

Closure Plan for RAI 8339/8420

DCD Chapter Associated with RAI: 12.2
RAI Number: RAI 308-8339, 343-8420(12.02-22(4))
Expected Final Closure Date: Aug. 20, 2016
Issue to be addressed: DF(Decontamination Factor) of 100 on Pre-Holdup Ion exchanger for Cs and Rb
Method of Closure (How Will the RAI Be Closed): <ol style="list-style-type: none">1) Provide additional supplemental information for the use of DF of 100 for Pre-Holdup Ion exchanger (e.g Test data)2) Provide markups for DCD Tier 1 & 2 to confirm the use of DF of 100 for Cs and Rb and requirements for application (3:1 resin ratio)
Expected Outcome (Expected Resolution/Results): <ol style="list-style-type: none">1) supplemental information materials to support the justification of the use of DF of 100 for Pre-Holdup Ion exchanger (e.g Test data) in ERR.2) DCD Tier 1 & 2 markup
Milestones to Completion:
Deliverables: DCD markup, Information material
Notes:

Closure Plan for RAI 343-8420

DCD Chapter Associated with RAI: 12.2
RAI Number: RAI 343-8420, Question 12.02-22, issue #1
Expected Final Closure Date: 09/23/2016
Issue to be addressed: Re-evaluation for liquid tanks shielding and zone design based on a fraction of the total tank volume
Method of Closure (How Will the RAI Be Closed): NRC is concerned that the source terms used for radiation shielding and zoning for many of the liquid tanks were based on the tanks being filled to only a small fraction of the tanks' total volume. Therefore KHNP will justify the following; 1. Conservatism on the tank source terms For item #1, KHNP will explain the methodologies to show the conservatism of the source term in the tanks based on the response to the RAI 7856 Question 12.02-2 & 3.
Expected Outcome (Expected Resolution/Results): Revised shielding calculations
Milestones to Completion: Final RAI response submittal date : TBD
Deliverables: RAI responses
Notes:

Closure Plan for RAI 343-8420

DCD Chapter Associated with RAI: 12.2
RAI Number: RAI 343-8420 (12.02-22(4), 23, 25)
Expected Final Closure Date: Jan. 30, 2017
Issue to be addressed: Radiation source daughter nuclides
Method of Closure (How Will the RAI Be Closed): <ul style="list-style-type: none">Review existing documents to confirm sufficient conservatism was built in to the DAMSAM code to account for daughter nuclides. If this documentation can not be found or is determined to be inadequate, run independent bench mark code, and compare the nuclides and activities from the analysis with those from the DAMSAM code analysis. Identify the conservatism in the DAMSAM code results in relation to the results from the alternate code case run.
Expected Outcome (Expected Resolution/Results): <ul style="list-style-type: none">DAMSAM has sufficient conservatism to account for daughter nuclides (to be verified by "see above") and no shielding re-analysis necessary
Milestones to Completion: <ul style="list-style-type: none">completion of the evaluation conservatism : Jan. 30, 2017
Deliverables: Evaluation report
Notes:

Chapter 11

(Non-Proprietary)

First Time Responses

RAI	Question	Topic	Expected Submittal Date	Category	Closure Plan Y/N	Comments
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Total = 34 Total Responded = 34 % Responded = 100%

Revised and Supplemented Responses - Rev. 1

RAI	Question	Topic	Expected Submittal Date	Category	Closure Plan Y/N	Comments
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230-8201	11.2-6	Liquid waste management system	7/29/2016	D	N	
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Total = 18 Total Responded = 17 % Responded = 94%

Revised and Supplemented Responses - Rev. 2

RAI	Question	Topic	Expected Submittal Date	Category	Closure Plan Y/N	Comments
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Total = 4 Total Responded = 4 % Responded = 100%

- 1) Chapter 11 is GREEN and making good progress
- 2) KHNP believes that it has addressed two open items and only three remain
- 3) Chapter 11 should meet its Phase two milestone

Chapter 12 (Non-Proprietary)

First Time Responses

RAI	Question	Topic	Expected Submittal Date	Category	Closure Plan Y/N	Comments
308-8339	12.2-19	Decontamination Factor	8/20/2016	C	Y	
343-8420	12.2-22	Tank Volume	9/23/2016			
343-8420	12.2-23	Daughter Nuclides	TBD	C	Y	
343-8420	12.2-25	GWMS Source Term	TBD			
490-8599	12.3-53	Mission Doses and Other Impacts to Shielding Design	TBD	C	N	
RPAC 8628	12.3-54	Cross Contamination	8/25/2016	D	N	

Total = 82 Total Responded = 77 % Responded = 94%

Revised and Supplemented Responses - Rev. 1

RAI	Question	Topic	Expected Submittal Date	Category	Closure Plan Y/N	Comments
141-8098	12.3-10	Radiation protection design features	7/22/2016	D	N	
225-8254	12.3-11	Radiation protection design features	TBD	D	N	Waiting on comments from Chapter 9 reviewer
141-8098	12.3-8	Radiation protection design features	N/A	N/A	N/A	Addressed by revising Question 15

Chapter 12

(Non-Proprietary)

207-8247	12.2-15	Radiation sources	7/22/2016	D	N	
263-8329	12.3-47	Radiation protection design features	7/22/2016	C	N	
376-8496	12.3-49	Radiation protection design features	7/25/2016	D	N	
369-8463	12.3-52	Radiation protection design features	7/29/2016	D	N	

Total = 16 Total Responded = 10 % Responded = 63%

Revised and Supplemented Responses - Rev. 2

RAI	Question	Topic	Expected Submittal Date	Category	Closure Plan Y/N	Comments
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Total = 5 Total Responded = 5 % Responded = 100%

- 1) Chapter 12 is RED; progress is being made, but it is taking time to perform the confirmatory analysis work
- 2) KHNP anticipates there to be approximately six open items
- 3) Chapter 12 will most likely miss the Phase two milestone