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Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

SEP 14 2018



Ms. Michelle Hunter, Bureau Chief
Ground Water Quality Bureau
New Mexico Environment Department
Harold Runnels Building
P.O. Box 5469
Santa Fe, NM 87502-5469

Subject: Notification of Discharge: One Week Written Notification and 15-Day Corrective Action Plan, Discharge Permit 831

Dear Ms. Hunter:

The purpose of this letter is to provide the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) with the subject notification, and corrective action plan pursuant to the Contingency Plan notification requirements in Discharge Permit 831 (DP-831), issued to the U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO). This notification is a follow-up to the 24-hour verbal notifications provided to Mr. Ron Strauch on September 4 and 10, 2018 and reflects the action plan discussed with Mr. Strauch. The following items are being addressed per DP-831 Conditions 31 and 32, of the Permit Contingency Plan section:

Permit Condition 31

Initial actions to reestablish freeboard were implemented on September 4, 2018, and were temporarily successful because additional precipitation occurred September 4 – 10, 2018.

This Contingency Plan addresses the excess above freeboard in Storm Water Ponds 2 and 3, with the intent to discharge this excess storm water outside of Storm Water Pond 3. It was anticipated that the transfer would have been completed by September 14, 2018.

Subsequent to the call to Mr. Strauch on September 4, another call was made to Mr. Strauch on September 10, after the WIPP facility received additional precipitation over the period September 7-10. With the soil saturated, this additional rainfall ran off into the storm water ponds, filling the ponds to capacity, and ultimately causing storm water to go over the outfall of Storm Water Pond 3. In addition, to maintain freeboard and prevent berm erosion around Storm Water Ponds 1 and 2, storm water was transferred to Storm Water Pond 3 as a corrective measure.

As the current matter addresses storm water runoff only, no further corrective measures are proposed. The other evaporation ponds, associated with the sewage treatment facility, and salt water containment are well below freeboard.



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Permit Condition 32

This report confirms the call to Mr. Strauch on September 4 and September 10, 2018, informing the GWQB of the need to discharge storm water from Storm Water Pond 3 to the ground surface to maintain freeboard capacity. Storm water will be transferred from Storm Water Pond 2 to Storm Water Pond 3 to achieve the proper freeboard. After freeboard is attained in both of the Ponds, the DOE will end the discharge, and evaporation will continue to decrease water levels.

Contingency Plan Information

The following information (a-g) completes the one-week notification, required in Section 32 in the DP-831 Permit.

- (a) The name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility:

Person in charge of the facility:

Todd Shrader, Manager
P.O. Box 3090
Carlsbad, New Mexico, 88221
(575) 234-7300

Owner of the facility:

U.S. Department of Energy

Operator of the facility:

Nuclear Waste Partnership LLC

- (b) Name and address of the facility:

U.S. Department of Energy
Waste Isolation Pilot Plant (WIPP)
26 miles southeast of Carlsbad, New Mexico off of State Highway 128
Carlsbad, NM 88220

- (c) The date, time, location, and duration of the discharge:

Date: September 7-14, 2018
Time: N/A
Location: WIPP Facility (Latitude: 32 22.589, Longitude 103 47.746)
Duration of Discharge: September 7, 2018 – September 14, 2018.

- (d) The source and cause of the discharge:

Source: Runoff from the WIPP facility occurring from high precipitation events September 4 – September 9, 2018.

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Cause of discharge:

September 4, 2018 through September 10, 2018 the WIPP Facility received 4.61 inches of precipitation. On September 4, 2018, the CBFO informed the GWQB of the less-than-one foot of freeboard in Storm Water Pond 2 and outflow from Storm Water Pond 3.

(e) A description of the discharge, including chemical composition:

The outflow from Storm Water Pond 3 was storm water runoff from the WIPP facility. Historical chemical sampling and analysis from storm water runoff have shown no exceedances of analyte limits. Samples will be collected consistent with DP-831 Condition 20 and the chemical composition will be noted in the next semi-annual report submitted to the GWQB.

(f) The estimated volume of the discharge:

There is no device for measuring the overflow of Storm Water Pond 3. Discharge volumes were calculated using standard stream flow calculations. Also, amounts of water outflow are conservative estimations. Storm Water Pond 3 has an engineered spillway to prevent erosion. Therefore, there is no erosion damage to pond berms or liner integrity. The estimated amount of outflow from the spillway and from pumping to the ground surface is as follows:

Storm Water Pond 3 – 740,000 gallons

(g) Any actions taken to mitigate immediate damage from this discharge:

On September 6, 2018, water was pumped from the Storm Water Pond 2 into Storm Water Pond 3 at a rate of approximately 1,000 gallons per minute so that freeboard could be maintained in Pond 2.

Corrective Action Plan

The following information (a-c) completes the 15-day Corrective Action Report/Plan required in Section 32 in the DP-831 Permit.

a) A description of proposed actions to prevent future unauthorized discharge.

Corrective measures include allowing Storm Water Pond 3 to overflow through the designed outflow. In addition, clean storm water will be pumped from Storm Water Pond 3 to the ground surface to keep Storm Water Pond 3 within permitted requirements. If additional rainfall occurs, the storm water will be allowed to overflow the Storm Water Ponds.

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- b) A description of proposed actions to prevent future unauthorized discharges of this nature.

The DOE attempts to contain as much storm water as possible in order to minimize recharge to an anthropogenic water table beneath the facility. When the rainfall amounts to more that can be managed to maintain freeboard, excess storm water is discharged. Clean storm water is not regulated by the GWQB.

- c) A schedule for completion of proposed actions.

Freeboard in Storm Water Ponds 1 and 2 have already been achieved. Recovery of freeboard in Storm Water Pond 3 was achieved on September 13, 2018.

Upon review of this matter, it is believed that this outflow of storm water runoff poses no threat to human health and environment. The corrective actions described are intended to meet all notification requirements of DP-831 with no additional documentation transmittal to the GWQB required, if events remain unchanged. If conditions or additional information changes the path forward, the GWQB will be notified. Results of this effort will be included in the next semi-annual report submitted to the GWQB.

If you have any further questions regarding this matter or need additional information, please contact me at (575) 234-7476.

Sincerely,



Michael R. Brown, Director
Office of Environmental Protection

cc:

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