

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

NOV 1 7 2011

OFFICE OF AIR AND RADIATION

Mr. Ed Ziernianski Carlsbad Field Office U.S. Department of Energy P.O. Box 3090 Carlsbad, NM 88221-3090

Dear Mr. Ziemianski,

I am writing in response to your August 11, 2011 Planned Change Notice to the U.S. Environmental Protection Agency. This notice states that the U.S. Department of Energy (DOE) will be initiating mining activities for the Salt Disposal Investigations (SDI) project. The DOE has stated the objective of the SDI experiment is to investigate thermal and hydro-geochemical responses of temperature sources points in excess of 160° C located in bedded salt.

The project consists of two phases. The initial preparatory phase consists of mining new access drifts and the location of the planned tests. This will take more than a year to complete. The second phase is planned to consist of tests involving heaters to simulate the effects of hot waste on salt. These tests are similar to previous lower temperature tests that were conducted at the Waste Isolation Pilot Plant (WIPP) prior to waste emplacement. The actual tests will not commence for a least several years.

After reviewing the DOE's proposal – including Section 3.5.3 of "Management Proposal for Salt Disposal Investigations Proposal With a Field Scale Heater Test At WIPP" (June 2011, DOE/CBFO-11-3470 Revision 0) – and responses to the Agency's questions related to the effects of increasing the mined area, the EPA has no objection to the Department conducting the initial preparatory phase of the SDI program. The EPA's review of the SDI proposal finds the mining phase of the SDI activities will not adversely impact WIPP's waste handling activities, air monitoring, disposal operations, or long-term repository performance. If the DOE changes the proposed SDI experimental drift or alcove configuration a written notification needs to be submitted to the EPA.

The Department's initial SDI proposal included a conceptual heater test analysis which indicated that there will be no adverse affect to the repository as a result of the planned tests. The Agency understands that the DOE will be developing a final design for the heater tests at a future date. The EPA will provide a decision on the heater tests once we receive and review the final heater test design.

Sincerely,

Jonathan Edwards

Director, Radiation Protection Division

cc: Frank Marcinowski, DOE/HQ Christine Gelles, DOE/HQ Alton Harris, DOE/HQ Russ Patterson, DOE/CBFO Steve Kouba, RES Art Chavez, RES