

BSC

Model Administrative Change Notice

 QA: QA
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Complete only applicable items.

1. Document Number:	ANL-EBS-MD-000015	2. Revision:	02	3. ACN:	02
4. Title:	CSNF Waste Form Degradation: Summary Abstraction				
5. No. of Pages Attached	1				

6. Approvals:		
Preparer:	<i>for</i> Paul E Sanchez Print name and sign	<i>Alex Sanchez</i> Alex Sanchez Date
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Responsible Manager:	Paul Dixon Print name and sign	<i>Paul Dixon</i> Date
7. Affected Pages	8. Description of Change:	
8-16	Changed text associated with YMRP criteria #4 Page 8-16, second sentence, as shown below: <i>Uncertainty is addressed in Sections <u>8.1 and 8.2</u> 8.2 and 8.3.</i> This condition is identified in CR 4734 Action 002	
8-16	Changed text associated with YMRP criteria #8 Page 8-16, second sentence, as shown below: <i>Uncertainty is addressed in Sections <u>8.1 and 8.2</u> 8.2 and 8.3.</i> This condition is identified in CR 4734 Action 002	

considered in developing the abstraction of radionuclide release rates and solubility limits, either through sensitivity analyses or use of bounding analyses;

Uncertainty is addressed in Sections 8.1 and 8.2.

(5-7) ...

Not Applicable.

(8) The U.S. Department of Energy adequately considers the uncertainties, in the characteristics of the natural system and engineered materials, such as the type, quantity, and reactivity of material, in establishing initial and boundary conditions for conceptual models and simulations of thermal-hydrologic-chemical coupled processes that affect radionuclide release; and

Uncertainty is addressed in Sections 8.1 and 8.2.

(9) ...

Not Applicable.

Acceptance Criterion 4—Model Uncertainty Is Characterized and Propagated Through the Model Abstraction

(1) Alternative modeling approaches of features, events, and processes are considered and are consistent with available data and current scientific understanding, and the results and limitations are appropriately considered in the abstraction;

Alternative modeling approaches are discussed in Section 6.4.2 and compared to the base-case modeling approach in Section 7.2.

(2) In considering alternative conceptual models for radionuclide release rates and solubility limits, the U.S. Department of Energy uses appropriate models, tests, and analyses that are sensitive to the processes modeled for both natural and engineering systems. Conceptual model uncertainties are adequately defined and documented, and effects on conclusions regarding performance are properly assessed. For example, in modeling flow and radionuclide release from the drifts, the U.S. Department of Energy represents significant discrete features, such as fault zones, separately, or demonstrates that their inclusion in the equivalent continuum model produces a conservative effect on calculated performance; and

In the consideration of alternative conceptual models (Section 6.4.2), appropriate models, tests, and analyses sensitive to the processes modeled for natural and engineering systems are used. Conceptual model uncertainties are adequately defined and documented, and effects on conclusions regarding performance are properly assessed. Although alternative conceptual models are considered, it is determined that the baseline model is more appropriate and the considered alternative conceptual models are not used in TSPA-LA (Section 6.4.2). Comparison of the base-case model to the alternative models in Section 7.2 shows good agreement.