreadable.
43	S11.02.02.02, 15 th para., 4 th sent.	Editorial: Removed 'then.'
44	S11.02.02.03, 2 nd para., delete	Editorial: Removed the restriction of utilizing only two types of pumps.
45	S11.02.02.03, 3 rd para., 1 st sent.	Editorial: Removed the restriction of using centrifugal pumps
46	S11.02.02.03, 7 th para. and 8 th para.	Editorial: Generalized the processing equipment for equipment drain processing and removed the requirement for and restriction to Hollow Fiber Filters (HFF) and charcoal organic removal units.

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47	S11.02.02.03, 10 th para. through 12 th para.	Editorial: Generalized the processing equipment for floor and chemical drain processing and removed the requirement for and restriction to Reverse Osmosis (RO) units.
48	S11.02.02.03, 14 th para.	Editorial: Generalized the processing equipment for detergent drain processing and removed the requirement for and restriction to charcoal filter units and cartridge type filter units.
49	S11.02.02.03, 15 th para. and 16 th para.	Editorial: Moved mobile system general description paragraphs to beginning of mobile system description.
50	S11.02.03, 2 nd para. 2 nd sent.	Editorial: Generalized the source of radioactive waste to unit operations and chemical reactor active components
51	S11.02.02.03, 17 th para., new	Editorial: Rewrote the paragraph to remove the restriction of having only one mobile chemical agent addition for specific pieces of equipment. Allows treatment specific mobile chemical agent addition systems for equipment drain, floor drain, chemical drain and detergent drain subsystems. Deleted and moved paragraph to Section 11.2.2.3 under “Mobile Systems for chemical agent addition.”
52	S11.02.04, 3 rd para. 2 nd sent.	Editorial: Removed the restriction to local display devices and changed ‘all vital’ to ‘vital’
53	S11.02.05, 1 st para. 2 nd sent.	Editorial: added a period ‘.’ missing at the end of the sentence.
54	S11.02.05, 1 st para. 3 rd sent.	Editorial: provided a reference to description of radiation detector in Section 11.5.3.2.6.
55	T11.2-01	Replaced table. [RAI 11.2-4, RAI 11.2-5, RAI 11.2-6, RAI 11.2-7, RAI 11.2-8]
56	T11.2-01	Inserted and replaced text in entire row 1 and 2 in conformance with RG1.143 Rev. 2. [RAI 11.2-4]
57	T11.2-01	Inserted and replaced text in entire row 3 and 4 in conformance with API corrected RG1.143 Rev. 2. [RAI 11.2-5]
58	T11.2-01	Inserted and replaced text in entire row 5 and 6 in conformance with RG1.143 Rev. 2. [RAI 11.2-7]
59	T11.2-01	Inserted and replaced text in entire row 7 and 8 in conformance RG1.143 Rev. 2. [RAI 11.2-6]
60	F11.02-02	Added, Figure 11.2-2, Liquid Waste Management System Process Stream Information Directory [RAI 11.2-11]
61	S11.03.02.01, 6 th para., 2 nd sent.	Editorial: Removed “any”

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62	S11.03.02.02, 3 rd para., 1 st sent.	Replaced “1.1.2” with “2.2” under Materials [RAI 11.3-1]
63	S11.03.02.02, 8 th para., 2 nd sent.	Editorial change to include swaged connections for instrument lines
64	S11.03.02.02, 15 th para., 2 nd sent.	Editorial change added period ‘.’ and two spaces ‘ ’ between sentences
65	S11.03.02.02, 16 th para., 2 nd sent.	Editorial change added period ‘.’ and two spaces ‘ ’ between sentences
66	S11.03.02.02, 20 th para., 2 nd sent.	Editorial change clarified equipment accessibility during outages
67	S11.03.02.02, 23 rd para., 1 st bullet	Editorial change generalized helium leak tests removing the restriction of ‘as-installed’ helium leak tests of the entire process system.
68	S11.03.06, 1 st para., 1 st sent.	Editorial change clarified sentence for intent to operate locally or remotely
69	S11.03.07.01, 2 nd para., 1 st sent.	Editorial change clarified location of offgas system seismic information
70	S11.03.08.01, 1 st para., 1 st sent., new 2 nd sent.	Editorial changes from COL applicant to COL Holder while maintaining the intent of the footnote to Table 11.3-2.
71	T11.03-01, Column 1, R2	Changed “B” to “ b,” deleted “annual average,” [RAI 12.2-9]
72	T11.03-01, Column 2, R2	Changed reviewer and Added, “standard,” [RAI 12.2-9]
73	T11.03-01, Column 1, R20	Changed “major” to “maximum,” changed “maximum permissible” to “input.” Deleted “(MPC).” [RAI 12.2-9]

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74	S11.04.01 Power Generation Design Bases 1st para., 7th bullet, 2nd sent.	Inserted “Depending on the availability and accessibility of adequate waste repositories in the future, NUREG-0800, Standard Review Plan, 11.4 Solid Waste Management System, DRAFT Rev. 3 – April 1996, Appendix 11.4-A, Design Guidance for Temporary Storage of Low Level Radioactive Waste provides guidance for construction and management of a temporary storage facility including up to five years waste storage. This temporary storage facility and an associated overall site waste management plan is intended to allow the station to operate while considerations for further waste minimization and volume reduction are adopted, such as the design and construction of additional volume reduction facilities, as necessary, and then the processing of the wastes that may have been stored during the construction of those facilities. Additionally, the five-year duration is to allow time for the regional state compacts to create additional low-level waste disposal sites.” [RAI 11.4-3]

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75	S11.04-01, 3rd para.	<p>Replaced “Process and effluent radiological monitoring systems are described in Section 11.5” with “Radionuclides influent to the SWMS are presented in Section 12.2, including Table 12.2-14a and Table 12.2-14b. Any resultant gaseous and liquid wastes are routed to other plant sections. Gaseous radionuclides from the SWMS are processed by the monitored radwaste building ventilation system. The monitored ventilation system is described in Section 9.4 and Section 12.3.3.2.4. Liquid waste is processed by the monitored LWMS system as described in Section 11.2. Process and effluent radiological monitoring systems are described in Section 11.5.</p> <p>“Section 12.3 describes systems to detect conditions that may result in excessive radiation levels per Title 10 Code of Federal Regulations Part 50, Appendix A, General Design Criteria 63. Section 11.5 describes systems to monitor the effluent discharge paths for radioactive material per Title 10 Code of Federal Regulations Part 50, Appendix A, General Design Criteria 64.</p> <p>“A description of the SWMS design features addressing Part 20.1406 requirements for permanently installed systems is in Section 12.6. The COL holder is responsible for discussing the implementation of operational procedures and design features of the mobile and portable systems in meeting Part 20.1406. The COL holder is responsible for describing how design features and operational procedures, as they apply to the installation and use of portable/mobile SWMS, minimize, to the extent practicable, contamination of the facility and the environment, facilitate decommissioning and minimize the generation of radioactive wastes.</p> <p>“The Area Radiation Monitors for the Radwaste Building Wet Solid Radioactive Waste Treatment Area, the Radwaste Building Dry Solid Waste Treatment Area and the Radwaste Building Packaged Waste Staging Area are depicted on Figure 12.3-41 and discussed in Section 12.3.4. The radwaste building seismic capability is described in Section 3.8.</p> <p>The portable/mobile SWMS equipment is located within the permanently installed SWMS systems, and further located within the radwaste building as previously referenced and described. The location of the SWMS equipment within the radwaste building with monitored process effluents ensures compliance with Title 10 Code of Federal Regulations Part 20.1302, Part 20 Appendix B effluent concentrations, Part 50.34a, Part 50, Appendix A, General Design Criteria 60 and General Design Criteria 61 as they relate to radioactive materials released in gaseous and liquid effluents to unrestricted areas.” [RAI 11.4-4]</p>
76	S11.04.02.01 2nd para., 2nd sent.	<p>Replaced “There is no liquid plant discharge from the SWMS” with “Liquids from SWMS operations are sent to the appropriate LWMS section for processing as depicted in Figure 11.4-1 and described in Section 11.2.” [RAI 11.4-5]</p>
77	S11.04.02.02, new 1st para.	<p>Added, “Waste will be classified as A, B, or C and meet the requirements of the waste treatment facility or repository per Title 10 Code of Federal Regulations, Parts 61.55 and 61.56.” [RAI 11.4-7]</p>

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78	S11.04.02.02, new 2 nd para.	Added, “The SWMS complies with Regulatory Guide 1.143, Revision 2, November 2001, as noted in Section 11.4.1. Construction of the radwaste building to meet the requirements of Regulatory Guide 1.143 regarding safety classification is located in Section 3.8.4 and Section 3.8.4.1.5. Regulatory Guide 1.143, Section 4.1, instructs that the design of radioactive waste management systems, structures and components should follow the direction in Regulatory Guide 8.8. Compliance with Regulatory Guide 8.8, Revision 3, June 1978 is located in Section 12.1.1.3 and Section 12.3.1. The COL holder is responsible to ensure that mobile systems comply with the requirements of Regulatory Guide 1.143 Revision 2, November 2001” [RAI 11.4-8]
79	S11.04.02.02, 5 th para., 1 st sent.	Editorial change clarified the ability to move spent bead resin directly to liners.
80	S11.04.02.02, 6 th para., 2 nd sent.	Editorial change from ‘decant’ pump to pump
81	S11.04.02.02, 12 th para., 1 st sent.	Editorial change added the ability to manually position fill head on new HIC
82	S11.04.02.02, 13 th para., 1 st sent.	Editorial change generalized from a resin pump to a pump and removed the redundant referral to pump
83	S11.04.02.02, 13 th para., 3 rd sent.	Editorial change added the ability to use pressure reduction in drying
84	S11.04.02.02, 16 th para	Added, “The off gas system activated carbon is rejuvenated by the off gas system and does not normally generate dry solid waste. Project specific actions will be developed regarding the removal, replacement, and processing of off gas activated carbon in the unlikely event that significant quantity of off gas system activated carbon requires replacement during the life of the plant.” [RAI 11.4-9]
85	S11.04.02.02, 19 th para., 3 rd sent.	Editorial change generalized the scale from a ‘truck’ scale to a ‘weight’ scale
86	S11.04.02, Dry Solid Waste Accumulation and Conditioning Subsystem, 1st para., 4th sent.	Changed “this” to “the dry solid.” Changed “waste” to “wastes.” [RAI 11.4-9]
87	S11.04.02.02, Container Storage Subsystem, 1st para., new 3rd sent.	Added, “The container storage schemes and sequencing is shown in Figure 11.4-1. [RAI 11.4-1]
88	S11.04.02.03, 3 rd para.	Editorial change generalized diaphragm pump

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89	S11.04.02.03, pumps, new 4th para.	Added, "Pump codes are per the noted requirements of Table 3.2-1 for K20 Solid Waste Management Systems." [RAI 11.4-12]
90	S11.04.02.03, tanks, new 3rd para.	Added, "Tank codes are per the noted requirements of Table 3.2-1 for K20 Solid Waste Management Systems." [RAI 11.4-1]
91	S11.04.02.03, piping, new 2nd para.	Added, "Piping codes are per the noted requirements of Table 3.2-1 for K20 Solid Waste Management Systems." [RAI 11.4-14]

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92	S11.04.02.03, new heading, "Venting" after heading, "Piping," new heading, "Mobile Systems" after heading, "Venting"	<p>Added, "Venting"</p> <p>Makeup and exhaust ventilation is described in Section 9.4.</p> <p>Mobile Systems</p> <p>Solid radwaste processing is performed using mobile systems. These mobile systems are typically comprised of unit operations and chemical reactors intended to enhance the versatility, efficiency and yield in radwaste processing and waste minimization. State of the art processing equipment for the first mobile systems is depicted on Figure 11.4-1 and could include pumps, tanks, dewatering equipment, dryers, packaging equipment, sorting equipment, and ancillary equipment. The mobile processing equipment is anticipated to be modernized as more effective technologies are discovered and proved throughout the life of plant operation. To effect this modernization, the various systems, structures and components associated with the mobile systems may be grouped or associated on or in skids or assemblies, perhaps with process, instrumentation, electrical, support system, and/or mounting connections, or be stand alone pieces of equipment. The mobile systems work in conjunction with permanent radwaste equipment and should be sized accordingly, both physically and as per processing capability. Solid waste system permanent equipment is described throughout Section 11.4. Liquid waste processing is described in Section 11.2. Ventilation is described in Section 9.4. The radwaste building structure is described in Section 3.8. Instrumentation requirements are described in Section 11.4.5. The COL holder is responsible for reviewing that the systems, structures, components and operation of the initial, and then subsequently updated future, mobile systems comply with the requirements of NUREG-0800 Draft Rev. 3 – April 1996, Section 11.4 Solid Waste Management Systems, including Branch Technical Position – ETSB 11-3, Regulatory Guide 1.143, Regulatory Guide 8.8 and Regulatory Guide 8.10. The COL holder is responsible for evaluating the initial, and then subsequently updated future, mobile systems per the guidance and information in IE Bulletin 80-10, May 6, 1980 for the express purpose of identifying and rectifying connections that are considered as nonradioactive, but could become radioactive through interfaces with radioactive systems, i.e., a nonradioactive system that could become contaminated due to leakage, valving errors or other operating conditions in radioactive systems. The COL holder is responsible for developing, and updating, as necessary, for the initial, and subsequently updated future, mobile systems, a Process Control Program as described in Generic Letter 89-01, January 31, 1989, specifically, Enclosure 3, Section 6.13 Process Control Program, PCP" [RAI 11.4-2]</p>

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93	S11.04.03, new 2nd para.	Added, "As mobile waste processes are selected for use, during the design stage before installation of final hook-up and connection with the permanent plant SWMS systems, the issues of IE Bulletin No. 80-10, dated May 6, 1980, will be evaluated by the COL holder for the express purpose of ensuring that systems considered as nonradioactive, but could become radioactive through interfaces with radioactive systems, remain nonradioactive." [RAI 11.4-11]
94	S11.04.04 new 2nd para.	Added, "The COL holder is responsible for testing new and subsequent mobile systems. These tests should include provisions of Regulatory Guide 8.8, as applicable." [RAI 11.4-2]
95	S11.04.05, 1st para., new 4th sent.	Added, "Instruments, including backflushing provisions, are located in low radiation areas when possible, as described in Section 12.3.1.1.2. These backflushing provisions are designed within the direction of IE Bulletin 80-10." [RAI 11.4-11]

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96	S11.04.06, all	<p>Deleted "None." Added, "The COL holder is responsible for updating Table 11.4-1 to reflect mobile system component capacities. Added, "The COL holder is responsible for updating Section 11.4 to include new figures and/or update existing figures to depict the process flow diagram representative of each mobile system, as applicable.</p> <p>Mobile Systems</p> <p>The solid radwaste processing is performed using mobile systems. These mobile systems are typically comprised of unit operations sections and chemical reactors intended to enhance the versatility, efficiency and yield in radwaste processing and waste minimization. State of the art processing equipment for the first mobile systems is depicted on Figure 11.4-1 and could include pumps, tanks, dewatering equipment, dryers, packaging equipment, sorting equipment, and ancillary equipment. The mobile processing equipment is anticipated to be modernized as more effective technologies are discovered and proved throughout the life of plant operation. To effect this modernization, the various systems, structures and components associated with the mobile systems may be grouped or associated on or in skids or assemblies, perhaps with process, instrumentation, electrical, support system, and/or mounting connections, or be stand alone pieces of equipment. The mobile systems work in conjunction with permanent radwaste equipment and should be sized accordingly, both physically and as per processing capability.</p> <p>Solid waste system permanently installed equipment is described throughout Section 11.4. Liquid waste processing is described in Section 11.2. Ventilation is described in Section 9.4. The radwaste building structure is described in Section 3.8. Instrumentation requirements are described in Section 11.4.5. The COL holder is responsible for reviewing that the systems, structures, components and operation of the initial, and then subsequently updated future, mobile systems comply with the requirements of NUREG-0800 Draft Rev. 3 – April 1996, Section 11.4 Solid Waste Management Systems, including Branch Technical Position – ETSB 11-3, Regulatory Guide 1.143, Regulatory Guide 8.8 and Regulatory Guide 8.10. The COL holder is responsible for evaluating the initial, and then subsequently updated future, mobile systems per the guidance and information in IE Bulletin 80-10, May 6, 1980 for the express purpose of identifying and rectifying connections that are considered as nonradioactive, but could become radioactive through interfaces with radioactive systems, i.e., a nonradioactive system that could become contaminated due to leakage, valving errors or other operating conditions in radioactive systems. The COL holder is responsible for developing, and updating, as necessary, for the initial, and subsequently updated future, mobile systems, a Process Control Program as described in Generic Letter 89-01, January 31, 1989, specifically, Enclosure 3, Section 6.13 Process Control Program, PCP.</p> <p>The COL holder is responsible for developing and maintaining programs identified in the administrative controls section of the Technical Specifications per the requirements of Title 10 Code of Federal Regulations Part 50.36a, as described in the Standard Review Plan 11.4, Draft Rev 3 – April 1996, Section III.9. [RAI 11.4-2]</p>

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97	S11.04.06, Mobile Systems, new 3rd para.	Added, "The COL holder is responsible for testing new and subsequent mobile systems. These tests should include provisions of Regulatory Guide 8.8, as applicable." [RAI 11.4-2]
98	S11.04.06, Mobile Systems, new 4th para.	Added, "The inclusion of a temporary storage facility and an overall site management plan per NUREG-0800 Standard Review Plan 11.4, Draft Rev 3-April 1996, Appendix 11.4-A may be required. [Ref. RAI 11.4-3]
99	S11.04.06, Mobile Systems, new 5th para.	Added, "The COL holder is responsible to include site-specific information in Section 11.4.1 describing how the implementation of operating procedures and design features for installation and operation of the mobile/portable SWMS will address the requirements of Part 20.1406. Specifically the operational procedures and design of the mobile/portable SWMS should minimize, to the extent practicable, contamination of the facility and the environment, facilitate decommissioning, and minimize the generation of radioactive wastes. This information may be placed into Section 12.6 provided applicable referencing is included in Section 11.4.1." [RAI 11.4-4]
100	S11.04.06, Mobile Systems, new 6th para.	Added, "It is assumed the COL holder will compact waste using a third party service. The Table 11.4-2 waste volume reduction will be considered and determined by the COL holder depending on the type and level of waste and the waste compacting equipment and resulting compaction performance." [Ref RAI 11.4-6]
101	S11.04.06, Mobile Systems, new 7th para.	Added, "Waste will be classified as A, B, or C and meet the requirements of the waste treatment facility or repository per Title10 Code of Federal Regulations, Parts 61.55 and 61.56." [RAI 11.4-7]
102	S11.04.06, Mobile Systems, new 8th para. and 9th para.	Added, "The COL holder is responsible to ensure that mobile systems comply with the requirements of Regulatory Guide 1.143 Revision 2, November 2001." [Ref. RAI 11.4-8] Added, "The COL holder is responsible for the mobile transport of radwaste, including compliance with Title 20 Code of Federal Regulations, Part 20 Appendix G and Title 40 Code of Federal Regulations, Part 190." [Ref. RAI 11.4-2 and RAI 11.4-8]
103	S11.04.6, Mobile Systems, new 10th para.	Added, "As mobile waste processes are selected for use, during the design stage before installation of final hook-up and connection with the permanent plant SWMS systems, the issues of IE Bulletin No. 80-10, dated May 6, 1980, will be evaluated by the COL holder for the express purpose of ensuring that systems considered as nonradioactive, but could become radioactive through interfaces with radioactive systems, remain nonradioactive." [RAI 11.4-11]

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104	S11.04.07, all	<p>Deleted "None,"</p> <p>Added, "NUREG-0800, Standard Review Plan, 11.4 Solid Waste Management System, DRAFT Rev. 3 – April 1996</p> <p>Regulatory Guide 1.143 Revision 2, November 2001</p> <p>Regulatory Guide 8.8, Revision 3, June 1978</p> <p>Regulatory Guide 8.10, Revision 1-R, September 1975</p> <p>Title10 Code of Federal Regulations, Part 20.1302</p> <p>Title10 Code of Federal Regulations, Part 20.1406</p> <p>Title10 Code of Federal Regulations, Part 20 Appendix B</p> <p>Title10 Code of Federal Regulations, Part 20 Appendix G</p> <p>Title10 Code of Federal Regulations, Part 50.34a</p> <p>Title10 Code of Federal Regulations, Part 50.36a</p> <p>Title10 Code of Federal Regulations, Part 50 Appendix A General Design Criteria 60</p> <p>Title10 Code of Federal Regulations, Part 50 Appendix A General Design Criteria 61</p> <p>Title10 Code of Federal Regulations, Part 50 Appendix A General Design Criteria 63</p> <p>Title10 Code of Federal Regulations, Part 50 Appendix A General Design Criteria 64</p> <p>Title10 Code of Federal Regulations, Part 61.55</p> <p>Title10 Code of Federal Regulations, Part 61.56</p> <p>Title 40 Code of Federal Regulations, Part 190</p> <p>IE Bulletin 80-10, May 6, 1980</p> <p>Generic Letter 89-10, January 31, 1989, specifically, Enclosure 3, Section 6.13 Process Control Program, PCP [RAI 11.4-2]</p>
105	T11.04-02, 1st footnote	<p>Added, footnote [RAI 11.4.6]</p> <p>◆ It is assumed the COL holder will compact waste using a third party service. The waste volume reduction will be considered and determined by the COL holder depending on the type and level of waste and the waste compacting equipment and resulting compaction performance.</p>
106	T11.04-02, 3rd footnote	<p>Added, footnote [RAI 11.4-10]</p> <p>◇ The volume reduction is based on LWMS Concentrated Waste moisture removal. An estimate of 50% volume reduction is thought to be conservative based on current moisture removal technologies, such as evaporation and membrane-based operations.</p>

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107	F11.04-01, New diagram	Added, “Container Storage Schemes and Sequencing Diagram” [RAI 11.4-1]
108	S11.05.01.01.01, 2nd para., 6th and 7th bullets	Added, bullet “Fuel Building General Area HVAC RMS,” deleted “Main Area,” added, “Fuel Pool.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
109	S11.05.01.01.02, 2nd para., 8th through 10th bullets	Replaced text with “Turbine Building Combined Ventilation Exhaust RMS” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
110	S11.05.02, 1st para., 5th bullet	Editorial comment: specified the reference to SRP Section 11.5.II called out by RAI 11.5-5
111	S11.05.02.02, 1st para., new 8th bullet	Added, bullet “Monitor selected non-radioactive systems for intrusion of radioactivity into the system.” [RAI 11.5-5] Incorporated new CONAVS definition per acronym list.
112	S11.05.03.01.01, 1st para., new 2nd sent.	Added, “The principal path that this subsystem monitors is exhaust from the contaminated area which is served by Controlled Area Ventilation Subsystem of Reactor Building (CONAVS).” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
113	S11.05.03.01.02, 1st para., 1st sent.	Added, “and pool area HVAC” and “which is part of the Reactor Building Refueling and Pool Area HVAC Sub-system (REPAVS).” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4], and incorporate correction to acronym list for REPAVS (email from Gehrig Austin, HVAC Related Acronym Revisions, 10/11/2006)
114	S11.05.03.01.06, Title	Replaced “Main” with “General.” [RAI 9.4-1]
115	S11.05.03.01.06, 1st para., 1st sent.;	Deleted “Main Area,” and added. “for the general area.” [RAI 9.2.3, RAI 9.4-1, RAI 9.4.4, RAI 11.5-6, RAI G11.5-8.d]
116	S11.05.03.01.06, 1st para. 4th sent.	Replaced text in sentence four, “spent fuel pool and the associated fuel handling” areas with “fuel building general” areas. [RAI 9.2.3, RAI 9.4-1, RAI 9.4-4, RAI 11.5-6, RAI G11.5-8.d]
117	S11.05.03.01.06, 2nd para., 1st sent.	Changed “building area” to “building general area” by adding “general” twice to sentence. [RAI 9.4-1, RAI 11.5-6]

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
118	S11.05.03.01.07, all	<p>Added title, “Fuel Building Fuel Pool HVAC RMS,” added, “The Fuel Building Fuel Pool HVAC RMS consists of a total of four channels that monitor the radiation level of the air exiting the Fuel Building Spent Fuel Storage Pool and equipment areas. Four channels provide the monitoring. Each channel uses a gamma sensitive detector located internal to the monitored exhaust duct. The outputs from the detectors are fed into radiation monitors for display and annunciation.</p> <p>“This subsystem provides inputs to logic that results in the energization of the Fuel Building Area HVAC fans and a trip of the Fuel Building HVAC.</p> <p>“The range of channel measurement and display is shown in Table 11.5-1 and 11.5-2. The range is selected to provide sufficient coverage for radioactivity released during normal operation up to, and including several decades beyond, the amount associated with a refueling accident and the subsequent air flow into the Fuel Building HVAC.”</p> <p>[RAI 9.2-3, RAI 9.4-1, RAI 9.4-4, RAI 11.5-6, RAI 11.5-8d]</p>
119	S11.05.03.01.08, all	Moved “Containment Purge Exhaust (RMS)” from Section 11.5.3.1.7 to Section 11.5.3.1.8. [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4, RAI 11.5-6, RAI G11.5-8.b]
120	S11.05.03.02.02, 4th para.	Corrected “3.7 Mega” to “3.7E 2Mega”, and “3.7E5 to 3.7E8” [RAI 11.5-6] and added a reference to Tables 11.1-1, 11.1-2 and 11.1-2b to reflect the intent of the RAI response.
121	S11.05.03.02.03, 1st para., new 3rd and 4th sent.	Added text, “One sampling skid contains provisions for continuous gaseous, particulate and halogen radioactivity monitoring of the offgas post treatment process. The second skid contains only provisions for continuous gaseous monitoring.” [RAI 11.5-6.a]
122	S11.05.03.02.03, 1 st para., 3 rd sent.	Editorial change per Dominion request, replaced ‘sampling skid’ with ‘sampler’ to remove the restriction to only skid mounted equipment.
123	S11.05.03.02.03, 1 st para., 4 th sent.	Editorial change per Dominion request, replaced ‘sampling skid’ with ‘sampler’ to remove the restriction to only skid mounted equipment.
124	S11.05.03.02.03, 2 nd para., 2 nd sent.	Editorial change replaced two periods with one period.
125	S11.05.03.02.03, 4th para.	Replaced “10 CFR 20.1203” with 10 CFR 20.1302” [RAI 11.5-6.b]
126	S11.05.03.02.03, 8th para.	Replaced “3.7E5” with “3.7E1” [RAI 11.5-6]
127	S11.05.03.02.07, 1st para., 2nd sent.	Added text, “Each RCCW heat exchanger train has its own radiation monitor.” [RAI 11.5-6.a]

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
128	S11.05.03.02.07, 3rd para.	Added, text “Each RCCW radiation sampler is provided with a remotely controlled radioactive check source. [RAI 11.5-6]
129	S11.05.03.02.12, 1st para., 2nd sent.	Replaced text “Those measurements are” with “The particulate measurement is.” [RAI 11.5-6]
130	S11.05.03.02.12, 4th para., 2nd sent.	Deleted “This lower limit of detectability is sufficient to indicate the equivalent of 3.785 liters per minute (lpm) leak rate (normal reactor water) within 60 minutes.” [RAI 11.5-6]
131	S11.05.03.02.13, 3 rd para., 3 rd sent.	Editorial change provides clarification from no radioactivity to background radioactivity anticipated at the TSC air intake
132	S11.05.03.02.14, 1st para, 2nd sent.	Replaced text “1203” with “1302” [RAI 11.5-6.b]
133	S11.05.03.02.14, 6th para.	Added text, “The subsystem has a remotely controlled radioactive check source.” [RAI 11.5-6]
134	S11.05.03.02.15	<p>The information contained in DCD section 11.5.3.2.15 will be replaced with information on Fuel Building Combined Ventilation Exhaust RMS. The information previously contained in section 11.5.3.2.15 has been moved to 11.5.3.2.16 (Fuel Building General Area HVAC RMS) and 11.5.3.1.7 (Fuel Building Fuel Pool HVAC RMS). The number of channels has been clarified. [RAI 11.5-6]</p> <p>The information contained in DCD section 11.5.3.2.15 has been replaced with information on Fuel Building Combined Ventilation Exhaust RMS. DCD section 11.5.3.2.16 has been deleted. The information previously contained in section 11.5.3.2.15 has been moved to 11.5.3.2.16 and 11.5.3.1.7. the number of channels has been clarified. [RAI G11.5-8.d]</p>
135	S11.05.03.02.15, new 3rd para.	Added, “The subsystem has a remotely controlled radioactive check source.” [RAI 11.5-6]
136	S11.05.04.03, 1st para., 3rd sent.	Corrected that “Tables 11.5-4 through 11.5-8” provide summary information concerning the frequency, analysis, sensitivity and purpose for both liquid and gaseous process and effluent extracted samples that are analyzed in the health physics laboratory.” Added, “Table 11.5-9 provides information concerning the selection of dynamic ranges for monitoring.” [RAI 11.5-22]
137	S11.05.05.02, 6th bullet	Replaced “Main” with “General” [RAI 9.2-3, 9.4-1, 9.4-4]
138	S11.050.5.02, new 10th bullet	Added, “Fuel Building Fuel Pool HVAC RMS ” [RAI 9.2-3, 9.4-1, 9.4-4]

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
139	S11.05.05.03, 4th bullet	Replaced “Ventilation Exhaust AHU” with “Fuel Pool HVAC.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
140	S11.05.05.03, 7th bullet	Replaced “Main” with “General.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
141	S11.05.05.04, 5th bullet	Replaced “Main” with “General.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
142	S11.05.05.04, 12th bullet	Replaced “Turbine Building Combined Ventilation Exhaust” with “Liquid Radwaste Discharge” [RAI 11.5-18]
143	S11.05.05.04, 16th bullet	Replaced “Ventilation Exhaust AHU” with “Fuel Pool HVAC.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
144	S11.05.06.01, 2nd para., 2nd sent.	Added “In addition, provisions for using test signals for checking system operability is included in the design.” [RAI 11.5-19]
145	S11.05.06.01, 5th bullet	Replaced “Main” with “General.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
146	S11.05.06.01, 13th bullet	Replaced “Ventilation Exhaust AHU” with “Fuel Pool HVAC.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
147	S11.05.07.01, 1st para.	Replaced “Applicant” with “Holder.” Inserted per MFN #06-099.
148	S11.05.07.02, 1st para, 1st sent.	Replaced “Applicant” with “Holder.” Inserted per MFN #06-099.
149	S11.05.07.02, 1st para, 2nd sent.	Replaced “applicant” with “COL Holder.” Editorial change to make DCD section consistent with itself and the ESBWR policy.
150	S11.05.07.03, 1st para.	Replaced “Applicant” with “Holder.” Inserted per MFN #06-099.
151	S11.05.07.04, 1st para.	Replaced “Applicant” with “Holder.” Inserted per MFN #06-099.
152	S11.05.07.05, all	Added, “Instrument Sensitivities - The COL Holder is responsible for the sensitivities, frequencies and basis for each gaseous and liquid samples.” Inserted per MFN #06-066.
153	S11.05.08	Dominion Comment: “Where is RG 1.45? It is listed in table 11.5-9 and section 11.5.2 as guidance for determining the expected values for RMs.”, robe255, 10/13/2006, 9:50:36AM. FIR (GE) Response: Added reference to RG 1.45 and renumbered references from 11.5-10.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
154	T11.05-01 Column 1, R8	Replaced “Main” with “General.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
155	T11.05-01 Column 1, 2, 3, 4, R11	Added row for Fuel Building Fuel Pool HVAC. [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
156	T11.05-01 Column 2, R23	Replaced 2 with 3 channels. [RAI G11.5-8c]
157	T11.05-01 Column 1, 2, 3, 4, R31	Deleted row. [RAI G11.5-8b]
158	T11.05-01 Column 1, 2, 3, 4, R32	Deleted row. [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
159	T11.05-02 Column 3, R4	Added, “M” to “MBq” [RAI H11.5-8.b]
160	T11.05-02 Column 1, R5	Replaced “Main” with “General.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
161	T11.05-02 Column 1, 2, 3, 4, 5, 6, R8	Added row for Fuel Building Fuel Pool HVAC. [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
162	T11.05-02 Column 3, 4, 5, 6, R11	Added data for Offgas Post-treatment monitor. [RAI H11.5-8.b]
163	T11.05-02 Column 3, 4, 5, 6, R15	Updated data for Turbine Building Normal Ventilation Air HVAC Radiation Monitor. [RAI H11.5-8.b]
164	T11.05-02 Column 3, 4, 5, 6, R16	Updated data for Turbine Building Compartment Area for HVAC Radiation Monitor. [RAI H11.5-8.b]
165	T11.05-02 Column 1, 2, 3, 4, 5, 6, R25	Deleted Fuel Building Ventilation Exhaust AHU. [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
166	T11.05-02, footnote	Added, “Holder” [Inserted per MFN #06-099]
167	T11.05-03, Column 1, R10	Added, “A, 9B” to Offgas Post-treatment ID on Figure 11.5-1. [RAI 11.5-10.b]
168	T11.05-03, Column 1, R16	Added, “A, 15B” to Reactor Component Cooling Water Intersystem Leakage ID on Figure 11.5-1 [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
169	T11.05-03, Column 2, R22	Replaced “Main” with “General.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
170	T11.05-03, Column 2, R23	Replaced “Ventilation Exhaust AHU” with “Fuel Pool HVAC.” [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4]
171	T11.05-04, all	Replaced five rows of text in Table 11.5-4 [RAI 11.5-11.a]
172	T11.05-04, footnote	Replaced, “Applicant” with “Holder” in the footnotes. [RAI 11.5-11.a]
173	T11.05-05, all	Replaced Table 11.5-5. [RAI 11.5-12]
174	T11.05-05, all	Replaced Table 11.5-5. [RAI 11.5-12]
175	Notes for T11.05-05, all	Replaced notes for Table 11.5-5. [RAI 11.5-12]
176	Notes for T11.05-05, all	Replaced notes for Table 11.5-5. [RAI 11.5-12]
177	T11.05-06, all	Replaced Table 11.5-6. [RAI 11.5-16]
178	T11.05-06	Replaced Table 11.5-6. [RAI 11.5-16]
179	T11.05-06	Replaced notes for Table 11.5-6. [RAI 11.5-16]
180	T11.05.06, note 2	Editorial correction of tritium from He to H3
181	T11.05-07	Replaced Table 11.5-7. [RAI 11.5-14]
182	T11.05-08	Replaced Table 11.5-8. [RAI 11.5-16]
183	T11.05-08	Replaced notes for Table 11.5-8. [RAI 11.5-16]
184	T11.05-09	Added Table 11.5-9 [RAI H11.5-11.b, RAI H11.5-8.c]
185	F11.05-01	Updated Figure 11.5-1 to include all RAI changes. [RAI 9.2-3, RAI 9.4-1, RAI 9.4-4, RAI 11.5-3-3.b, RAI 11.5-10.a, RAI 11.5-10.b, RAI 11.5-6.c]