

HLWYM HEmails

From: Timothy McCartin
Sent: Monday, July 11, 2005 6:22 PM
To: Donald Hooper; Roland Benke; Bret Leslie; Christopher Grossman; Richard Codell
Cc: James Winterle; Andy Campbell
Subject: RE: ashremob calculations

we need to set up some time to discuss this - I assume this is to be discussed at one of the Thursday sessions

>>> Roland Benke <rbenke@cnwra.swri.edu> 07/11/05 04:48PM >>

In order to highlight the contribution from the initial deposit, I set the weighting factors for fluvial and eolian remobilization to zero. Several short-duration spikes from individual realizations are noticeable in the curve for inhalation dose averaged over all realizations (see plot in the attached spreadsheet). Please note that the plotted results are raw data from the rgssa.tpa output file and have not been probability weighted. The second attachment lists changes made to the TPA input parameter values from their default settings.

Roland

-----Original Message-----

From: Timothy McCartin [mailto:TJM3@nrc.gov]
Sent: Monday, June 27, 2005 6:11 AM
To: dhooper@cnwra.swri.edu; rbenke@cnwra.swri.edu; Christopher Grossman; Richard Codell
Cc: Andy Campbell
Subject: Re: ashremob calculations

Based on Dick's description I have the same problem - when we did the probability right on the direct release the mean dose dropped by about a factor of seven.

>>> Richard Codell 06/24/05 05:31PM >>

I ran tpa501betac with the ashremob turned on and 400 vectors. I plot the mean of the 400 vectors and the first 10 vectors on the attached jpg file. It looks good, but I am concerned that these calculations with ashremob don't pick up the spiky part of the dose caused by the direct deposition at the RMEI by airborne transport. If you run same case without ashremob, it uses the old ashplume model with wind directed toward the RMEI, and leads to relatively large, but short-duration spikes. For that case we need to use the convolution procedure, but not apparently with the ashremob calculations since they are spread out in time. My question is "does the new procedure properly take into account the part of the dose due to the direct deposition of airborne ash at the RMEI?"

Dick

Richard B. Codell, Ph.D.
Senior Hydraulic Engineer
Division of High-Level Waste Repository Safety
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville MD 20852

Phone 301-415-8167
Fax 301-415-5399
EMail RBC@NRC.GOV

Hearing Identifier: HLW_YuccaMountain_Hold_EX
Email Number: 1396

Mail Envelope Properties (s2d2b8d1.058)

Subject: RE: ashremob calculations
Sent Date: 7/11/2005 6:21:52 PM
Received Date: 7/11/2005 6:23:21 PM
From: Timothy McCartin

Created By: Timothy.Mccartin@nrc.gov

Recipients:

"James Winterle" <jwinterle@cnwra.swri.edu>
Tracking Status: None
"Andy Campbell" <Andy.Campbell@nrc.gov>
Tracking Status: None
"Donald Hooper" <dhooper@cnwra.swri.edu>
Tracking Status: None
"Roland Benke" <rbenke@cnwra.swri.edu>
Tracking Status: None
"Bret Leslie" <BWL.twf4_po.TWFN_DO@nrc.gov>
Tracking Status: None
"Christopher Grossman" <Christopher.Grossman@nrc.gov>
Tracking Status: None
"Richard Codell" <Richard.Codell@nrc.gov>
Tracking Status: None

Post Office: NRNWMS05.NRC.GOV

Files	Size	Date & Time
MESSAGE	2297	7/11/2005 6:23:21 PM

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received: