UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 26 2016

Mr. Russ Patterson, Manager
WIPP Compliance and Recertification
Carlsbad Field Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, New Mexico 88221-3090

Dear Mr. Patterson:

DOE has been conducting sensitivity analyses on the experimental and operations room closure parameters for the DOE's 2014 Compliance Recertification Application as we requested in our August 26, 2015 letter [EPA-HQ-OAR-2014-0609-0026]. We have reviewed the draft analyses DOE has conducted, and we would like for you to conduct an additional sensitivity study, SEN2_12, for the experimental and operations room areas for parameters identified by EPA in our August 2015 letter. Modifications to values used for those parameters are provided in the enclosed table; also listed are the requested outputs.

If you have any questions concerning this request, please contact Kathleen Economy at (202) 343-9844 or economy.kathleen@epa.gov.

Sincerely,

Tom Peake

Tom Peake
Director
Center for Waste Management and Regulations

Enclosure

cc: Electronic Distribution
Todd Shrader, DOE/CBFO
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EPA WIPP Team
EPA WIPP Docket

Experimental and Operations Room Sensitivity Study Parameters Values - February 2016

EPA requests SNL conduct a creep closure sensitivity study test with modifications to those parameters used in SNL's BRAGFLO **SEN1_12** TEST. The parameters values highlighted, underlined and italicized are those that EPA would like to be modified for this additional test. The additional test is to be labeled as SEN2_12.

SEN2_12 Parameter changes

OPS/EXP Room Cavity SEN2_12

Model Test	Porosity	PERMX_LOG (m^2)	COMP_RCK	POR_DISP	CAP_MOD	PCT_A	PCT_EXP	RELP_MOD	SAT_IBRN	SAT_RBRN	SAT_RGAS
SEN2_12	*S_HALITE (1 + ½ STD)*	*S_HALITE +1*	S_HALITE	0.7	2	0.56	-0.346	4	0.95	***0.6***	***0.398***

The above parameter values for the operations and experimental rooms are to be used for all time frames: -5 to 0 years and 0 to 10,000 years.

DRZ SEN2_12

SEN2_12	***S_HALITE***	***S_HALITE***	S_HALITE	0.7	2	0.56	-0.346	4	0.95	***0.6***	***0.398***

The above parameter values for the DRZ adjacent to the experimental and operations rooms are to be used for all time frames: -5 to 0 years and 0 to 10,000 years.

BRAGFLO OUTPUT:

Please provide the following output results from this study (all replicates).

1. North flowing gas above and below the PCS DRZ located north of the NROR.
2. South flowing gas the above and below the PCS DRZ located north of the NROR.
3. North flowing brine the through the PCS located north of the NROR.
4. South flowing brine the through the PCS located north of the NROR.
5. Brine flow and saturations in the EXP Cavity
6. Brine flow and saturations in the ROR
7. Gas flow and saturations in the EXP Cavity
8. Gas flow and saturations in the ROR
9. Brine and pressure in WAS Panel
10. CCDF - Total release
11. CCDF – Spallings
12. CCDF – Culebra
13. CCDF – DBR