

From: [Hans Weger](#)
To: [David Esh](#)
Cc: [Brad Broussard](#)
Subject: [External_Sender] RE: RE: Timeframes in TX
Date: Monday, April 10, 2023 12:44:42 PM

No Problem. I wasn't sure what you were asking for in some of the questions, so if I answered a different question, please let me know.

How long were the original analyses performed (when was peak) for WCS?

Before the authorization of large amounts of DU, the Performance Assessment (PA) code was run for a period of 100,000 years with peak dose happening at 13,640 to 13,750 years for the adjacent resident. In anticipation of the Part 61 rule changes, The PA code also did an inadvertent intruder analysis, which was run for 1,000,000 years, and which peaked at 1,000,000 years.

What is done currently for WCS (if different)?

The peak doses did change over the years (2011 to 2018) as the inventory changed (uses the current inventory and then fills up the disposal cell with it), but the length of time for the PA calculations did not change.

Did this change for analysis of DU disposal?

Yes. The code was run for a 1,000,000 years. The peak dose is now at 120,000 years for the PA, but still at 1,000,000 for the inadvertent intruder analysis.

Are the analyses requirements different for the CWF compared to the FWF?

The requirements are the same. The performance assessment contains both the CWF and the FWF in the same run. The doses are summed together for the PA, but the inadvertent intruder analysis calculates separate doses for both the CWF and the FWF.

From: David Esh <David.Esh@nrc.gov>
Sent: Monday, April 10, 2023 9:09 AM
To: Brad Broussard <brad.broussard@tceq.texas.gov>
Cc: Hans Weger <hans.weger@tceq.texas.gov>
Subject: RE: RE: Timeframes in TX

Thanks, and sorry Hans! I wasn't sure who does what task there. We have been pestering Hans with many other questions.

Dave

From: Brad Broussard <brad.broussard@tceq.texas.gov>
Sent: Monday, April 10, 2023 9:58 AM
To: David Esh <David.Esh@nrc.gov>
Cc: Hans Weger <hans.weger@tceq.texas.gov>
Subject: [External_Sender] RE: Timeframes in TX

Hi Dave,

I've forwarded your questions to Hans since he has been the primary reviewer of the PA for the last several years.

Thanks

From: David Esh <David.Esh@nrc.gov>
Sent: Monday, April 10, 2023 6:19 AM
To: Brad Broussard <brad.broussard@tceq.texas.gov>
Subject: Timeframes in TX

Hi Brad – I hope you are doing well.

We are working on compiling some information for the LLW rulemaking effort. Can you give me an update on the analyses used for WCS in TX:

How long were the original analyses performed (when was peak) for WCS?

What is done currently for WCS (if different)?

Did this change for analysis of DU disposal?

Are the analyses requirements different for the CWF compared to the FWF?

I understand your requirements but don't have the actual analyses that were performed.

Thanks much!

Dave

David Esh
Sr. Risk Analyst
Risk and Technical Analyses Branch
US Nuclear Regulatory Commission
(301) 415-6705