LIST OF REQUESTED DATA SETS WITH DATA TRACKING NUMBERS

BACKGROUND

Net infiltration source and output data sets are taken from Tables 4-1 and 8-1, which are repeated in Sections 9.3 and 9.4 of the following report:

- Sandia National Laboratories, 2007. "Simulation of Net Infiltration for Present-Day and Potential Future Climates." MDL-NBS-HS-000023 Rev 01.

Note that version Rev 01 ADD01 of the infiltration report is not yet publicly available. If any data sets have been updated, please provide them.

In addition, several borehole-based data sets are taken from the following reports:

- Sandia National Laboratories, 2007. "UZ Flow Models and Submodels." MDL-NBS-HS-000006 Rev 03.
- Sandia National Laboratories, 2007. "Calibrated Properties Model." ANL-NBS-HS-000058 Rev 00A (Downloaded from License Support Network).

Data tracking numbers (DTNs) are provided for all data sets. Document Input Reference System (DIRS) numbers are provided as available. The data sets are divided into: (i) source data for net infiltration: (ii) developed or output data for net infiltration; and (iii) borehole data.

Source Data (DTN, Name/Description/Date, DIRS)

GS000308315121.003. "Meteorological Stations Selected to Represent Future Climate States at Yucca Mountain, Nevada." Submittal date: 03/14/2000. [151139]

GS011208312212.004. "SN-USGS-SCI-113 V1: Empirical Calculation of Soil Thickness Based on Field Measurements." Submittal date: 01/24/2002. [76317]

GS910808312212.001. "Geohydrologic Data Collected from Shallow Neutron Access Boreholes and Resultant Preliminary Geohydrologic Evaluations, Yucca Mountain Area, Nye County, Nevada." Submittal date: 08/09/1991. [175972]

GS941208312121.001. "Surface-Water Discharge Data for the Yucca Mountain Area, Southern Nevada and Southern California, 1994 Water Year." Submittal date: 11/30/1994. [107374]

GS960908312121.001. "Surface-Water Discharge Data for the Yucca Mountain Area, Southern Nevada and Southern California, 1995 Water Year." Submittal date: 10/10/1996. [107375]

GS960908312211.004. "Heat Dissipation Probe Data: Bleach Bone Ridge 3/95 - 11/95. Submittal date: 09/19/1996." [146872]

LB0208HYDSTRAT.001. "2002 UZ Model Grid Components." Submittal date: 08/26/2002. [174491]

MO0003COV00095.000. "Coverage: Scotbons." Submittal date: 03/01/2000. [146848]

MO0206SEPQ1998.001. “Meteorological Monitoring Data for 1998.” Submittal date: 06/26/2002. [166731]

MO0209SEPQ2000.001. “Meteorological Monitoring Data for 2000.” Submittal date: 09/09/2002. [166730]

MO0305SEP01MET.002. “Meteorological Monitoring Data for 2001.” Submittal date: 05/21/2003. [166164]

MO0305SEP02MET.002. “Meteorological Monitoring Data for 2002.” Submittal date: 05/21/2003. [166163]

MO0312SEPQ1993.001. “Meteorological Monitoring Data for 1993.” Submittal date: 12/24/2003. [176092]

MO0312SEPQ1997.001. “Meteorological Monitoring Data for 1997.” Submittal date: 12/24/2003. [167116]

MO0503SEPMMD03.001. “Meteorological Monitoring Data for 2003.” Submittal date: 03/03/2005. [176097]

MO0512COV05112.000. “Special Infiltration Project - Survey of Field Observation Locations.” Submittal date: 12/12/2005. [177249]

MO0601GSCSPINF.000. “Special Infiltration Project Position of Field Observation Locations of Ecological Study Plot Corners and Streamflow Gauges.” Submittal date: 01/30/2006. [177236]

MO0603GSCGEOMP.000. “Digital Geologic Map of Nevada Test Site and Vicinity, Nye, Lincoln, and Clark Counties, Nevada, and Inyo County, California.” Submittal date: 03/09/2006. [176585]

MO0603SEPSTREA.000. “Surface Water Discharge Data Collected During Water Year 1998 from Streamflow Gauge Stations 102512531, 102512533 and 102512537.” Submittal date: 03/22/2006. [179889]

MO0603SPAGRIDD.003. “Gridded Infiltration Model Input File Showing Infiltration Hydrogeologic Units.” Submittal date: 03/06/2006. [177121]

MO0605SEPALTRN.000. “Alternative Soil Units, Hydraulic Parameters, and Associated Statistics for Infiltration Modeling at Yucca Mountain, NV.” Submittal date: 05/31/2006. [178089]

MO0605SEPHOURL.000. “Hourly Precipitation Data for Four NOAA Meteorological Stations for the Years 1948 through 2005.” Submittal date: 05/17/2006. [177237]

MO0605SEPSGP05.000. “Storage Gauge Precipitation 2005.” Submittal date: 05/19/2006. [178663]

MO0605SEPSURFC.000. “Surface Water Discharge Data Collected During WY 1993 from Streamflow Gauge Station No. 102512533 (Pagany Wash No. 1), and During WY 1995 from Streamflow Gauge Station No. 1025125372 (Lower Split Wash).” Submittal date: 05/15/2006. [179890]

MO0605SPABEDRK.005. “Bedrock Saturated Hydraulic Conductivity for Infiltration Hydrogeologic Units.” Submittal date: 05/25/2006. [177122]

MO0605SPAFABRP.004. “Supporting Calculation Files for the Assessment of Bedrock Saturated Hydraulic Conductivity.” Submittal date: 05/25/2006. [180539]

MO0605SPASPOKA.000. “Spokane Weather Data - Daily Values.” Submittal date: 05/19/2006. [177135]

MO0606SEPRECIP.001. “Precipitation Data Collected at Yucca Mountain Meteorological Sites 1 through 5 for the Period January 1, 1988 through December 31, 1992.” Submittal date: 06/01/2006. [177136]

MO0607SEPMED94.000. “Air Temperature Data from Meteorological Data Acquisition (MEDA) Station 05 for 1994 - 2004.” Submittal date: 07/12/2006. [178079]

MO0607SEPMMD04.001. “Meteorological Monitoring Data for 2004.” Submittal date: 07/18/2006. [178311]

MO0608SPASDFIM.006. “Soil Depth Input File for Use in Infiltration Modeling.” Submittal date: 8/31/2006. [178082]

MO0610METMND05.000. “Meteorological Monitoring Data for 2005.” Submittal date: 09/18/2006. [178328]

MO9901ESPYMNYE.000. “Ecological Study Plots at Yucca Mountain, Nye County, Nevada.” Submittal date: 01/04/1999. [177247]

MO9903CLIMATOL.001. “Climatological Tables from 1986-1997 Meteorological Data from Site 1 through Site 9 EFPD Meteorological Sites.” Submittal date: 03/23/1999. [116056]

MO9905VMMDAJ90.000. “Validated Meteorological Monitoring Data, April - June 1990.” Submittal date: 05/21/1999. [150118]

MO9905VMMDJM90.000. “Validated Meteorological Monitoring Data, January - March 1990.” Submittal date: 05/21/1999. [150056]

MO9905VMMDJS90.000. “Validated Meteorological Monitoring Data, July - September 1990.” Submittal date: 05/21/1999. [150119]

MO9905VMMDOD90.000. “Validated Meteorological Monitoring Data, October - December 1990.” Submittal date: 05/21/1999. [150120]

MO9906GPS98410.000. “Yucca Mountain Project (YMP) Borehole Locations.” Submittal date: 06/23/1999. [109059]

MO9907GCESPYMN.000. "Ground Cover Data for Ecological Study Plots at Yucca Mountain, Nevada." Submittal date: 07/29/1999. [157659]

MO9907SADESYYM.000. "Soil Analysis Data for Ecological Study Plots at Yucca Mountain, Nevada." Submittal date: 07/28/1999. [177169]

SN0511NOAADATA.001. "NOAA and SORAD Meteorological and Solar Radiation Data Measured at Desert Rock, Nevada." Submittal date: 11/22/2005. [177238]

SN0601ALANDSAT.001. "Landsat Imagery of Yucca Mountain from January 1998 to August 2002." Submittal date: 02/07/2006. [177239]

SN0601DOQQYM98.001. "Digital Ortho Quarter Quad (DOQQ), Yucca Mountain 06/01/1998 - 08/18/1998." Submittal date: 01/24/2006. [177240]

SN0601PRECPTMP.002. "Developed Precipitation Data at NTS Sites from 1959-2004, and Precipitation and Temperature Data at Amargosa Farms-Garey from 1965-2005." Submittal date: 01/16/2006. [176122]

SN0601QBSAT802.001. "Quickbird (QB) Satellite Imagery, Yucca Mountain, 31 August 2002." Submittal date: 04/25/2006. [177241]

SN0601SRTMDTED.001. "Shuttle Radar Topography Mission (SRTM) Digital Terrain Elevation Data (DTED) of Yucca Mountain, February 2000." Submittal date: 01/23/2006. [177242]

SN0603DWEATHER.002. "Developed Weather Station Data for Beowawe, NV (1982-2004), Delta, UT (1968-2004), Hobbs, NM (1947-2004), Nogales, AZ (1948-1983), Rosalia, WA (1949-2004), St. John, WA (1963-2004), and Spokane, WA (1948-2004)." Submittal date: 03/20/2006. [177917]

SN0608T0502206.020. "Climate Data, Geospatial Information, and Soil Moisture and Property Data for Reynolds Creek Experimental Watershed (RCEW), Idaho." Submittal date: 08/21/2006. [179875]

SN0608WEATHER1.005. "Temperature, Precipitation, Wind Speed, Relative Humidity, Dew Point Temperatures, and Barometric Pressure Data Collected from 1993-2004 Measured at Yucca Mountain Weather Stations 1,2,3,6, and 9." Submittal date: 08/23/2006. [177912]

<u>Developed or Output Data (DTN, Description)</u>

MO0602SPAPRECP.000. "Daily Precipitation for Water Years 1998, 2001, and 2002; Sites 2, 3 & 4." Submittal date: 02/16/2006.

MO0602SPAWEATH.000. "Daily Weather Data for Water Years 1998, 2001, 2002, Yucca Mountain Meteorological Site 1." Submittal date: 02/16/2006.

MO0603SPAREFET.000. "Reference Evapotranspiration (ET) for Yucca Mountain." Submittal date: 03/01/2006.

MO0605SPADAYWA.000. "Daily Weather Data for Spokane Washington." Submittal date: 05/24/2006.

MO0606SPABASAL.001. "Basal Transpiration Coefficients (Kcb) for Yucca Mountain Vegetation Associations (1993, 1991, and 1990 Water Years)." Submittal date: 06/28/2006.

MO0606SPATRANS.000. "Transpiration Coefficients (Kcb) for a Bromus Tectorum Monoculture." Submittal date: 06/05/2006.

MO0606SPAVEGAS.001. "Cover Data for Vegetation Associations at Yucca Mountain (1990, 1991 and 1993)." Submittal date: 06/26/2006.

MO0607SEPTOTAL.003. "Total Annual Precipitation for Water Years 1990, 1991 and 1993 from Yucca Mountain Meteorological Sites 2, 3 and 4." Submittal date: 07/13/2006.

MO0610SPALINEA.000. "Linear Regression Analysis for the MASSIF Kcb Versus NDVI Correlation." Submittal date: 10/19/2006.

MO0703MASSIFIM.001. "Independent Verification of MASSIF Infiltration Model." Submittal date: 03/05/2007.

SN0602T0502206.003. "Solar Radiation and Reference Evapotranspiration (ET0) on Inclined Surfaces." Submittal date: 02/20/2006.

SN0602T0502206.004. "Calculated Daily Diffuse and Direct Solar Radiation from 2000 through 2004 and Measured at Desert Rock, Nevada." Submittal date: 03/13/2006.

SN0602T0502206.005. "Evaluation of Hargreaves Solar Radiation Coefficient, KRS, for Yucca Mountain." Submittal date: 02/28/2006.

SN0603T0502206.006. "Evaluation of Published Diffuse and Total Solar Radiation Correlations for Yucca Mountain." Submittal date: 03/13/2006.

SN0606T0502206.011. "Geospatial Inputs for Net Infiltration Model of Yucca Mountain." Submittal date: 05/31/2006.

SN0606T0502206.012. "Daily Normalized Difference Vegetation Index (NDVI) Estimation for Selected Slopes/Azimuths at Yucca Mountain." Submittal date: 05/31/2006.

SN0606T0502206.014. "Calculated Weather Summary for Present Day and Future Climates." Submittal date: 06/07/2006.

SN0607T0502206.016. "Analysis of Soil Water Storage in Nevada Test Site (NTS) and Reynolds Creek Experimental Watershed (RCEW) Lysimeters." Submittal date: 08/24/2006.

SN0608ASSEMBLY.001. "Assembly Data for Geospatial Inputs to MASSIF Model of Yucca Mountain." Submittal data: 08/15/2006.

SN0608CWATSHED.001. "Calibration Watersheds at Yucca Mountain Based on Pour Point Stream Gages." Submittal date: 08/15/2006.

SN0608DRAINDYM.001. "Drainage Delineation at Yucca Mountain." Submittal date: 08/15/2006.

SN0608NDVIANAL.001. "Analysis Data Supporting Estimations of Normalized Difference Vegetation Index (NDVI) at Yucca Mountain, 1997–2002." Submittal date: 08/15/2006.

SN0608NDVIAUXD.001. "Auxiliary Data Used in Calculations of Daily Normalized Difference Vegetation Index (NDVI) Estimation for Selected Slopes/Azimuths at Yucca Mountain and Geospatial Inputs for Net Infiltration Model of Yucca Mountain." Submittal date: 08/15/2006.

SN0608NDVILSTM.001. "Normalized Difference Vegetation Index (NDVI) Derived from Calibrated and Geocorrected LANDSAT TM Data at Yucca Mountain, 1997–2002." Submittal date: 08/15/2006.

SN0608NDVIQBIM.001. "Normalized Difference Vegetation Index (NDVI) Imagery Derived from Calibrated and Georectified Quickbird Imagery of Yucca Mountain, August 31, 2002." Submittal date: 08/15/2006.

SN0608NSSLOPES.001. "Normalized Difference Vegetation Index (NDVI) on North and South Slopes and Supporting Data at Yucca Mountain, 1997–2002." Submittal date: 08/15/2006.

SN0608PVRATYMT.001. "Potential Vegetation Response (PVR) at Yucca Mountain, 1997–2002." Submittal date: 08/15/2006.

SN0608T0502206.019. "Temperature Model Fitting Parameters for Present-Day and Future Climate Proxy Sites." Submittal date: 08/16/2006.

SN0609AZSLPHST.001. "Distribution of Slope on North-South Facing Terrain Slopes at Yucca Mountain." Submittal date: 09/18/2006.

SN0609LSTMPROC.001. "Thematic Mapper Processing Overview." Submittal date: 09/21/2006.

SN0609T0502206.021. "Alternative Infiltration Model Inputs. " Submittal date: 09/18/2006.

SN0609T0502206.022. "Alternative Infiltration Modeling Results." Submittal date: 09/18/2006.

SN0609T0502206.023. "Precipitation Parameters Calculated using Fourier Analyses for Modern Interglacial and Future Climates." Submittal date: 09/07/2006.

SN0609T0502206.024. "Monsoon Net Infiltration Results." Submittal date: 09/18/2006. [Preliminary]

SN0609T0502206.025. “Calculated Weather Summary for Monsoon Climate.” Submittal date: 09/21/2006. [Preliminary]

SN0609T0502206.026. “Calculated Weather Summary for Present-Day Climate.” Submittal date: 09/21/2006. [Preliminary]

SN0609T0502206.027. “Calculated Weather Summary for Glacial Transition Climate.” Submittal date: 09/21/2006. [Preliminary]

SN0609T0502206.028. “Present-Day Net Infiltration Results.” Submittal date: 09/22/2006. [Preliminary]

SN0609T0502206.029. “Glacial Transition Net Infiltration Results.” Submittal date: 09/28/2006. [Preliminary]

SN0610T0502206.030. “Average Daily Wind Speed at 2m Height above the Ground.” Submittal date: 10/09/2006.

SN0610T0502206.031. “Precipitation Duration Functions for the Present-Day, Monsoon, and Glacial Transition Climates for Infiltration Modeling at Yucca Mountain, NV.” Submittal date: 10/09/2006.

SN0610T0502206.032. “MASSIF Calculation of Net Infiltration at Yucca Mountain.” Submittal date: 10/31/2006. [Preliminary]

SN0610T0502206.033. “Latin Hypercube Sample (LHS) Input and Output Files for MASSIF Calculation of Net Infiltration at Yucca Mountain.” Submittal date: 10/20/2006. [Preliminary]

SN0612FTPRNUZB.002. “Unsaturated Zone (UZ) Boundary and Repository Footprint.” Submittal date: 12/14/2006.

SN0612T0502206.039. “Estimation of Uncertainty on Upscaled Uniform Value for Soil Depth Class 4.” Submittal date: 12/06/2006.

SN0701SPALAYER.002. “Spatial Data Layers at Yucca Mountain.” Submittal date: 01/16/2007.

SN0701T0502206.034. “Present-Day Net Infiltration Results, Rev 1.” Submittal date: 01/11/2007.

SN0701T0502206.035. “Glacial Transition Net Infiltration Results, Rev 1.” Submittal date: 01/11/2007.

SN0701T0502206.036. “Monsoon Net Infiltration Results, Rev 1.” Submittal date: 01/11/2007.

SN0701T0502206.037. “MASSIF Calculation of Net Infiltration at Yucca Mountain, Rev 1.” Submittal date: 02/13/2007.

SN0701T0502206.040. “Calculated Weather Summary for Present Day Climate, Rev 1.” Submittal date: 01/10/2007.

SN0701T0502206.041. "Calculated Weather Summary for Monsoon Climate, Rev 1." Submittal date: 01/10/2007.

SN0701T0502206.042. "Calculated Weather Summary for Glacial Transition Climate Rev 1." Submittal date: 01/10/2007.

SN0701T0502206.043. "Latin Hypercube Sample (LHS) Input and Output Files for MASSIF Calculation of Net Infiltration at Yucca Mountain." Submittal date: 01/11/2007.

SN0701T0502206.044. "Sensitivity Analysis of Average Net Infiltration for Three Climates." Submittal date: 01/18/2007.

SN0701T0502206.045. "Comparison of the Calculated Precipitation Record with Site Data." Submittal date: 01/23/2007.

SN0704T0502206.047. "Recharge Estimates Used to Validate the Massif Model of Net Infiltration at Yucca Mountain." Submittal date: 04/19/2007.

Borehole Data Sets (DTN, Description, DIRS)

MO9906GPS98410.000. "Yucca Mountain Project (YMP) Borehole Locations." Submittal date: 06/23/1999. [109059]

LB0401H2OPOTEN.001. "Statistically Consolidated Water Potential Data." Submittal date: 01/29/2004. [170678]

GS031208312232.002. "Deep UZ Surface-Based Borehole Instrumentation Program Data from Boreholes USW NRG-7A, UE-25 UZ#4, USW NRG-6, UE-25 UZ#5, USW UZ-7A and USW SD-12 for the Time Period 4/1/98 through 9/30/98." Submittal date: 07/15/2004. [171748]

GS031208312232.001. "Deep Unsaturated Zone Instrumentation Data from Boreholes USW NRG-7A, UE-25 UZ#4, UE-25 UZ#5, USW UZ-7A and USW SD-12 for 10/01/98 through 03/31/99." Submittal date: 07/15/2004. [178752]

GS000708312232.004. "Deep UZ Surface-Based Borehole Instrumentation Program-Interim Data Submittal for Boreholes USW NRG-7A, UE-25 UZ#4, and UE-25 UZ#5. Data Were Collected between 4/1/99 and 3/31/00." Submittal date: 09/13/2000. [162174]

GS010908312232.001. "Deep Unsaturated Zone Surface-Based Borehole Instrumentation Program-Interim Data Submittal for Boreholes USW NRG-7A, UE-25 UZ#4, and UE-25 UZ#5. Data Were Collected between April 1, 2000 and March 31, 2001." Submittal date: 09/26/2001. [162175]

GS021008312232.00 1. "Deep Unsaturated Zone Surface-Based Borehole Instrumentation Program - Final Data Submittal for Boreholes USW NRG-7A, UE-25 UZ#4, and UE-25 UZ#5. Data Were Collected between April 1, 2001 and December 17, 2001." Submittal date: 12/12/2002. [162176]

GS031208312232.008. “Deep Unsaturated Zone Surface-Based Borehole Instrumentation Program Data from Boreholes USW NRG-7A, USW NRG-6, UE-25 UZ#4, UE-25 UZ#5, USW UZ-7A, and USW SD-12 for the Time Period 10/01/95 through 3/31/96.” Submittal date: 05/24/2004. [178750]

GS031208312232.004. “Deep Unsaturated Zone Surface-Based Borehole Instrumentation Program Data from Boreholes USW NRG-7A, UE-25 UZ #4, UE-25 UZ #5, USW UZ-7A and USW SD-12 for the Time Period 7/1/97 - 9/30/97.” Submittal date: 01/14/2004. [182187]

GS031208312232.006. “Deep Unsaturated Zone, Surface-Based Borehole Instrumentation Program - Data for Boreholes USW NRG-7A, USW NRG-6, UE-25 UZ#4, UE-25 UZ #5, USW UZ-7A, and USW SD-12, for the Period 8/16/96 through 12/31/96.” Submittal date: 05/24/2004. [182186]

GS031208312232.007. “Deep Unsaturated Zone Surface-Based Borehole Instrumentation Program Data for Boreholes USW NRG-7A, USW NRG-6, UE-25 UZ#4, UE-25 UZ#5, USW UZ-7A and USW SD-12 for the Time Period 4/1/96 through 8/15/96.” Submittal date: 05/24/2004. [178751]

GS950208312232.003. “Data, Including Water Potential, Pressure and Temperature, Collected from Boreholes USW NRG-6 and USW NRG-7A from Instrumentation through March 31, 1995.” Submittal date: 02/13/1995. [105572]

GS951108312232.008. “Data, Including Water Potential, Pressure and Temperature, Collected from Boreholes UE-25 UZ#4 & UZ#5 from Instrumentation through September 30, 1995, and from USW NRG-6 & NRG-7A from April 1 through September 30, 1995.” Submittal date: 11/21/1995. [106756]

GS031208312232.005. “Deep Unsaturated Zone Surface-Based Borehole Instrumentation Program Data from Boreholes USW NRG-7A, UE-25 UZ#4, UE-25 UZ#5, USW UZ-7A and USW SD-12 for the Time Period 1/1/97 - 6/30/97.” Submittal date: 05/24/2004. [179284]

GS950408318523.001. “Temperature, Thermal Conductivity, and Heat Flow Near Yucca Mountain, Nevada.” Submittal date: 04/21/1995. [107244]

GS930208318523.001. Borehole temperatures from Sass, J.H., Lachenbruch, A.H., Dudley Jr., W.W., Priest, S.S., Munroe, R.J., 1988. “Temperature, thermal conductivity and heat flow near Yucca Mountain, Nevada: some tectonic and hydrologic implications.” USGS Open File Rep. 87-649. U.S. Geological Survey, Denver, CO.