NYE County NWRPO -Technical Data Report

RID No.	Transmitter	Org.	Receiver	Org.	Key word1	Title/Description
7402	Gilmore	NWRPO	QARC	Nye	mdl	Annual Ventilation Modeling Letter Report for April 1, 2006 to March 31, 2007

1

Doc. Date 11/26/2007 **General Doc. Type** QA Program Doc **Keyword2** vent

Entry Date 1/24/2008 **Detailed Doc. Type** Annual Report **Keyword3** flow

Data Originator Preparer George Danko

Title of Data Annual Ventilation Modeling Letter Report for April 1, 2006 to March 31, 2007

Description of Data The work presented in this annual report is a continuation of model tasks conducted in the previous grant year (April 1, 2005 to March 31, 2006). The four tasks are as follows: (1) Examine the Potential Significance of Water Vapor Migration Between the Network of Drifts for the Baseline Repository Design; (2) Barometric Pressure Fluctuation Studies with a Refined Model; (3) Long-Term, Forced Ventilation Studies; and (4) In-rock Vapor Flow Studies.

Data Collection Method MULTIFLUX, a fully coupled, hydrothermal ventilation model and software code was used to model the flow of heat, moisture, and air in a conceptual design of a high-level underground nuclear waste repository at Yucca Mountain, NV.

Data Location(s) MULTIFLUX was configured to simulate ventilation in the Department of Energy's conceptual repository design, according to the BSC (Bechtel SAIC Company), 2004b, "Multiscale Thermohydrologic Model ," prepared by Bechtel SAIC Company, LLC. ANL-EBS-MD-000049 REV 01. Yucca Mountain Project, Las Vegas, Nevada.

Data Collection Period(s) 4/1/06 to 3/31/07

Data Source(s) The calculations are based on the input configuration for the conceptual repository design and the input data used by BSC, 2004b. "Multiscale Thermohydrologic Model ," prepared by BSC, LLC. ANL-EBS-MD-000049 REV 01. Yucca Mountain Project, Las Vegas, Nevada.

Supporting Data: monthly progress reports.

Data Censoring None

Data Processing Numerical Transport Code Functionalization (NTCF) procedure is used in MULTIFLUX to develop a model for the representation of the computational results of the porous media numerical transport code (NUFT). Typically, 4 to 6 NUFT runs are used for a MULTIFLUX model calculation with three complete iterations. The NUFT results are post-processed using the NTCF modeling technique used in MULTIFLUX.

Data Limitations Assumptions are stated in the description of each numerical modeling task included in the report. The use of results must be limited to the conditions stated in the report. The results must be used within the scope of the assumptions.

Governing QA Docs. QAP-3.1 Rev. 1, QAP-3.2 Rev. 2

Frequency of Transmittal As required

Direct Questions About Data To NWRPO QA Records Center