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Section 4.5 and Chapter 13
Attachments: Audit Questions 87 to 91 Hermes PSAR Chapters 4.5 and 13_Redacted.pdf

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Hermes Construction Permit Application Audit

Audit Questions for Preliminary Safety Analysis Report (PSAR) Section 4.5 and Chapter 13

Item #	PSAR Chapter or Topic	Question
87	MHA Tritium	<p>[[]], page 15 states, [[]]</p> <p>On page 18 the statement is made that [[]]</p> <p>There is a similar statement on page 19, for [[]]</p> <p>a. [[]]</p> <p>b. [[]]</p> <p>]]</p>

		<p>c. Is equation 5.5 or 5.6 used for both uptake and release? If so, does the diffusivity, D, for uptake correspond to the diffusivity in Flibe or graphite? For the release does D correspond to tritium transport in graphite?</p> <p>d. The perfect absorber means mass transfer from the Flibe to graphite is not limited by tritium diffusion into graphite. How is this represented in the various diffusion equations?</p>
88	MHA Tritium	Table 13 shows the release fractions are $\left[\frac{R}{C} \right]$ for the pebbles. $\left[\frac{R}{C} \right]$
89	MHA Tritium	$\left[\frac{R}{C} \right]$ If not, how is the pebble inventory $\left[\frac{R}{C} \right]$ release determined?
90	MHA Tritium	The reflector inventory corresponds to $\left[\frac{R}{C} \right]$ Are the release fractions from Table 17 of $\left[\frac{R}{C} \right]$ used for the MHA release as a function of time $\left[\frac{R}{C} \right]$ Are the release fractions based on the $\left[\frac{R}{C} \right]$
91	MHA Tritium	$\left[\frac{R}{C} \right]$ assumes a $\left[\frac{R}{C} \right]$ Flibe TS which equates to a total Flibe tritium concentration of $\left[\frac{R}{C} \right]$ The staff is expecting the OL Chapter 14, Section 3.3 coolant system activity limit to include an upper bound Flibe activity. Is the staff's understanding correct?