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



JUL 26 2018

Ms. Michelle Hunter, Bureau Chief
New Mexico Environment Department
Ground Water Quality Bureau
Harold Runnels Building
1190 Saint Francis Drive
P.O. Box 5469
Santa Fe, NM 87502

Subject: Semi-Annual Discharge Monitoring Report for January 1 through June 30, 2018, Discharge Permit, DP-831

Dear Ms. Hunter:

The purpose of this letter is to transmit to you the Waste Isolation Pilot Plant Discharge Monitoring Report, including the required attachments on compact disc, for the period of January 1 through June 30, 2018. This report is required by Discharge Permit, DP-831.

If you have any questions about this report or require any additional information, please contact me at (575) 234-7476.

Sincerely,


Michael R. Brown, Director
Office of Environmental Protection

Enclosure (2)

cc: w/o enclosures
R. Strauch, NMED, GWQB *ED
R. Maestas, NMED, HWB ED
CBFO M&RC
*ED denotes electronic distribution



**Waste Isolation Pilot Plant
Semi-Annual Discharge Monitoring
Report for Discharge Permit DP-831
for Reporting Period January 1,
2018 through June 30, 2018**

U.S. Department of Energy

July 2018



**WASTE ISOLATION PILOT PLANT
SEMI-ANNUAL DISCHARGE MONITORING REPORT FOR DISCHARGE
PERMIT DP-831
FOR REPORTING PERIOD
JANUARY 1, 2018 THROUGH JUNE 30, 2018**

REPORTING REQUIREMENTS OF DP-831 OPERATIONAL PLAN

Part B. Applicable to the Facultative Lagoon System

Condition 8. – The permittee shall measure the thickness of the sludge blanket in each pond of the Facultative Lagoon System once within the effective term of this Discharge Permit, but before the end of 2018. When sludge accumulation exceeds 1/3 of the total depth of any pond, the permittee shall remove the sludge in a manner, which is protective of the pond liner. Removed solids shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations. The permittee shall maintain solids blanket measurements and solids disposal manifests for solids transported from the facility for off-site disposal. The permittee shall submit all measurements and manifests to NMED in the semi-annual monitoring report immediately following the solids thickness measurement.

No sludge measurements were performed on the Facultative Lagoon System ponds during this reporting period. The most recent sludge measurements were made in November 2017 and the results were reported in the second semi-annual report for 2017.

Part D. Applicable to the Storm Water Runoff Impoundments in Contact with Salt Stockpiles (Salt Storage Ponds 1, 2, and 3) and Salt Stockpiles (Salt Cells 1, 2, and 3).

Condition 9. – The permittee shall measure the thickness of the solids blanket in each impoundment once within the effective term of this Discharge Permit, but before the end of 2018. Removed solids shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations. The permittee shall maintain solids blanket measurements and solids disposal manifests for solids transported from the facility for off-site disposal. The permittee shall submit all measurements and manifests to NMED in the semi-annual monitoring report immediately following the solids thickness measurement.

Sludge blanket measurements were performed on all three of the Salt Storage Ponds on February 14, 2018. Only the sludge in Salt Storage Pond 2 reached the 1/3 total depth of the pond. An Action Request was placed in the work order system to remove the sludge from Salt Storage Pond 2. A cost estimate has been performed by the Engineering group for the removal of salt from Salt Storage Pond 2. Table 1 shows the location and results of the measurements.

Table 1- Sludge Blanket Measurements of the Salt Storage Ponds

Pond Name	Location	Date	Sludge Thickness (ft.)	Maximum Allowable Thickness (ft.)*
Salt Storage Pond 1	Staff Gauge	02/14/2018	0.25	1.30
Salt Storage Pond 2	Staff Gauge	02/14/2018	4.63	2.66
Salt Storage Pond 3	Staff Gauge	02/14/2018	5.14	6.66

*Maximum allowable thickness corresponds to the 1/3 of the total depth of the Ponds.

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Condition 10. – *The permittee shall inspect the leak detection systems for Salt Storage Ponds 2 and 3 on a monthly basis for the presence of liquid. The permittee shall keep a log of the inspection findings and repairs made. The inspection log, including a statement whether or not liquids were observed in the leak detection systems, shall be submitted to NMED in the semi-annual monitoring reports.*

Monthly inspections of the Salt Storage Pond 2 and 3 leak detection systems occurred during this reporting period. Water was observed in both of the leak detection systems. The sumps of Salt Storage Ponds 2 and 3 were pumped. There were 9,100 gallons pumped from the Salt Storage Pond 2 Sump and 35,200 gallons pumped from the Salt Storage Pond 3 Sump. The average leakage rate was calculated to be 19 gallons per day for Salt Storage Pond 2 and 73 gallons per day in Salt Storage Pond 3 since the last time the sumps were pumped. The Action Leakage Rate for Salt Storage Pond 2 is 706 gallons per day and Salt Storage Pond 3 is 1,880 gallons per day. Both of the leakage rates were well below the Action Leakage Rate using EPA Standard EPA 530-R-92-004, NTIS #PB 92-128 214. Therefore, no excessive leakage rates were determined. The inspection log can be found on the accompanying compact disc (CD) as a portable document format (pdf) file named “Salt Pond Sump Inspection 1st Half 2018.pdf.”

There were no repairs required to the leak detection system during this reporting period.

Condition 11. – *The permittee shall conduct regular maintenance of the earthen cover on the Salt Cell 1, and SPDV material pile. Inspections shall be conducted monthly and after storm events of 2 inches or greater in a 24-hour period to evaluate potential erosion and vegetation success of the cover. In the event of significant erosion or failure of vegetative success, the permittee shall provide a plan and schedule for repair within 90 days of discovery. General observations and cover repair shall be reported to NMED.*

The earthen cover of the Salt Cell 1 and the Site and Preliminary Design Validation (SPDV) material pile were inspected monthly for the reporting period. The soil cover overlying the synthetic liner on both piles was noted as needing repair in the reporting period. An Action Request was written, and the project has been added to the Financial Review List to prioritize funding for the repairs.

There were two rain events of 2 inches or greater in a 24-hour period in this reporting period (June 3 and June 16). After these events, appropriate inspections were performed on the earthen covers, ponds, and liners for repair and erosion as required after a rain event of 2 inches in a 24-hour period. No additional damage, other than that noted above, was observed in these inspections.

REQUIREMENTS OF DP-831 MONITORING AND REPORTING SECTION

Part B. Applicable to the Facultative Sewage Lagoon System

Condition 15. – *The volume of domestic influent discharged to the Facultative lagoon System shall be measured monthly using a totalizing flow meter on the influent line to the system or the totalizing meter that measures total domestic water usage. Volumes of other authorized discharges to the Facultative Lagoon System shall be calculated by a time/volume method or volumetric measurement of the transport container(s). NMED may require comprehensive laboratory analyses of such wastewater prior to discharge when NMED determines that additional information is needed. Monthly meter readings, the units of measurement, monthly discharge volumes and other volumetric calculations for the previous 6-month period shall be submitted to NMED semi-annually in the monitoring reports.*

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Table 2 shows the volume of water discharged to the Facultative Lagoon System for this reporting period. Discharged water volume is based on total raw water use. No miscellaneous non-hazardous water was discharged to Evaporation Lagoons B or C.

Table 2 – Discharge to Facultative Lagoon System

Month	Volume (gallons)
January	339,888
February	341,631
March	352,189
April	405,402
May	632,973
June	427,188
Total	2,499,271

Weekly meter readings of the domestic water meter are found on the accompanying CD as a pdf file named “Water Discharge to Facultative System 1st Half of 2018.pdf.”

***Condition 16.** – The permittee shall collect a wastewater sample on a semi-annual basis (once every six months) from the influent to the Facultative Lagoon System. The grab sample shall be analyzed for TKN, NO₃-N, SO₄, TDS, and Cl. Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results shall be submitted to NMED in the semi-annual monitoring reports.*

Samples were collected from the Settling Lagoon 2 influent, which is the influent to the Facultative Lagoon System.

Table 3 – Facultative Lagoon System Analytical Data

Analyte	Sample Date	Settling Lagoon 2 Concentration (mg/L)
TKN	05/30/18	109
NO ₃ -N	05/30/18	ND
SO ₄	05/30/18	52.0
TDS	05/30/18	2,000
Cl	05/30/18	62.7

TKN: Total Kjeldahl nitrogen

TDS: Total dissolved solids

ND: Not detected, analyte below the method detection limit

Laboratory analytical results and QA/QC Summary Report for the Facultative Lagoon System are found as a pdf file on the accompanying CD named “Facultative Lagoon and H-19 Analytical and QA-QC.pdf.”

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Part C. Applicable to the Evaporation Pond H-19 and Storm Water Impoundments Not in Contact with Salt Stockpiles (Storm Water Ponds 1, 2, and 3)

Condition 17. – The volume and origin of all wastewater discharged to the Evaporation Pond H-19 that is derived from miscellaneous non-hazardous sources shall be measured monthly and reported to NMED. Discharge volumes to the Evaporation Pond H-19 shall be calculated by a time/volume method or volumetric measurement of the transport container(s). NMED may require comprehensive laboratory analyses of such wastewater prior to discharge when NMED determines that additional information is needed. Monthly discharge volumes and other volumetric calculations for the previous 6-month period shall be submitted to NMED semi-annually in the monitoring reports.

Table 4 shows the volume of miscellaneous non-hazardous water discharged to Evaporation Pond H-19 for this reporting period. This water is from groundwater well pumping (GW), condensate from the Exhaust Shaft ductwork (ES), and Waste Shaft sump water (WS).

Table 4 – Discharge to H-19 Evaporation Pond

Month	Volume (gallons)	Water Origin
January	0	-
February	5,510	ES & WS
March	0	-
April	0	-
May	5,680	GW & WS
June	3,695	GW & WS
Total	14,885	

Condition 18. – A sample shall be collected semi-annually from the Evaporation Pond H-19 and analyzed for SO₄, Cl, and TDS. Samples shall be collected annually after a significant storm event from each of the storm water ponds, Storm Water Ponds 1, 2, and 3 and analyzed for SO₄, Cl, and TDS. Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results shall be submitted to NMED in the semi-annual monitoring report.

Analytical results, including the laboratory QA/QC summary report, shall be submitted to NMED in the semi-annual monitoring reports.

The second significant storm event occurred on June 16, 2018. Samples from Evaporation Pond H-19 and Storm Water Ponds 1, 2, and 3 will be collected in the second half of 2018, and reported in the second semi-annual report which is due February 1, 2019.

Evaporation Pond H-19 was not sampled during this reporting period because there was not enough water in the pond during the sampling event.

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Table 5 – Storm Water Ponds and Evaporation Pond H-19 Analytical Data

Analyte	Sample Date	Evaporation Pond H-19	Storm Water Pond 1	Storm Water Pond 2	Storm Water Pond 3
SO ₄ (mg/L)	NS	NS	NS	NS	NS
Cl (mg/L)	NS	NS	NS	NS	NS
TDS (mg/L)	NS	NS	NS	NS	NS

NS – not sampled during this reporting period. Samples will be collected and reported in the second semi-annual report for 2018.

Condition 19. – The water depth shall be measured monthly to the nearest tenth of a foot (0.1 ft) in the Storm Water ponds 1, 2, and 3. The approximate volume of storm water shall be calculated and submitted to NMED in the semi-annual monitoring reports.

Table 6 – Storm Water Ponds Depths and Volumes

	January 01/15/18	February 02/19/18	March 03/08/18	April 04/24/18	May 05/08/18	June 06/04/18
Storm Water Pond 1						
Water Depth (ft)	0.7	0.4	0.2	0.0	0.0	1.7
Water Volume (gal)	97,390	55,651	27,826	0	0	236,518
Storm Water Pond 2						
Water Depth (ft)	4.2	3.9	3.7	2.8	2.6	4.3
Water Volume (gal)	1,443,483	1,340,377	1,271,639	962,322	893,584	1,477,851
Storm Water Pond 3						
Water Depth (ft)	2.8	2.5	2.3	1.6	1.2	3.0
Water Volume (gal)	4,038,701	3,605,983	3,317,505	2,307,829	1,730,872	4,327,180

Part D. Applicable to the Storm Water Runoff Impoundments in Contact with Salt Stockpiles (Salt Storage Ponds 1, 2, and 3) and Salt Stockpiles (Salt Cells 1, 2, and 3)

Condition 20. – A sample shall be collected annually after a significant storm event from each of the Salt Storage Cells 1, 2, and 3 and analyzed for SO₄, Cl, and TDS. Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results shall be submitted to NMED in the semi-annual monitoring reports.

Analytical results, including the laboratory QA/QC summary report, shall be submitted to NMED in the semi-annual monitoring reports.

Two significant storm events occurred, one on June 3 and the other on June 16, 2018. Samples from Salt Storage Ponds 1, 2, and 3 will be collected and reported in the next reporting period for 2018.

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Condition 21. *The water depth shall be measured monthly to the nearest tenth of a foot (0.1 ft) in the Salt Storage Ponds 1, 2, and 3. The approximate volume of storm water shall be calculated and submitted to NMED in the semi-annual monitoring reports.*

Table 7 – Salt Storage Ponds Depths and Volumes

	January 01/15/18	February 02/19/18	March 03/08/18	April 04/24/18	May 05/08/18	June 06/04/2018
Salt Storage Pond 1						
Water Depth (ft)	0.0	0.0	0.0	0.0	0.0	0.5
Water Volume (gal)	0	0	0	0	0	569,247
Salt Storage Pond 2						
Water Depth (ft)	5.6	5.5	5.3	4.6	4.6	4.3
Water Volume (gal)	2,005,837	1,970,018	1,898,381	1,647,652	1,647,652	1,540,196
Salt Storage Pond 3						
Water Depth (ft)	12.4	12.0	12.0	11.6	11.4	11.0
Water Volume (gal)	14,186,418	13,728,792	13,728,792	13,271,166	13,728,792	12,584,726

Ground Water Monitoring and Reports

Condition 22. – *Depth to the water table shall be measured to the nearest hundredth of a foot (0.01 ft) quarterly in the piezometers/monitoring wells:*

- *PZ-1, PZ-2, PZ-3, PZ-4, PZ-5, PZ-6, PZ-7, PZ-8, PZ-9, PZ-10, PZ-11, PZ-12, PZ-13, PZ-14 and PZ-15*
- *C-2505, C-2506, C-2507, C-2811, and WQSP-6A*

For depth to the water in the piezometers and monitoring wells, see Table 8 – Monitoring Well Water Levels and Chemical Analyses.

Condition 23. – *The permittee shall perform semi-annual ground water sampling in the following piezometers/monitoring wells and analyze the samples for temperature, pH, specific conductance, SO₄, TDS, and Cl:*

- *Piezometers: PZ-1, PZ-5, PZ-6, PZ-7, PZ-9, PZ-10, PZ-11, PZ-12, and PZ-13*
- *Monitoring Wells: C-2507, C-2811, and WQSP-6A*

Ground water sample collection, preservation, transport and analysis shall be performed according to the following procedure:

- a) *Measure the depth-to-most-shallow ground water from the top of the well casing to the nearest hundredth of a foot.*
- b) *Purge three well volumes of water from the well prior to sample collection.*
- c) *Obtain samples from the well for analysis.*
- d) *Properly prepare, preserve and transport samples.*
- e) *Analyze samples in accordance with the methods authorized in this Discharge Permit.*

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Depth-to-most-shallow ground water measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED in the semi-annual monitoring reports.

Water levels in the shallow wells (PZ-1 through PZ-15, C-2811, C-2505, C-2506, and C-2507) were obtained in quarterly events; March 6 through March 7, 2018, and June 4 through June 6, 2018. Water levels are included in Table 8 – Monitoring Well Water Levels and Chemical Analyses. These were taken in accordance with quarterly milestones outlined in the Ground Water Monitoring Schedule specified in the Discharge Permit renewal, DP-831, dated July 29, 2014. During the reporting period, the water levels at the shallow subsurface water (SSW) monitoring points showed an average decrease in elevation of 0.08 feet. The drop in water elevation over this reporting period is most likely due to a low amount of precipitation during 2018.

The SSW piezometers, required to be sampled according to Condition 23, were sampled for field and general chemistry parameters on May 21 through May 23, 2018. Results for the field sampling parameters and laboratory analyses are presented in Table 8.

Laboratory analytical results and QA/QC Summary Report are found on the accompanying CD as a pdf file named “Shallow Surface Water Analytical and QA-QC.pdf”.

Condition 24. – *The permittee shall perform semi-annual ground water sampling from monitoring well WQSP-6A and analyzed for TKN and NO₃. Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results shall be submitted to NMED in the semi-annual monitoring reports.*

Analytical results, including the laboratory QA/QC summary report, shall be submitted to NMED in the semi-annual monitoring reports.

WQSP-6A was sampled on May 23, 2018. Sulfate, chloride, and total dissolved solids were detected in WQSP-6A samples at concentrations above standards of 20.6.2.3103 NMAC, *Standards for Ground Water of 10,000 mg/L TDS concentration or less for Human Health and Domestic Water Supply*. Although the concentrations were higher than the standards, they are less than background concentrations established in the *Waste Isolation Pilot Plant RCRA Background Groundwater Quality Baseline Report* (DOE/WIPP 98-2285). Nitrate was also detected but did not exceed the standards. Total Kjeldahl Nitrogen was below the detection limit of 1 mg/L. The SSW identified at the WIPP facility has not impacted the Dewey Lake groundwater in WQSP-6A based on the consistency of analyzed parameters in this well.

For WQSP-6A analytical results, see Table 8 – Monitoring Well Water Levels and Chemical Analyses.

Laboratory analytical results and QA/QC Summary Report for WQSP-6A samples are found on the accompanying CD as a pdf file named “Shallow Surface Water Analytical and QA-QC.pdf”.

Condition 25. – *Hydrographs shall be submitted annually for all monitoring wells and piezometers covered under Condition 22 of this Discharge Permit. At a minimum, graphs shall include the previous five years of water level*

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data, or for recently installed wells, all data since the well was installed. Data for several wells may be included on one graph.

The hydrographs of all monitoring wells and piezometers will be included in the second 2018 semi-annual report which is due February 1, 2019.

Condition 26. – *A potentiometric map for facility area shall be submitted annually. The map shall incorporate the most recent water level data for all monitoring wells and piezometers installed in the shallow subsurface water (SSW).*

The potentiometric map that incorporates the most recent water level data for all monitoring wells and piezometers installed in the shallow subsurface water will be included in the second 2018 semi-annual report which is due February 1, 2019.

Condition 27. – *A single table in a paper and electronic format (EXCEL spreadsheet) of water level measurements and water quality data with only those constituents analyzed and water levels measured during a single event shown in columns. Tabulated field measurements to include temperature, pH, and electrical conductivity corrected to 25 degrees Celsius. Monitoring sites shall be shown in rows. The second column shall contain the date of the sampling event. Values exceeding standards shall be bolded. Any constituent not analyzed for a particular site shall be shown as “NA”, any site not sampled shall be shown as “NS” with an associated reason, and any site not measured for water levels shall be shown as “NM” with an associated reason.*

Table 8 – Monitoring Well Water Levels and Chemical Analyses is included in paper form in this report and in electronic Excel format on the accompanying CD. The file name on the CD is “Table 8 – Monitoring Well Water Levels and Chemical Analyses.” Electrical conductivity is listed as specific conductivity in this table.

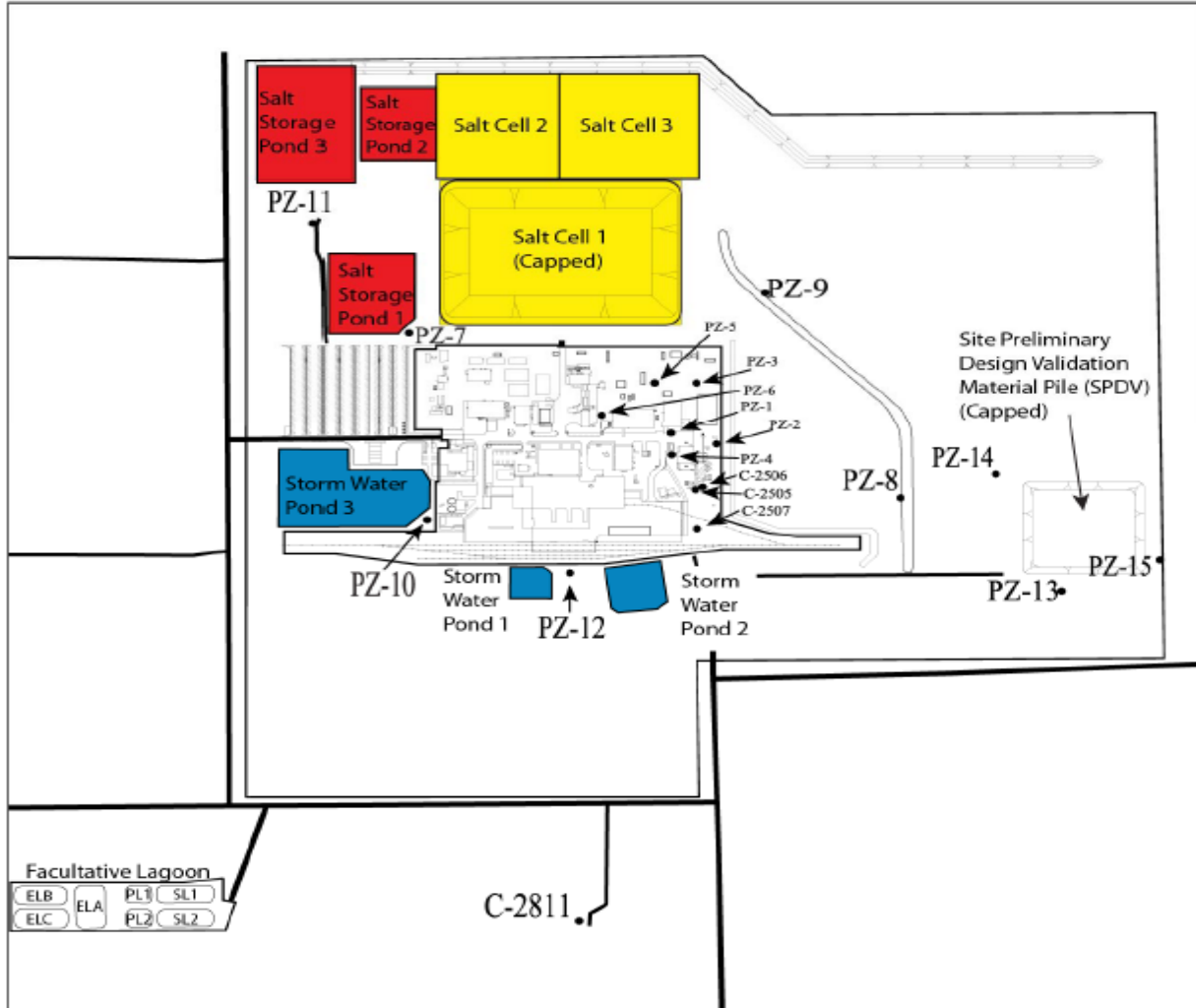
Condition 28. – *A single table that includes all available ground water data to date shall be submitted annually. For each monitoring well, the name of the well shall be entered in the far left column in a row by itself. Sampling events, beginning with the earliest event first, shall be entered in subsequent rows with the sampling date in the second column and the corresponding analytical data in columns further to the right. Each new sampling event shall be added as an additional row to the existing spreadsheet with the corresponding date of the sampling event noted in the second column next to the monitoring well name.*

The table that includes all available ground water data to date will be included in the second 2018 semi-annual report which is due February 1, 2019.

Condition 45. – *In the event the permittee implements changes to the wastewater system authorized by this Discharge Permit which result in only a minor effect on the character of the discharge, the permittee shall report such changes (including submission of record drawings, where applicable) as of January 1 and June 30 of each year to the NMED.*

There were no changes to the wastewater system authorized by this Discharge Permit during this reporting period

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Legend

<table border="1" style="width: 100%; text-align: center;"> <tr><td colspan="4">Salt Cells</td></tr> <tr><td>Salt Cell 1</td><td>Salt Cell 2</td><td>Salt Cell 3</td><td></td></tr> </table>	Salt Cells				Salt Cell 1	Salt Cell 2	Salt Cell 3		<table border="1" style="width: 100%; text-align: center;"> <tr><td colspan="4">Salt Storage Ponds</td></tr> <tr><td>Salt Storage Pond 1 (SSP1)</td><td>Salt Storage Pond 2 (SSP2)</td><td>Salt Storage Pond 3 (SSP3)</td><td></td></tr> </table>	Salt Storage Ponds				Salt Storage Pond 1 (SSP1)	Salt Storage Pond 2 (SSP2)	Salt Storage Pond 3 (SSP3)		<table border="1" style="width: 100%; text-align: center;"> <tr><td colspan="4">Storm Water Ponds</td></tr> <tr><td>Storm Water Pond 1 (SWP1)</td><td>Storm Water Pond 2 (SWP2)</td><td>Storm Water Pond 3 (SWP3)</td><td></td></tr> </table>	Storm Water Ponds				Storm Water Pond 1 (SWP1)	Storm Water Pond 2 (SWP2)	Storm Water Pond 3 (SWP3)		<table border="1" style="width: 100%; text-align: center;"> <tr><td colspan="4">Facultative Lagoon</td></tr> <tr><td>Settling Lagoon 1 (SL1)</td><td>Settling Lagoon 2 (SL2)</td><td>Polishing Lagoon 1 (PL1)</td><td>Polishing Lagoon 2 (PL2)</td></tr> <tr><td>Effluent Lagoon A (ELA)</td><td>Effluent Lagoon B (ELB)</td><td>Effluent Lagoon C (ELC)</td><td></td></tr> </table>	Facultative Lagoon				Settling Lagoon 1 (SL1)	Settling Lagoon 2 (SL2)	Polishing Lagoon 1 (PL1)	Polishing Lagoon 2 (PL2)	Effluent Lagoon A (ELA)	Effluent Lagoon B (ELB)	Effluent Lagoon C (ELC)	
Salt Cells																																							
Salt Cell 1	Salt Cell 2	Salt Cell 3																																					
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Effluent Lagoon A (ELA)	Effluent Lagoon B (ELB)	Effluent Lagoon C (ELC)																																					

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Figure 1 – Well and Pond Locations

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Table 8 – Monitoring Well Water Levels and Chemical Analyses

Monitoring Site	Field and General Chemistry Parameters									Other	Water Level Monitoring (Ft AMSL)	
	Sample Date	pH (SU)	Temp. (°C)	Specific Conductivity @25 °C (µS/cm)	Nitrate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	TDS (mg/L)	TKN (mg/L)		03/06/18-03/07/18	06/05/18-06/06/18
PZ-1	5/22/2018	6.54	25.46	89,650	NA	1,860	26,500	54,500	NA	3371.77	3371.63	
PZ-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	3371.24	3371.08	
PZ-3	NS	NS	NS	NS	NS	NS	NS	NS	NS	3371.66	3371.65	
PZ-4	NS	NS	NS	NS	NS	NS	NS	NS	NS	3366.99	3366.82	
PZ-5	5/22/2018	7.26	23.66	68,660	NA	585	5,910	12,800	NA	3372.37	3372.34	
PZ-6	5/22/2018	7.01	23.76	92,800	NA	1,210	18,400	32,300	NA	3370.35	3370.31	
PZ-7	5/21/2018	6.40	22.71	92,610	NA	2,950	54,600	100,000	NA	3377.56	3377.65	
PZ-8	NS	NS	NS	NS	NS	NS	NS	NS	NS	3356.35	3356.70	
PZ-9	5/22/2018	6.32	23.78	92,920	NA	4,790	99,200	180,000	NA	3362.76	3362.94	
PZ-10	5/21/2018	7.47	23.14	5,345	NA	224	193	998	NA	3368.35	3368.08	
PZ-11	5/21/2018	6.59	22.66	92,640	NA	1,980	36,400	66,300	NA	3374.25	3374.13	
PZ-12	5/21/2018	7.04	23.29	41,260	NA	576	3,280	7,280	NA	3357.22	3357.01	
PZ-13	5/22/2018	Bailed			NA	2,800	146,000	269,000	NA	3357.55	3357.66	
PZ-14	NS	NS	NS	NS	NS	NS	NS	NS	NS	3354.11	3354.38	
PZ-15	NS	NS	NS	NS	NS	NS	NS	NS	NS	3383.41	3383.33	
C-2811	5/21/2018	7.32	21.31	14,700	NA	347	1,090	2,510	NA	3347.56	3347.16	
C-2505	NS	NS	NS	NS	NS	NS	NS	NS	NS	3368.27	3368.09	
C-2506	NS	NS	NS	NS	NS	NS	NS	NS	NS	3368.89	3368.72	
C-2507	5/22/2018	7.19	23.80	40,000	NA	638	3,040	6,850	NA	3365.42	3365.30	
WQSP-6A	5/23/2018	7.12	23.64	13,760	4.98 ^H	1,770	340	3,480	ND	3347.56	3347.16	
Explanation:	NA: Not Analyzed, parameter not required, per permit conditions.											
	NS: Not Sampled, not required per permit conditions											
	ND: Non-detect											
	PZ-13 Field Parameters were not measured since a bailer was used to collect the sample due to difficulty using Low-Flow pumps											
	AMSL: Above Mean Sea Level											
	"Bold" concentrations exceed standards listed in 20.6.2.3103 NMAC for Human Health and Domestic Water Supply											
	H: Hold times for preparation or analysis exceeded											