UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, DC 20460

August 17, 2023

OFFICE OF
AIR AND
RADIATION

Mr. Mark Bollinger
Manager
Carlsbad Field Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, New Mexico 88221

Subject: Start of Experimental Activities Associated with Hydrogen Safety Sensor Testing in the Waste Isolation Pilot Plant (WIPP) Northern Underground Experimental Area

Dear Mr. Bollinger:

The U.S. Environmental Protection Agency has reviewed the Department of Energy's (DOE) Planned Change Notice (PCN) of July 13, 2023, regarding the start of experimental activities to test a hydrogen (H_2) safety sensor. The submitted PCN meets the requirements established in EPA's 2003 letter[1] and based on DOE's representations, EPA finds no issues with the proposed activities. EPA agrees that no modifications or impacts to waste disposal processes or operations will occur as a result of these experiments. The planned activities will not alter either the facility's ability to safely emplace waste or the current certified design of the disposal system, and the <5.5% mixture of H_2 gas with nitrogen/argon does not appear to be a flammable hazard.

For this and any other experiments, DOE should provide status updates in the change reports required by 40 C.F.R. § 194.4 (b)(4). Please be advised that this letter does not in any way constitute a determination that DOE has actual statutory authority under the WIPP Land Withdrawal Act to conduct such activities, nor is this letter intended to indicate in any manner the Agency's opinion on this question.

EPA appreciates DOE's adherence to established processes for approving experimental activities at the WIPP. If you have any questions, please contact Tom Peake at (202) 343-9765.

Sincerely,

Lee Veal Digitally signed by Lee Veal
Date: 2023.08.17 18:24:02 -04'00'

Lee Ann B. Veal
Director
Radiation Protection Division

[1] Marcinowski, F. EPA letter from Frank Marcinowski, Director, EPA Radiation Protection Division, Office of Radiation and Indoor Air to Dr. Ines Triay, Manager, Carlsbad Field Office. March 11, 2003.

cc: Tom Peake, EPA ORIA
Dan Schultheisz, EPA ORIA
Jonathan Walsh, EPA ORIA
Harry Shah, EPA Region 6
EPA WIPP Team
Michael Gerle, DOE CBFO
Anderson Ward, DOE CBFO
Betsy Forinash, DOE CBFO
George Basabilvazo, DOE CBFO