

HLWYM HEmails

From: John Trapp [JST@nrc.gov]
Sent: Thursday, March 22, 2007 10:52 AM
To: Debashis Basu; John Stamatkos; Donald Hooper; Brittain Hill; James Rubenstone; nadams@swri.org
Subject: Fwd: TOPICTABLE wjh.doc
Attachments: TOPICTABLE wjh.doc

Got the attached from B Hinze with the request that we provide comments (Unofficialkly). Talked to LK and got a statement to give him unofficial comments (for last time.)

If you want to, fine, if not fine.

>>> William Hinze 03/22/2007 10:42 AM >>>

Please confirm receipt of this email to bima@insightbb.com,,,, will very much appreciate your recs,,,cheers,,,Bill

Hearing Identifier: HLW_YuccaMountain_Hold_EX
Email Number: 1333

Mail Envelope Properties (s602600a.069)

Subject: Fwd: TOPICTABLE wjh.doc
Sent Date: 3/22/2007 10:51:58 AM
Received Date: 3/22/2007 10:53:29 AM
From: John Trapp

Created By: JST@nrc.gov

Recipients:

"Debashis Basu" <dbasu@cnwra.swri.edu>
Tracking Status: None
"John Stamatkos" <jstam@cnwra.swri.edu>
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"Donald Hooper" <dhooper@cnwra.swri.edu>
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"nadams@swri.org" <nadams@swri.org>
Tracking Status: None

Post Office: NRNWMS05.NRC.GOV

Files	Size	Date & Time
MESSAGE	382	3/22/2007 10:53:29 AM
TOPICTABLE wjh.doc	38976	

Options

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

TOPIC	NRC	DOE	EPRI	OTHER
Igneous event	Small-volume basaltic volcano similar to Lathrop Wells	Small-volume basaltic volcano similar to Lathrop Wells		
Volcanic activity	Multiple vents with cones and plumes per dike, possible flank eruptions	Each dike a single volcanic event (cones and plumes)		
Magma viscosity	Remains liquid; no solidification	Homogeneous flow; small bubbles; no solidification	10^6 to 10^8 poise	Magma solidifies on waste package (consultant view)
Dike length	6 km (2-11)	4 km (1-10)		
Dike width	5 m (1-10)	1.5 m (0.5-5)		
Probability of IA in regulatory period	10^{-7}	10^{-9} - 10^{-7} (PVHA)		about 10^{-6} (Nevada)
No. of waste packages disrupted: extrusive event	About 5 – completely destroyed	<10 -- completely destroyed	none breached	
No. of waste packages disrupted: intrusive event	37 (1-1402) lognormal distr.	1600 (0-11000)	0-6 engulfed; 14-24 affected by corrosive gas	
Dogleg scenario	50 packages – contents entrained into ejects	Dogleg model improbable		
Tephra remobilization	Tephra lasts > 1000 yrs	Tephra lasts a few centuries		
Eolian ash transport	Ash leaves active fan by wind erosion	Negligible compared to fluvial		
Fluvial ash transport	All contaminates ash deposited in fluvial fan	Climate will have little impact; channels near RMEI will not migrate		
Inhaled dose	All deposited	All deposited	Deposited	

from fluvial/eolian transport	remobilized material is respirable	remobilized material is respirable	material > 130 microns; not respirable	
Dose conversion factors	FGR 13	FGR 13		

This table is necessarily a simplification, and the reader is encouraged to read the extensive text on each topic.