BSC

Model
Administrative Change Notice

Complete only applicable items.

1. Document Number:	ANL-EBS-MD-000037		2. Revision:	04	3. ACN:	01
4. Title:	In-Package Chemistry Abstraction					
5. No. of Pages Attached		1				

6. Approvals:			
Preparer:	William F. Downs Print name and sign	*[signature]*	11/29/05 Date
Checker:	Clinton Lum Print name and sign	*[signature]*	11/29/05 Date
QER:	Darrell Svalstad Print name and sign	*[signature]*	11/29/05 Date
Independent Technical Reviewer:	Jean Younker Print name and sign	*[signature]*	12-1-05 Date
Responsible Manager:	David Stahl Print name and sign	*[signature]*	12-01-05 Date

7. Affected Pages	8. Description of Change:
p. 4-1	Remove Marra and Ebert 2003 [DIRS 172949] as a Direct Input:

Table 4-1. Summary of Direct Inputs

Identifier	Input	Reference
HLWG	Reaction Rate	BSC 2004 [DIRS 169988], Section 8.1, Equations 50 and 51, Table 8-1
	Density	Baxter 1988 [DIRS 106164], Table 10
	Composition	CRWMS M&O 2001 [DIRS 153263], Table 3 ~~(for LaBS glass) Marra, J. and Ebert, W. 2003 [DIRS 172949] Table 2, column: SRTC Tests, Pu only~~
	$f_{exposure}$	BSC 2004 [DIRS 169988], Table 8-1

Change due to CR 6723. The cited document, Marra and Ebert 2003 [DIRS 172949], was not qualified. Further investigation shows that the data from this document is used only for sensitivity analyses and is not used as direct input for the model.

4. INPUTS

This section lists the inputs used to develop this report. The information used to develop the model was not used to validate the model.

4.1 DIRECT INPUT

The information in the following sections is used as direct input to the in-package chemistry model. Table 4-1 lists the data used in the in-package chemistry model. All the inputs in Table 4-1 are qualified data.

Table 4-1.   Summary of Direct Inputs

Identifier	Input	Reference	Used in:
data0.ymp.R4	Thermodynamic Data	DTN: SN0410T0510404.002 [DIRS 172712] BSC 2004 [DIRS 171916]	For EQ6 runs and Sections 6.3.1, 6.10.5, 6.10.6
J-13 Well Water	Water Composition	DTN: MO0006J13WTRCM.000 [DIRS 151029]	Section 6.3.1, Appendix F *CDSP.xls, CSNF.xls,* and in all EQ6 input files
Ca-porewater	Water Composition	DTN: GS020408312272.003 [DIRS 160899]	
Na-porewater	Water Composition	DTN: GS020408312272.003 [DIRS 160899]	
51.3i	Water Composition	DTN: MO0303MWDSCMAB.000 [DIRS 162551], file: W6_THCabstraction3i3o3pfiles, path: ESP\Jolley\EQ36 for P&CE\THC Abstraction\W6\tf4	
10006.3i	Water Composition	DTN: MO0303MWDSCMAB.000 [DIRS 162551], file: W4_THCabstraction3i3o3pfiles, path: ESP\Jolley\EQ36 for PCE\THC Abstraction\W4\tf4	
20013.3i	Water Composition	DTN: MO0303MWDSCMAB.000 [DIRS 162551] file: W5_THCabstraction3i3o3pfiles, path: ESP\Jolley\EQ36 for P&CE\THC Abstraction\W5\tf4	
Liquid Entry Rate	Flow Rates	BSC 2004 [DIRS 169131], Tables 6.8-1 and 6.8-2	
Vapor Entry Rate	Flow Rates	BSC 2004 [DIRS 169868], Table 6.6-1	
HLWG	Reaction Rate	BSC 2004 [DIRS 169988], Section 8.1, Equations 50 and 51, Table 8-1	
	Density	Baxter 1988 [DIRS 106164], Table 10	
	Composition	CRWMS M&O 2001 [DIRS 153263], Table 3	
	$f_{exposure}$	BSC 2004 [DIRS 169988], Table 8-1	
N-Reactor Fuel	Reaction Rate	DOE 2000 [DIRS 152658], Equation 2-39	
	Composition	DOE 2000 [DIRS 150095], Table 3-1	
CSNF	Isotopic Inventory	BSC 2003 [DIRS 169110], Attachment III Disk 1 of 9, ATT III/ LPM1/ uniform_profile/ 3.5/ ft71-case10.N04	
	Reaction Rate	BSC 2004 [DIRS 169987], Section 8.1, Tables 8-2 and 8-3	