



Department of Energy
Office of Civilian Radioactive Waste Management
1551 Hillshire Drive
Las Vegas, NV 89134-6321

QA: N/A
Project No. WM-00011

MAY 23 2007

OVERNIGHT MAIL

ATTN: Document Control Desk
Director, Division of High-Level Waste
Repository Safety
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

TRANSMITTAL OF ALIQUOTS OF ATMOSPHERIC DUST SAMPLES

Reference: Ltr, Davis to Williams, dtd 4/10/07 (Request for Aliquots of Atmospheric Dust Samples)

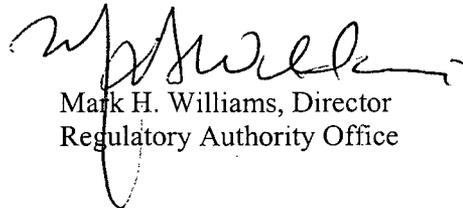
In the above referenced letter, the U.S. Nuclear Regulatory Commission (NRC) and its contractor, the Center for Nuclear Waste Regulatory Analyses, requested specific samples of aliquots of atmospheric dust collected by the U.S. Department of Energy (DOE) and its contractors in the vicinity of Yucca Mountain. Pursuant to a teleconference held on April 19, 2007, between Sandia National Laboratories/Lead Laboratory, DOE, U.S. Geological Survey, and NRC, the list of samples and the sample attributes were agreed upon. The samples have been split and are at the Sample Management Facility and will be shipped to:

Southwest Research Institute
ATTN: Miriam Juckett
6220 Culebra Road, Building 189
San Antonio, TX 78238

Enclosed are the two lists (Enclosures 1 and 2) of the samples requested.

There are no new regulatory commitments in this letter or its enclosures.

Please direct any questions concerning this letter to J. Russell Dyer at (702) 794-1408 or e-mail russ_dyer@ymp.gov, or Drew H. Coleman at (702) 794-5537 or e-mail drew_coleman@ymp.gov.



Mark H. Williams, Director
Regulatory Authority Office

RAO:AVG-1020

Enclosures:

1. Splits of Dust Samples Sent from the USGS/YMPB Geochemistry Team to the Sample Management Facility
2. Splits of Torit Cyclone Dust Sample Inventory

WM5507

MAY 23 2007

cc w/encls:

M. G. Bailey, NRC, Rockville, MD
B. J. Benney, NRC, Rockville, MD
A. C. Campbell, NRC, Rockville, MD
J. C. Chen, NRC, Rockville, MD
J. R. Davis, NRC, Rockville, MD
Jack Guttman, NRC, Rockville, MD
R. K. Johnson, NRC, Rockville, MD
David Misenhimer, NRC, Rockville, MD
A. S. Mohseni, NRC, Rockville, MD
J. L. Rubenstone, NRC, Rockville, MD
N. K. Stablein, NRC, Rockville, MD
S. A. Whaley, NRC, Rockville, MD
M. C. Wong, NRC, Rockville, MD
D. B. Spitzberg, NRC, Arlington, TX
L. D. Wert, Jr., NRC, Arlington, TX
R. M. Latta, NRC, Las Vegas, NV
J. D. Parrott, NRC, Las Vegas, NV
M. P. Lee, ACNW, Rockville, MD
M. T. Ryan, ACNW, Rockville, MD
W. C. Patrick, CNWRA, San Antonio, TX
Budhi Sagar, CNWRA, San Antonio, TX
J. R. Egan, Egan, Fitzpatrick, Malsch & Cynkar, Vienna, VA
J. H. Kessler, EPRI, Charlotte, NC
M. J. Apted, Monitor Scientific, LLC, Denver, CO
Rod McCullum, NEI, Washington, DC
W. D. Barnard, NWTRB, Arlington, VA
Pat Guinan, State of Nevada, Carson City, NV
R. R. Loux, State of Nevada, Carson City, NV
Alan Kalt, Churchill County, Fallon, NV
Irene Navis, Clark County, Las Vegas, NV
E. A. Mueller, Esmeralda County, Goldfield, NV
Ron Damele, Eureka County, Eureka, NV
Susan Cash, Inyo County, Bishop, CA
Chuck Chapin, Lander County, Battle Mountain, NV
Wade Poulsen, Lincoln County, Pioche, NV
Linda Mathias, Mineral County, Hawthorne, NV
David Swanson, Nye County, Pahrump, NV
Clinton Eldridge, White Pine County, Ely, NV
R. I. Holden, National Congress of American Indians, Washington, DC

Splits of Dust Samples Sent from the USGS/YMPB Geochemistry Team to the Sample Management Facility

(all of the samples are approximately 10 grams as verified on a one-place (0.1 gram sensitivity) balance)

Sample #	Collection Date	Collector	Sample Location	Elev. (feet)	Sample Description	Sample Collection Report	Data Tracking Number
SPC01030800	06/29/04	Peterman	Yucca Crest 36°49.861' N 116°28.100' W	4,876	Small deposit of vesicular "A" horizon below patch of desert pavement	SIT.20040729.0008	GS060908313000.004
SPC01030803	06/29/04	Peterman	Yucca Crest 36°49.285' N 116°28.028' W	4,835	Dust from dust-filled cavity on a flat rock; cavity is about 10 x 20 cm and 10 cm deep	SIT.20040729.0008	GS060908313000.004
SPC01030805	06/29/04	Peterman	Yucca Crest 36°51.464' N 116°27.984' W	4,860	Dust from flat rock	SIT.20040729.0008	GS060908313000.004
SPC01030807	06/29/04	Peterman	Yucca Crest 36°50.271' N 116°28.153' W	4,930	Dust from large cavity on flat rock; cavity has also collected H2O	SIT.20040729.0008	GS060908313000.004
SPC00574980	02/12/02	Paces	ESF Station 2+23.7 to 2+24.7	NA	Bedded tuff just past the Bow Ridge Fault; finest material is in lee of ribs; friable tuff may have been included	MOL.20020709.0117	MO0209EBSDUST2.030
SPC00574982	02/12/02	Paces	ESF Station 8+61 to 8+62.7	NA	PTn; good sample with even dust coating; smooth wall and non-friable substrate	MOL.20020709.0117	MO0209EBSDUST2.030
SPC00574983	02/12/02	Paces	ESF Station 12+63.2 to 12+65.4	NA	Tptrn; good sample; relatively smooth wall; thin, even coating of fine dust	MOL.20020709.0117	MO0209EBSDUST2.030
SPC00574987	02/12/02	Paces	ESF Station 30+07 to 30+09	NA	Tptpmn or Tptpul; smooth, densely welded walls with good coating of dust	MOL.20020709.0117	MO0209EBSDUST2.030

Splits of Torit Cyclone Dust Sample Inventory

Sample #	Sampling Period	Sampling Location	Sample Type	Weight of Sample Provided (g)	Accession Number of Sample Collection Report
SPC01037535	3/28/06 -5/18/06	South Portal	Torit Cyclone (Vortex)	0.2126	SIT.20060731.0109
SPC02043004	5/18/06 - 6/7/06	South Portal	Torit Cyclone (Vortex)	0.2135	SIT.20060731.0108
SPC02043008	6/19/06 -7/13/06	South Portal	Torit Cyclone (Vortex)	0.2002	SIT.20060731.0108
SPC02043025	7/13/06 -8/8/06	South Portal	Torit Cyclone (Vortex)	0.2009	SIT.20060925.0044
SPC02043027	8/8/06 - 9/6/06	South Portal	Torit Cyclone (Vortex)	0.2264	SIT.20060925.0044
SPC02043031	9/6/06 - 11/1/06	South Portal	Torit Cyclone (Vortex)	0.2152	not yet available
SPC02043033	11/1/06 - 1/4/07	South Portal	Torit Cyclone (Vortex)	0.2385	not yet available
SPC02043037	1/4/07 - 3/22/07	South Portal	Torit Cyclone (Vortex)	0.2106	not yet available