



**Department of Energy**  
 Carlsbad Field Office  
 P. O. Box 3090  
 Carlsbad, New Mexico 88221  
 April 16, 2020



Ms. Avery Young  
 Ground Water Quality Bureau  
 New Mexico Environment Department  
 P.O. Box 5469  
 Santa Fe, New Mexico 87502-5469

**Subject:** Permittee Comments on the Draft Discharge Permit Renewal and Modification, DP-831, Waste Isolation Pilot Plant.

Dear Ms. Young:

The purpose of this letter is to provide you with the enclosed comments on the March 2, 2020, Draft Discharge Permit Renewal and Modification, DP-831, Waste Isolation Pilot Plant.

If you have any questions, please contact Mr. Mike Brown at (575) 234-7476.

Sincerely,

Gregory  
 Sosson

Digitally signed by Gregory Sosson  
 DN: c=US, o=U.S. Government,  
 ou=Department of Energy, ou=Energy  
 IT Services, ou=DOE Common  
 Operating Environment, ou=People,  
 cn=Gregory Sosson  
 Date: 2020.04.16 11:58:15 -0600

Gregory Sosson  
 Acting Manager  
 Carlsbad Field Office

Enclosure

cc: w/enclosure  
 M. Hunter, NMED           \*ED  
 R. Maestas, NMED        ED  
 K. Pierard, NMED         ED  
 S. Pullen, NMED          ED

CBFO M&RC  
 \*ED denotes electronic distribution

**SCANNED**



## Permittee Comments on Draft Discharge Permit Renewal and Modification, DP-831

### Waste Isolation Pilot Plant

#### **COMMENT 1 - Discharge Permit Summary, Non-Domestic Waste Water**

The freeboard information for Salt Storage Pond 5 in the *Discharge Permit Summary, Non-Domestic Waste Water* table attached at the end of the draft permit is inconsistent with draft permit Condition #4 shown below.

*The permittee shall preserve a minimum of one foot of freeboard between the liquid level in all the impoundments and the elevation of the top of the impoundment liner, except the Brine Retention Ponds East and West shall maintain two feet of freeboard. In the event that the permittee determines that the specified freeboard cannot be preserved in the impoundments, the permittee shall enact the contingency plan set forth in this Discharge Permit.*

The *Description and Comments* for the Salt Storage Pond 5 in the *Non-Domestic Wastewater* table states that this impoundment is "...permitted two feet of freeboard..." This is inconsistent with permit Condition 4 (shown above) which requires one foot of freeboard. Please revise the entry to make the Discharge Permit Summary table and permit Condition 4 consistent by changing "...permitted two feet of freeboard..." to "...permitted one foot of freeboard..." so that the description reads as shown in the redline strike out text below:

*To be constructed, 60-mil HDPE liner, 200-mil geonet drainage layer, and a second 60-mil HDPE liner with a leak detection system; disposal by evaporation; permitted **one foot** ~~two feet~~ of freeboard; capacity of 6,355,404 gallons.*

**COMMENT 2 – Draft Discharge Permit Condition #54:** Recommend changing the word "measure" to "estimate" in reference to hydraulic conductivity in Condition #54 as shown in the redline strikeout text below. Aquifer parameters estimates are not obtained through measurement, but calculated based on hydraulic data obtained through the aquifer testing.

*The permittee shall perform aquifer testing to determine the local hydraulic properties of the aquifer near the monitoring wells required by this Discharge Permit and that contain groundwater within 60 days of the complete installation of each new monitoring well. The purpose of the aquifer testing shall be to quantify the movement of groundwaters in the vicinity of each well or piezometer. Aquifer testing shall be performed in wells in both the shallow groundwater and in the natural groundwater in the Dewey Lake Formation where groundwater is present. Aquifer testing shall **estimate** ~~measure~~ hydraulic conductivity, transmissivity, and storage coefficient and shall be performed utilizing procedures previously utilized at the facility so as to produce comparable results.*

*The **estimated** ~~measured~~ hydraulic properties for each monitoring well shall be submitted to NMED within 120 days of the installation of the monitoring wells in a cumulative well report.*