



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 16, 1997

Dr. Stephan Brocoum
Assistant Manager for Licensing
U.S. Department of Energy
Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
P. O. Box 30307
Las Vegas, Nevada 89036-0307

**SUBJECT: TRANSMITTAL OF ASHPLUME CODE, TECHNICAL DESCRIPTION AND
USERS GUIDE**

Dear Dr. Brocoum:

In response to your request in your June 4, 1997, letter, we are transmitting one copy of the code "Ashplume Version 1.0, Revision 1", along with the technical description and users guide. This code was developed at the Center for Nuclear Waste Regulatory Analyses (CNWRA) to evaluate the effects of direct disruption of a repository by volcanic activity and to provide a method for modeling volcanic ash dispersion that has been contaminated by waste from a repository. While the code you have received is in the stand-alone mode, Ashplume has also been incorporated into the U.S. Nuclear Regulatory Commission Total System Performance Assessment code.

As this code was developed at the CNWRA, we would recommend that, if technical assistance is needed, you contact Mark Jarzempa, Center for Nuclear Waste Regulatory Analyses, Southwest Research Institute, P.O. Drawer 28510, San Antonio, Texas 78238-0566 (phone number (210) 522-6828). In addition, Brittain Hill of the CNWRA (phone number (210) 522-6087) has considerable experience testing and implementing the code, primarily with data from Cerro Negro, and can provide insight into assumptions and input parameters.

1/0

102.8
WM-11
NH16

9707220054 970716
PDR WASTE
WM-11 PDR

220043



If there are any other questions regarding this code, please contact me at (301) 415-7252 or John Trapp at (301) 415-8063.

Sincerely,
Original Signed By
Newton K. Stablein, Acting Branch Chief
Engineering and Geosciences Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosures: As stated

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