NYE County NWRPO - Technical Data Report

RID No.	Transmitter	Org.	Receiver	Org.	Key word1	Title/Description
6929	Hammermeister	Nye County NWRPO	QARC	Nye	ventilation	Yucca Mountain Coupled Hydrothermal-Ventilation Study Annual Report for April 2004 - March 2005, NWRPO-2005-02, November 2005, Grant No. DE-FC28-02RW12163

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Doc. Date 12/8/2005 **General Doc. Type** Report **Keyword2** modeling

Entry Date 5/12/2006 **Detailed Doc. Type** Annual Report **Keyword3** MULTIFLUX

Data Originator Preparer George Danko And Davood Bahrami

Title of Data Yucca Mountain Coupled Hydrothermal-Ventilation Study Annual Report for April 2004 - March 2005, NWRPO-2005-02, November 2005, Grant No. DE-FC28-02RW12163

Description of Data This report summarizes the results of the coupled ventilation-hydrothermal studies conducted to support the evaluation of the design and performance of the Department of Energy's proposed high level radioactive waste repository at Yucca Mountain, Nevada. This work was performed during the period of April 1, 2004 through March 31, 2005, by Dr. George Danko, Professor, University of Nevada, Reno under contract to Nye County, Nevada. Davood Bahrami participated in the numerical modeling work and the preparation of the report. The record package also includes the review documentation.

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) 4/1/04 to 3/31/05

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.

Data Censoring N/A

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 One time only

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Direct Questions About Data To- NWRPO QA Records Center