

ESBWR DCD Tier 2 Chapter 12

26A6642BJ Revision 6 to Revision 7 Change List

Item	Location	Description of Change
1.	Entire Chapter	Global chapter editorial changes made to correct misspelling and grammar, and spell out or integrate acronyms where appropriate.
2.	S12.2.1.1.1, “Post-Operation Gamma Sources”	Added sentence pointing to Table 12.2-3 Part C. MFN 10-054 (Markups, Part 1)
3.	S12.2.1.2.1, “Radioactive Sources in the Spent Fuel Pool”	Corrected table reference to point to Table 12.2-3 Part C. MFN 10-054 (Markups, Part 1)
4.	S12.2.1.2.1, “Post -Accident Radioactive Sources”, 3 rd paragraph	Added description of release path out the side of the building, and clarified that the path does not lead to the operating floor of the RB. MFN 10-117
5.	S12.2.2.1, 3 rd paragraph	Revised the discussion of X/Q and D/Q determination as a result of the response to RAI 12.2-28. MFN 09-786, Supplement 1 (RAI 12.2-28 Part 2 Response)
6.	T12.2-3, Part B	Corrected values in table to be consistent with DCD fuel design. MFN 10-054 (Markups, Part 1)
7.	T12.2-3, Part C	Added table to present spent fuel pool gamma sources, which bound all discharged spent fuel. MFN 10-054 (Markups, Part 1)
8.	T12.2-15	Revised X/Q and D/Q as a result of changes to reactor coolant design basis concentrations as discussed in RAI 12.2-28. MFN 09-786, Supplement 1 (RAI 12.2-28 Part 2 Response)
9.	T12.2-16	Revised gaseous release values based on changes to reactor coolant design basis concentrations as discussed in RAI 12.2-28. MFN 09-786, Supplement 1 (RAI 12.2-28 Part 2 Response)

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10.	T12.2-17	Revised airborne releases and concentration values based on changes to reactor coolant design basis concentrations as discussed in RAI 12.2-28. MFN 09-786, Supplement 1 (RAI 12.2-28 Part 2 Response)
11.	T12.2-18b	Revised annual average doses from airborne releases based on changes to reactor coolant design basis concentrations as discussed in RAI 12.2-28. MFN 09-786, Supplement 1 (RAI 12.2-28 Part 2 Response). Also, doses revised to correctly reflect 30-year midpoint of plant operating life. MFN 10-054, Supplement 2 (Markups, Part 3)
12.	T12.2-23a	Corrected input values for round off error and consistency with the DCD as discussed in RAI 12.2-28. MFN 09-786, Supplement 2 (RAI 12.2-28 Part 3 Response)
13.	T12.2-23b	Revised building airborne radioactivity concentration values based on changes to reactor coolant design basis concentrations as discussed in RAI 12.2-28. MFN 09-786, Supplement 2 (RAI 12.2-28 Part 3 Response)
14.	T12.2-23c	Revised building airborne radioactivity concentration values based on changes to reactor coolant design basis concentrations as discussed in RAI 12.2-28. MFN 09-786, Supplement 2 (RAI 12.2-28 Part 3 Response)

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15.	T12.2-23d	Revised building airborne radioactivity concentration values based on changes to reactor coolant design basis concentrations as discussed in RAI 12.2-28. MFN 09-786, Supplement 2 (RAI 12.2-28 Part 3 Response)
16.	T12.2-23e	Revised building airborne radioactivity concentration values based on changes to reactor coolant design basis concentrations as discussed in RAI 12.2-28. MFN 09-786, Supplement 2 (RAI 12.2-28 Part 3 Response)
17.	S12.3.1.5.1, 3rd paragraph, 14th bullet	Revised in response to RAI 12.7-5 S02. MFN 09-724 (RAI 12.7-5 S02 Response)
18.	S12.3.2.2.2, 3rd paragraph through 9th, & 11th paragraph thru 14	Description of shielding codes added to address an NRC request in Item e of RAI 12.3-14. MFN 09-713, Revision 1 (RAI 12.3-14 Revised Response)
19.	S12.3.2.2.3, "Fuel Handling"	Revised in response to RAI 9.1-50 S04 MFN 09-792, Revision 1 (RAI 9.1-50 S04 Revised Response)
20.	T12.3-1	Descriptions of the PANDORA, MCNPX, NISEIS, ORIGEN, and EMIR radiological codes added to address NRC request in Item f of RAI 12.3-14. MFN 09-713, Revision 1 (RAI 12.3-14 Revised Response)
21.	T12.3-8	Corrected wall thickness values for rooms 6108 and 6161 per discussion with NRC. MFN 10-054 (Markups, Part 1)

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22.	T12.3-8	Corrected wall and slab thicknesses for various rooms to be consistent with the latest calculations or evaluations. Also removed thicknesses from exterior below grade walls for all buildings and from intermediate level floors (Elevation –2350) in the Radwaste Building because no slabs exist in the rooms listed in the table at that elevation. MFN 10-054, Supplement 1 (Markups, Part 2)
23.	F12.3-9	Revised in response to RAI 9.1-50 S04. MFN 09-792, Revision 1 (RAI 9.1-50 S04 Revised Response)
24.	F12.3-10	Revised to specifically identify the Finished Ground Level Grade Elevation of 4500. MFN 10-088 (Markups) Revised in response to RAI 9.1-50 S04. MFN 09-792, Revision 1 (RAI 9.1-50 S04 Revised Response)
25.	F12.3-11	Revised to specifically identify the Finished Ground Level Grade Elevation of 4500. MFN 10-088 (Markups) Revised in response to RAI 9.1-50 S04. MFN 09-792, Revision 1 (RAI 9.1-50 S04 Revised Response)
26.	S12.4.2, 2nd paragraph	Corrected description of DPV arrangement in Subsection 12.4.2 to be consistent with Subsection 5.4.9.2. MFN 10-054 (Markups, Part 1)
27.	S12.4.3, 4th paragraph	Corrected the dose rate value, for the unit conversion, from 5 mrem/hr to 15 mrem/hr. MFN 10-054 (Markups, Part 1)

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28.	S12.4.4, 3rd paragraph	Second and third sentences deleted in response to RAI 12.4-40. MFN 09-774 (RAI 12.4-40 Response)
29.	S12.4.4, new 4th paragraph	Information added in response to RAI 9.1-128. MFN 09-697 (RAI 9.1-128 Response)
30.	S12.4.4, 4th paragraph	Added “quickly” and “with at least 6.0 m (19.7 ft) of water above the fuel” to 4th sentence and added new 5th sentence, in response to RAI 9.1-128 S01. MFN 10-041 (RAI 9.1-128 S01 Response)
31.	S12.4.6, “Drywell” section, 5th paragraph	Deleted phrase “with full cleanup of all condensate water” MFN 09-786 (RAI 12.2-28 Part 1 Response)
32.	S12.4.6, “Turbine Building” section, 4th paragraph	Added text “three low-pressure” to the description of the feedwater heaters. MFN 09-786 (RAI 12.2-28 Part 1 Response)
33.	T12.4-1	Values for Refueling Activity: Estimated Annual Time, Projected Annual Collective Dose, and Percent of Total revised in response to RAI 12.4-40. Total Estimated Annual Time and Projected Annual Collective Dose values and values in Percent of Total column also adjusted accordingly. MFN 09-774 (RAI 12.4-40 Response)
34.	T12.4-5	Estimated time for Refueling activities in the Reactor and Fuel Buildings revised in response to RAI 12.4-40. Total estimated Annual Time and Projected Annual Collective Dose values also adjusted accordingly. MFN 09-774 (RAI 12.4-40 Response)