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Symbol: EPC-DO: 24-288

Date: October 29, 2024

LA-UR: 24-30963

Locates Action No.: U2200542

Justin Ball, Chief
 Ground Water Quality Bureau
 New Mexico Environment Department
 Harold Runnels Building, Room N2261
 Santa Fe, NM 87502

Subject: DP-1132, Monitoring Report, Radioactive Liquid Waste Treatment Facility, Third Quarter 2024

Dear Mr. Ball:

On May 5, 2022, the New Mexico Environment Department (NMED) issued Discharge Permit DP-1132 to the U.S. Department of Energy, National Nuclear Security Administration (NNSA) and Triad National Security, LLC (Triad) for discharges of treated effluent from the Technical Area 50 Radioactive Liquid Waste Treatment Facility (RLWTF). Pursuant to Permit Condition Number (No.) 24, NNSA and Triad are required to submit a quarterly monitoring report by November 1, 2024. The following permit conditions are addressed in Attachments 1 through 6 of this report.

- Condition No.13: Maintenance and Repair
- Condition No. 14: Damage to Structural Integrity
- Condition Nos. 25 and 26: RLWTF Influent Volumes
- Condition No. 27: Discharge Volumes
- Condition No. 29: Effluent Sampling
- Condition No. 30: Soil Moisture Monitoring System for the Solar Evaporative Tank System
- Condition No. 36: Groundwater Monitoring
- Condition No. 41: Stabilization of Specific Units and Systems that have Ceased

Please contact Robert A. Gallegos at (505) 901-3824 or robert.gallegos@nnsa.doe.gov or contact Brian M. Iacona at (505) 500-6038 or biacona@lanl.gov if you have questions regarding this monitoring report.

Sincerely,

**SARAH
HOLCOMB
(Affiliate)**

Sarah S. Holcomb
Group Leader
Environmental Compliance Programs
Triad National Security, LLC

Digitally signed by SARAH
HOLCOMB (Affiliate)
Date: 2024.10.24 09:20:19
-06'00'

Sincerely,

**ROBERT
GALLEGO**

Robert A. Gallegos
Permitting and Compliance Program Manager
National Nuclear Security Administration
U.S. Department of Energy

Digitally signed by
ROBERT GALLEGO
Date: 2024.10.24
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Attachment: Attachment 1 RLWTF Monitoring Report – Third Quarter 2024
Attachment 2 Quarterly Summary of Maintenance and Repair Activities Conducted at the RLWTF
Attachment 3 RLWTF Daily Influent and Effluent Volumes
Attachment 4 Treated Effluent Sampling Results
Attachment 5 Groundwater Monitoring Report – Third Quarter 2024
Attachment 6 Monitoring Well Location Map

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Attachment 1

RLWTF Monitoring Report –

Third Quarter 2024

EPC-DO: 24-288

LA-UR-24-30963

Date: October 29, 2024

Condition No. 24: Monitoring Reports

Pursuant to Permit Condition Number (No.) 24, the U.S. Department of Energy, National Nuclear Security Administration (NNSA) and Triad National Security, LLC (Triad) are required to submit a quarterly monitoring report by November 1, 2024, for the monitoring period of July 1, 2024, through September 30, 2024 (third quarter). The following permit conditions are addressed in Attachments 1 through 6 of this report.

- Quarterly Monitoring Report
 - Condition No.13: Maintenance and Repair
 - Condition No. 14: Damage to Structural Integrity
 - Condition Nos. 25 and 26: RLWTF Influent Volumes
 - Condition No. 27: Discharge Volumes
 - Condition No. 29: Effluent Sampling
 - Condition No. 30: Soil Moisture Monitoring System for the Solar Evaporative Tank System
 - Condition No. 36: Groundwater Monitoring
 - Condition No. 41: Stabilization of Specific Units and Systems that have Ceased
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Condition No. 13: Maintenance and Repair

The Permittees shall submit to NMED a summary and description of the maintenance and repair activities performed on the Facility as part of the quarterly monitoring reports.

- **Attachment 2** provides a summary of the maintenance and repair activities conducted at the Radioactive Liquid Waste Treatment Facility (RLWTF) during the third quarter 2024 monitoring period.
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Condition No. 14: Damage to Structural Integrity

- On August 31, 2022, NMED was notified that the south treated effluent tank at the RLWTF was taken out of service when treated effluent was discovered to have wept onto the exterior surface of the tank. Corrective Action Plans were submitted to NMED on September 30, 2022 (EPC-DO:22-264), and November 21, 2022 (EPC-DO: 22-315). A Corrective Action Plan Implementation Extension Request (EPC-DO: 23-274) was submitted to NMED on August 30, 2023. NMED approved this request on October 3, 2023.
- An epoxy resin patch and an additional welded patch were applied to the thinning area of the tank in January and February 2023.
- During this reporting period, the contract to construct the replacement treated effluent tanks was awarded. The replacement tanks are currently being fabricating by the manufacturer.

Condition No. 25: Influent Volumes: Low-Level Radioactive Wastewater

The total daily and monthly volumes of RLW influent conveyed to the Facility shall be submitted to NMED in the quarterly monitoring reports.

- **Attachment 3** provides the total daily and monthly volumes of low-level radioactive wastewater (RLW) received by the RLWTF during the third quarter 2024 monitoring period.
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Condition No. 26: Influent Volumes: Transuranic Wastewater

The total daily and monthly volumes of TRU influent received by the Facility shall be submitted to NMED in the quarterly monitoring reports.

- **Attachment 3** provides the total daily and monthly volumes of transuranic (TRU) influent wastewater received by the RLWTF during the third quarter 2024 monitoring period.
-

Condition No. 27: Discharge Volumes

The Permittees shall measure and record the volume of treated wastewater discharged to the SET, MES, and Outfall 051 on a daily basis.

- **Attachment 3** provides the daily volume of treated effluent discharged to the Mechanical Evaporator System (MES) and to National Pollutant Discharge Elimination System (NPDES) Outfall 051 during the third quarter 2024 monitoring period.
 - No treated effluent was discharged to the Solar Evaporative Tank System (SET) during the third quarter 2024 monitoring period.
-

Condition No. 29: Effluent Sampling

The Permittees shall sample and analyze effluent waste streams discharged to Outfall 051, the SET, and the MES.

- **MES Sampling.** Treated effluent from the RLWTF was discharged to the MES this quarter during the months of July and August. Quarterly sampling for all water contaminants listed in 20.6.2.3103 NMAC, all toxic pollutants as defined in 20.6.2.7.T(2) NMAC, and total kjeldahl nitrogen (TKN) was completed on July 23rd, 2024. These analytical results are provided in **Attachment 4, Table 1**.

Monthly sampling for TKN, nitrate (NO₃-N), total dissolved solids (TDS), chloride (Cl), fluoride (F), and perchlorate (ClO₄) was completed on August 1st, 2024. Analytical results from this discharge are provided in **Attachment 4, Table 2**.

All sample results from the MES this quarter were either not detected or less than 20.6.2.3103 NMAC standards and tap water screening levels for 20.6.2.7.T(2) NMAC analytes.

- **NPDES Outfall 051 Sampling.** Treated effluent from the RLWTF was discharged to NPDES Outfall 051 this quarter during the month of September. Monthly sampling for all water contaminants listed in 20.6.2.3103 NMAC, all toxic pollutants as defined in 20.6.2.7.T(2) NMAC, and total kjeldahl nitrogen (TKN) was completed on September 4th, 2024. These analytical results are provided in **Attachment 4, Table 3**.
 - **SET Sampling.** No treated effluent was discharged to the SET during the reporting period. Therefore, no effluent sampling from the SET was completed during the third quarter 2024 monitoring period.
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Condition No. 30: Soil Moisture Monitoring System for the SET

The permittees shall perform quarterly soil moisture monitoring in the moisture monitoring boreholes and shall provide this information in the quarterly reports.

- No treated effluent was discharged to the SET during the third quarter 2024 monitoring period.
 - In accordance with Permit Condition No. 30, the SET-Soil Moisture Monitoring System Completion Report (EPC-DO: 22-132) was submitted to NMED on June 29, 2022. NMED approved the report on May 18, 2023.
 - Baseline monitoring of all SET moisture monitoring boreholes continued in the third quarter with quarterly monitoring completed within the months of July, August, and September, 2024.
-

Condition No. 36: Ground Water Monitoring

The Permittees shall collect ground water samples from the following ground water monitoring wells: MCA-RLW-1, MCA-RLW-2, and MCOI-6 on a quarterly basis and analyze the samples for TKN, NO₃-N, TDS, Cl, F, and perchlorate.

- **Attachment 5** provides the complete ground water monitoring report from the quarterly sampling of perched/intermediate ground water monitoring well MCOI-6 on July 18, 2024.

Sample results from MCOI-6 for TKN, NO₃+NO₂-N, TDS, Cl, F, and ClO₄ are provided in **Attachment 5, Table 1**. These samples were submitted to GEL Laboratories, LLC for analysis. All results from the July 18, 2024, sampling event at MCOI-6 were below 20.6.2.3103 NMAC standards and 20.6.2.7.T NMAC screening levels, with the exception of the following:

- NO₃+NO₂-N was detected at a concentration of 15.1 mg/L. The 20.6.2.3103 NMAC standard for NO₃-N is 10 mg/L. The average NO₃+NO₂-N concentration at MCOI-6 during the 5-yr period from 2019 through 2023 was 13.6 mg/L with multiple exceedances of the 10 mg/L standard. Detections of NO₃+NO₂-N at MCOI-6 at concentrations greater than the ground water standard were previously identified and reported to NMED.

Monitoring well MCOI-6 will continue to be routinely sampled for NO₃+NO₂-N in accordance with DP-1132 and pursuant to the Compliance Order on Consent (Consent Order).

- ClO₄ was detected at a concentration of 139 µg/L. The 20.6.2.7.T NMAC guidance for ClO₄ is 13.8 µg/L. The average ClO₄ concentration at MCOI-6 during the 5-yr period from 2017 through 2022 was 97 µg/L. Detections of ClO₄ at MCOI-6 at concentrations greater than the 20.6.2.7.T NMAC guidance screening levels were previously identified and reported to NMED. Monitoring well MCOI-6 will continue to be routinely sampled for ClO₄ in accordance with DP-1132 and pursuant to the Consent Order.

Quarterly samples were not collected from alluvial monitoring wells MCA-RLW-1 or MCA-RLW-2 during this period due to insufficient water in the wells. **Attachment 5** provides the ground water monitoring report for these alluvial wells collected on July 1st, 2024.

A map showing the location of ground water monitoring wells MCA-RLW-1, MCA-RLW-2, MCOI-6, R-1, R-14, R-46 and R-60 is provided in **Attachment 6**.

Condition No. 41: Stabilization of Specific Units and Systems That Have Ceased

The Permittees shall provide NMED quarterly progress reports describing stabilization activities for each quarter in accordance with the time periods and submittal dates required for monitoring reports in Condition 24.

On September 26, 2023, a Revised Integrated Schedule of Stabilization Activities at the RLWTF (EPC-DO: 23-294) was submitted to NMED for review. NMED approval was received on May 6th, 2024.

The current status of each unit and system listed in Permit Condition No. 41 is listed below.

Clarifier #1

- Stabilization activities for Clarifier #1 were completed under the Stabilization Plan for the Low-Level Clarifier #1 submitted to NMED on December 4, 2018 (EPC-DO: 18-428). This workplan was approved by NMED on December 27, 2018.
- Stabilization of Clarifier #1 was completed on June 10, 2024. The required Clarifier #1 Stabilization Completion Report (EPC-24-085) was submitted to NMED on July 2, 2024.

Clarifier #2

- Stabilization activities for Clarifier #2 are being completed under the Stabilization Plan for Low-Level Clarifier #2 Tank submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
- Removal of excess chemicals was completed in 2019.
- The chemical feed system was dismantled in May 2021.

- No additional stabilization milestones were completed during the reporting period for this unit.
- The established completion date for stabilization of Clarifier #2 is September 2026.

75K Tank

- Stabilization activities for the 75K Tank are being completed under the Stabilization Plan for 75K Tank submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
- The 75K Tank was operationally emptied in 2019.
- The 75K Tank will remain available for use as emergency storage.
- No additional stabilization milestones were completed during the reporting period for this unit.
- The established completion date for stabilization of the 75K Tank is September 2030.

100K Tank

- Stabilization activities for the 100K Tank are being completed under the Stabilization Plan for the 100K Tank submitted to NMED on December 4, 2018 (EPC-DO: 18-428). This workplan was approved by NMED on December 27, 2018. Requests for Extensions of Time to complete mobilization for 100K Tank Stabilization (EPC-DO: 19-372 and EPC-DO: 19-470) were previously submitted to and approved by NMED as previously reported.
- The 100K Tank was emptied of all process liquids in 2019.
- No additional stabilization milestones were completed during the reporting period for this unit.
- The established completion date for stabilization of the 100K Tank is September 2030.

Gravity Filter

- Stabilization activities for the Gravity Filter are being completed under the Stabilization Plan for Gravity Filter submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
- Stabilization of the Gravity Filter has been initiated with the removal of unused chemicals and the chemical feed system.
- No additional stabilization milestones were completed during the reporting period for this unit.
- The established completion date for stabilization of the Gravity Filter is September 2029.

WM2-North/South Tanks

- Stabilization activities for the WM2-North/South Tanks are being completed under the Stabilization Plan for the WM2-North/South Tanks submitted to NMED on January 25, 2019 (EPC-DO: 19-007). This workplan was approved by NMED on April 25, 2019.
- During this reporting period, the containment structure around the WM2-North/South Tanks was installed and certified for use enabling work within the tanks to be completed.
- An extension request to complete stabilization activities at the WM2-North/South Tanks was submitted to NMED on August 29, 2024 (EPC-DO: 24-215). NMED approved this request on September 25, 2024.
- The established completion date for stabilization of the WM2-North/South Tanks is September 2025.

Attachment 2

Quarterly Summary of Maintenance and Repair Activities Conducted at the RLWTF

EPC-DO: 24-288

LA-UR-24-30963

Date: October 29, 2024

DP-1132 Report: Third Quarter 2024 RIWTF Maintenance

Structures	Description	Built	Task Type				Total
			PM	CO	MD	SR	
Building 1	Original treatment bldg.	1963	42	2	1	0	0
Building 2	Original influent storage bldg.	1963	4	0	0	0	4
Building 66	TRU influent storage	1982	2	0	0	0	2
Building 90	100K Influent Storage tank	1982					0
Building 248	Low-level bottoms storage	1996	3	0	0	0	3
Building 250	Low-level influent storage	2009	18	0	0	0	18
Building 257	Mechanical Evaporator System	2010	1	0	0	0	1
TA52	Solar Evaporation Tank	2011	11	0	0	0	11
Totals		81	2	1	0	0	84

Task Types: PM - preventive maintenance
 CO - corrective maintenance
 MD - modification
 SR - service request
 UP= Unplanned

DP-1132 Report: Third Quarter 2024 RLWTF Maintenance

TA-50-0001 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500001	00758184	01	CO	500001 REPLACE CA-001 IN ROOM 14 WITH LIKE FOR LIKE.
500001	00765085	01	CO	500001 TROUBLESHOOT/REPAIR OF HV-6
500001	00760473	01	MD	500001 REPLACE TK-8 PUMP SOLENOID
500001	00784065	01	PM	500001 EH-001 ELEVTR 6MO PM ELEC/MECH MAINT, THYSSEN KRUPP
500001	00783482	01	PM	50-0001 (M) AED
500001	00785822	01	PM	50-0001 EMERGENCY LIGHTS (M) PM
500001	00785797	01	PM	50-0001 TRITIUM EXIT LIGHTS (M) PM
500001	00789143	01	PM	500001 EW 1YR PM, EYWASH STATIONS
500001	00786253	01	PM	500001 MICROFILTER 3 MONTH PUMP MAINTENANCE
500001	00785849	01	PM	50-1 FEXT (1M) PM
500001	00786531	01	PM	50-1 RM24 ANNUAL SRO/HWE CONTROL CABINET CLEANING
500001	00785633	01	PM	500001 RM 24 (6M) SRO, ALT(2EA) ANALYZER VERIFICATION PM
500001	00788268	01	PM	50-1 T-21 PH TRANSMITTERS (6 MO) CALIBRATION
500001	00786046	01	PM	50-0001 (M) AED
500001	00788272	01	PM	500001 LUBE 6MO PM, HEATING & VENTILATION (MECHANICAL) 5 EA
500001	00785844	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00785801	01	PM	500001 PERFORM WEEKLY EYWASH/ SAFETY SHOWER TESTING
500001	00786535	01	PM	50-1 RM 34B (1YR) FIT CALIBRATION 3 EA
500001	00788717	01	PM	50-0001 TRITIUM EXIT LIGHTS (M) PM
500001	00788664	01	PM	500001 CA-4 (3 MONTH) AIR COMPRESSOR PM
500001	00789626	01	PM	500001 RM24 ANNUAL TK-25 LEVEL TRANSMITTER CALIBRATION
500001	00788666	01	PM	500001 ASE-004 3MO PM, EXHAUST STACK PUMP
500001	00788743	01	PM	50-1 FEXT (1M) PM
500001	00790201	01	PM	50-1-60 CM-010/HE-008: 1-YR PM (INSPECTION)
500001	00789631	01	PM	500001 CM-11 (1YR) PM, ANSI INSPECTION
500001	00788683	01	PM	50-0001 EMERGENCY LIGHTS (M) PM
500001	00790200	01	PM	500001 CM-010/HE-008 (1YR) PM, MECH/ELECT MAINT
500001	00789630	01	PM	500001 CM-11 (1YR) PM, MECHANICAL
500001	00766742	01	PM	TA-50 FCP 6MO PM, FIRE ALARM SYSTEMS INSPECTION & TESTING
500001	00790199	01	PM	50-1-116B CM-003/HE-005: 1-YR PM (INSPECTION)
500001	00790198	01	PM	50-1-116B CM-003/HE-005: 1-YR PM MECH/ELECT
500001	00789040	01	PM	50-0001 (M) AED
500001	00788694	01	PM	500001 PERFORM WEEKLY EYWASH/ SAFETY SHOWER TESTING
500001	00788689	01	PM	50-0001 BHW 1MO PM (2 EA)
500001	00791588	01	PM	50-1 FEXT (1M) PM

DP-1132 Report: Third Quarter 2024 RLWTF Maintenance

TA-50-0001 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500001	00769110	01	PM	50-1 HUE (A) PM
500001	00791618	01	PM	50-0001 EMERGENCY LIGHTS (M) PM
500001	00791616	01	PM	50-0001 TRITIUM EXIT LIGHTS (M) PM
500001	00792458	01	PM	500001 BHW 1YR PM, INSPECTION & MAINTENANC
500001	00792437	01	PM	50-1 DRUM TUMBLER (3M) FM
500001	00794690	01	PM	500001-60/60A LT 1YR PM LVL INSTRUMENT VERIFICATION (27)
500001	00794110	01	PM	500001 PV-008 6MO PM, (MECHANICAL)
500001	00791556	01	PM	500001 3MO ELEVATOR ELECT/MECH MAINT, THYSSEN-KRUPP
500001	00791711	01	PM	50-0001 (M) AED
500001	00791567	01	PM	500001 PERFORM WEEKLY EYEWAsh/SAFETY SHOWER TESTING

DP-1132 Report: Third Quarter 2024 RLWTF Maintenance

TA-50-0250 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500250	00785825	01	PM	500250 LT(M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00786533	01	PM	50-250 (1YR) FIT VERIFY ACCURACY 1 EA
500250	00786250	01	PM	500250 SHS 3MO PM, SAFETY SHOWER
500250	00785833	01	PM	500250 LTNT(M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00785824	01	PM	500250 LTET(M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00785794	01	PM	500250 FEXT(M), FIRE EXTINGUISHERS PM
500250	00786536	01	PM	500250 (A) VERIFY & ENSURE ACCURACY TANK LEVEL INDIC PM 6 EA
500250	00792121	01	PM	50-250 LTNT(A) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00788723	01	PM	500250 LTE(M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00788722	01	PM	500250 LTET(M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00789628	01	PM	50-250 CM-1-HE-1 (1YR) MECH-ELECT MAINTENANCE PM
500250	00788741	01	PM	500250 FEXT(M), FIRE EXTINGUISHERS PM
500250	00789629	01	PM	50-250 CM-1/HE-1 1YR ANSI INSPECTION PM
500250	00791609	01	PM	500250 FEXT(M), FIRE EXTINGUISHERS PM
500250	00791625	01	PM	500250 LTNT(M) PM, NON-TRITIUM EMERGENCY EXIT LIGHT
500250	00791620	01	PM	500250 LTE(M) PM, EMERGENCY WALL MOUNTED LIGHTING UNITS
500250	00791619	01	PM	500250 LTET(M) PM, TRITIUM EMERGENCY EXIT LIGHT
500250	00792103	01	PM	50-250 SPW(5YR) PM

DP-1132 Report: Third Quarter 2024 RLWTF Maintenance

TA-52-0181 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-52-0182 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
520182	00788457	01	PM	520182 (A) EMERGENCY LIGHTS PM
520182	00785883	01	PM	520182 (A) NON TRITIUM LIGHTS PM
520182	00785882	01	PM	520182 (A) FEXT PM
520182	00788669	01	PM	520182 (3M) FENCE LINE VERIFICATION
520182	00788661	01	PM	520182 (3M) SIGNAGE VERIFICATION FOR FENCE LINE
520182	00788728	01	PM	520182 (M) NON TRITIUM LIGHTS PM
520182	00788693	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00788727	01	PM	520182 (M) FEXT PM
520182	00791562	01	PM	520182 (M) FEXT PM
520182	00791566	01	PM	520182 (M) EMERGENCY LIGHTS PM
520182	00791563	01	PM	520182 (M) NON TRITIUM LIGHTS PM

TA-52-0183 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.

DP-1132 Report: Third Quarter 2024 RLWTF Maintenance

TA-50-0002 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500002	00785025	01	PM	500002 (A) WATER TIGHTNESS MORTANDAD CANYON
500002	00788654	01	PM	50-2 CA (6M) MECHANICAL PM
500002	00791105	01	PM	50-2 TCA (6M) AUTO DUMP PM
500002	00794692	01	PM	500002 HUE 1YR PM

TA-50-0090 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500066	00783767	01	PM	500066 (A) VERIFY & ENSURE ACCURACY TANK LEVEL INDICATOR 4EA
500066	00747791	01	PM	500066 ULTRASONIC TANK: 3-YR INSPECTION (VISUAL/EXTERNAL)

TA-50-0066 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-50-0201 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
				*** NO DATA TO REPORT FOR LISTED PERIOD.
				*** NO DATA TO REPORT FOR LISTED PERIOD.
				*** NO DATA TO REPORT FOR LISTED PERIOD.

TA-50-0248 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500248	00788271	01	PM	50-248 MIXERS: 6-MO PM (LUBRICATION)
500248	00788658	01	PM	500248 PUMPS 3MO PM
500248	00794693	01	PM	50-248 HUE (A) PM

TA-50-0257 Work Completion Report (07-01-2024 to 09-30-2024)

Unit	Work Order	WO	WO Type	Task Title
500257	00792420	01	PM	50-257 EVAP BOILER (3M) PM

Acronyms used by LANL Maintenance:

ASE	air sampler, exhaust	LPT	lightning protection
BHW	boiler, hot water	LTE	lights, emergency
CA	compressed air	LTET	lights, emergency, tritium
DAD	desiccant air dryer	LTNT	lights, non-tritium
EB	exhaust bank	PRV	pressure reducing valve
EH	exhaust heater	PV	pump, vacuum
FAR	filter, air replaceable	RCA	radiological control area
FE	fan, exhaust	SHS	shower, safety
FEXT	fire extinguisher	SPH	sprinkler pipe, dry
HEPA	high-efficiency particulate air	SPW	sprinkler pipe, wet
HUE	heater unit, electric	TCA	tank, compressed air

Attachment 3

RLWTF Daily Influent and Effluent Volumes

EPC-DO: 24-288

LA-UR-24-30963

Date: October 29, 2024

DP-1132 Report: Third Quarter 2024
RLWTF Daily Influent and Effluent

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
Totals, 2024-Q3	412,009	222,717	126,287	0	438
Sub-total, July	148,160	110,443	0	0	204
Sub-total, August	164,644	112,274	0	0	234
Sub-total, Sept.	99,205	0	126,287	0	0

All flows are in Liters.

1-Jul	4,391	0	0	0	0
2-Jul	18,206	0	0	0	204
3-Jul	6,359	19,731	0	0	0
4-Jul	1,060	27,532	0	0	0
5-Jul	2,801	6,885	0	0	0
6-Jul	3,104	0	0	0	0
7-Jul	1,325	0	0	0	0
8-Jul	7,040	0	0	0	0
9-Jul	3,823	0	0	0	0
10-Jul	4,996	0	0	0	0
11-Jul	2,650	0	0	0	0
12-Jul	2,006	0	0	0	0
13-Jul	1,022	0	0	0	0
14-Jul	871	0	0	0	0
15-Jul	3,974	0	0	0	0
16-Jul	6,056	0	0	0	0
17-Jul	11,090	0	0	0	0
18-Jul	7,911	0	0	0	0
19-Jul	4,391	0	0	0	0
20-Jul	3,952	0	0	0	0
21-Jul	3,520	0	0	0	0
22-Jul	7,684	0	0	0	0
23-Jul	5,564	18,838	0	0	0
24-Jul	9,917	26,680	0	0	0
25-Jul	3,861	10,776	0	0	0
26-Jul	4,239	0	0	0	0
27-Jul	5,450	0	0	0	0
28-Jul	2,574	0	0	0	0
29-Jul	2,347	0	0	0	0
30-Jul	3,671	0	0	0	0
31-Jul	2,309	0	0	0	0

DP-1132 Report: Third Quarter 2024
RLWTF Daily Influent and Effluent

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
1-Aug	9,005	10,609	0	0	0
2-Aug	3,899	15,000	0	0	0
3-Aug	3,066	14,864	0	0	0
4-Aug	2,612	11,874	0	0	0
5-Aug	3,974	0	0	0	0
6-Aug	6,435	0	0	0	156
7-Aug	3,899	0	0	0	0
8-Aug	5,034	0	0	0	0
9-Aug	9,576	0	0	0	0
10-Aug	9,046	0	0	0	0
11-Aug	7,229	0	0	0	0
12-Aug	8,592	0	0	0	0
13-Aug	5,125	0	0	0	78
14-Aug	9,266	0	0	0	0
15-Aug	5,367	10,401	0	0	0
16-Aug	2,536	14,235	0	0	0
17-Aug	2,952	14,235	0	0	0
18-Aug	2,536	14,235	0	0	0
19-Aug	3,671	6,821	0	0	0
20-Aug	4,731	0	0	0	0
21-Aug	4,807	0	0	0	0
22-Aug	8,251	0	0	0	0
23-Aug	3,104	0	0	0	0
24-Aug	3,558	0	0	0	0
25-Aug	2,574	0	0	0	0
26-Aug	8,024	0	0	0	0
27-Aug	7,267	0	0	0	0
28-Aug	4,012	0	0	0	0
29-Aug	9,538	0	0	0	0
30-Aug	2,952	0	0	0	0
31-Aug	2,006	0	0	0	0

DP-1132 Report: Third Quarter 2024
RLWTF Daily Influent and Effluent

Date	Low-level Influent	Effluent MES	Effluent Outfall 051	Effluent SET	Transuranic Influent
1-Sep	1,817	0	0	0	0
2-Sep	1,438	0	0	0	0
3-Sep	2,650	0	0	0	0
4-Sep	2,990	0	63,077	0	0
5-Sep	6,737	0	0	0	0
6-Sep	6,018	0	0	0	0
7-Sep	2,309	0	0	0	0
8-Sep	1,817	0	0	0	0
9-Sep	3,444	0	0	0	0
10-Sep	5,337	0	0	0	0
11-Sep	4,050	0	0	0	0
12-Sep	4,391	0	0	0	0
13-Sep	3,936	0	0	0	0
14-Sep	946	0	0	0	0
15-Sep	1,400	0	0	0	0
16-Sep	6,889	0	0	0	0
17-Sep	7,873	0	0	0	0
18-Sep	3,634	0	63,210	0	0
19-Sep	3,747	0	0	0	0
20-Sep	2,574	0	0	0	0
21-Sep	1,590	0	0	0	0
22-Sep	1,552	0	0	0	0
23-Sep	2,914	0	0	0	0
24-Sep	3,028	0	0	0	0
25-Sep	5,261	0	0	0	0
26-Sep	3,066	0	0	0	0
27-Sep	1,930	0	0	0	0
28-Sep	1,249	0	0	0	0
29-Sep	1,136	0	0	0	0
30-Sep	3,482	0	0	0	0

Attachment 4

Treated Effluent Sampling Results

EPC-DO: 24-288

LA-UR-24-30963

Date: October 29, 2024

Attachment 4

Table 1. Analytical Results from Quarterly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on July 23, 2024, Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	CCC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
RLWTF-24-306062	RLWTF_MES	07/23/2024	107-02-8	Acrolein	1.67	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	1.67	0.04
RLWTF-24-306062	RLWTF_MES	07/23/2024	107-13-1	Acrylonitrile	1.67	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	1.67	0.52
RLWTF-24-305953	RLWTF_MES	07/23/2024	309-00-2	Aldrin	0.00665	ug/L	U	N	UF	2024-1443	FD	SW-846-8081B	0.00665	0.00198
RLWTF-24-306062	RLWTF_MES	07/23/2024	309-00-2	Aldrin	0.00883	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.00883	0.00198
RLWTF-24-306062	RLWTF_MES	07/23/2024	AI	Aluminim	19.3	ug/L	U	N	F	2024-1443	REG	EPA-200/8	19.3	5,000
RLWTF-24-306062	RLWTF_MES	07/23/2024	120-12-7	Anthracene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	1,720
RLWTF-24-306067	RLWTF_MES	07/23/2024	Sb	Antimony	1	ug/L	U	N	F	2024-1443	REG	EPA-200/8	1	6
RLWTF-24-306062	RLWTF_MES	07/23/2024	12674-11-2	Araclor-1216	0.0333	ug/L	U	N	UF	2024-1443	REG	SW-846-8082A	0.0333	0.5
RLWTF-24-306062	RLWTF_MES	07/23/2024	111041-28-2	Araclor-1221	0.0333	ug/L	U	N	UF	2024-1443	REG	SW-846-8082A	0.0333	0.5
RLWTF-24-306062	RLWTF_MES	07/23/2024	11141-16-5	Araclor-1232	0.0333	ug/L	U	N	UF	2024-1443	REG	SW-846-8082A	0.0333	0.5
RLWTF-24-306062	RLWTF_MES	07/23/2024	53469-21-9	Araclor-1242	0.0333	ug/L	U	N	UF	2024-1443	REG	SW-846-8082A	0.0333	0.5
RLWTF-24-306062	RLWTF_MES	07/23/2024	12672-29-6	Araclor-1248	0.0333	ug/L	U	N	F	2024-1443	REG	SW-846-8082A	0.0333	0.5
RLWTF-24-306062	RLWTF_MES	07/23/2024	11097-69-1	Araclor-1254	0.0333	ug/L	U	N	UF	2024-1443	REG	SW-846-8082A	0.0333	0.5
RLWTF-24-306062	RLWTF_MES	07/23/2024	11096-82-5	Araclor-1260	0.0333	ug/L	U	N	UF	2024-1443	REG	SW-846-8082A	0.0333	0.5
RLWTF-24-306067	RLWTF_MES	07/23/2024	As	Arsenic	2	ug/L	U	N	F	2024-1443	REG	EPA-200/8	2	10
RLWTF-24-306062	RLWTF_MES	07/23/2024	1912-24-9	Atrazine	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	3
RLWTF-24-306062	RLWTF_MES	07/23/2024	103-33-3	Azobenzene	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	0.78
RLWTF-24-306067	RLWTF_MES	07/23/2024	BaII	Barium	0.67	ug/L	U	N	F	2024-1443	REG	EPA-200/8	0.67	2,000
RLWTF-24-306062	RLWTF_MES	07/23/2024	71-43-2	Benzene	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	5
RLWTF-24-306062	RLWTF_MES	07/23/2024	92-87-5	Benzidine	4.11	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	4.11	0.001
RLWTF-24-306062	RLWTF_MES	07/23/2024	50-32-8	Benzol(a)pyrene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	0.2
RLWTF-24-306062	RLWTF_MES	07/23/2024	205-99-2	Benzolfluoranthene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	0.343
RLWTF-24-306062	RLWTF_MES	07/23/2024	207-08-9	Benzol(k)fluoranthene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	3.432
RLWTF-24-306067	RLWTF_MES	07/23/2024	Be	Beryllium	0.2	ug/L	U	N	F	2024-1443	REG	EPA-200/8	0.2	4
RLWTF-24-305953	RLWTF_MES	07/23/2024	319-84-6	BHCl[alpha-]	0.00665	ug/L	U	N	UF	2024-1443	FD	SW-846-8081B	0.00665	0.0693
RLWTF-24-306062	RLWTF_MES	07/23/2024	319-84-6	BHCl[alpha-]	0.00663	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.00663	0.0693
RLWTF-24-305953	RLWTF_MES	07/23/2024	319-85-7	BHCl[beta-]	0.00665	ug/L	U	N	UF	2024-1443	FD	SW-846-8081B	0.00665	0.24253
RLWTF-24-306062	RLWTF_MES	07/23/2024	319-85-7	BHCl[beta-]	0.00683	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.00683	0.24253
RLWTF-24-305953	RLWTF_MES	07/23/2024	58-89-9	BHCl[gamma-]	0.00665	ug/L	U	N	UF	2024-1443	FD	SW-846-8081B	0.00665	0.45152
RLWTF-24-306062	RLWTF_MES	07/23/2024	58-89-9	BHCl[gamma-]	0.00683	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.00683	0.45152
RLWTF-24-306062	RLWTF_MES	07/23/2024	111-44-4	Bis[2-chloroethyl]ether	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	0.14
RLWTF-24-306062	RLWTF_MES	07/23/2024	117-81-7	Bis[2-ethylhexyl]phthalate	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	55.64
RLWTF-24-306067	RLWTF_MES	07/23/2024	B	Boron	15.7	ug/L	J	Y	F	2024-1443	REG	EPA-200/7	15	750
RLWTF-24-306062	RLWTF_MES	07/23/2024	75-27-4	Bromodichloromethane	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	1.344
RLWTF-24-306062	RLWTF_MES	07/23/2024	75-25-2	Bromoform	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	32.851
RLWTF-24-306062	RLWTF_MES	07/23/2024	74-83-9	Bromonmethane	0.337	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.337	7.545
RLWTF-24-306062	RLWTF_MES	07/23/2024	Cd	Cadmium	0.333	ug/L	U	N	F	2024-1443	REG	EPA-200/8	0.3	5
RLWTF-24-306062	RLWTF_MES	07/23/2024	56-23-5	Carbon Tetrachloride	0.0765	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	5
RLWTF-24-305953	RLWTF_MES	07/23/2024	57-74-9	Chlordane[alpha/gamma]	0.0786	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.0786	0.4484
RLWTF-24-306062	RLWTF_MES	07/23/2024	57-74-9	Chlordane[alpha/gamma]	0.067	mg/L	U	N	F	2024-1443	FD	EPA-300/0	0.067	250
RLWTF-24-305957	RLWTF_MES	07/23/2024	Cl(-1)	Chloride	0.067	mg/L	U	N	F	2024-1443	REG	EPA-300/8	0.3	50
RLWTF-24-306067	RLWTF_MES	07/23/2024	108-90-7	Chlorobenzene	0.333	ug/L	U	N	UF	2024-1443	REG	EPA-200/8	0.3	1,000
RLWTF-24-306062	RLWTF_MES	07/23/2024	67-66-3	Chloroform	7.04	ug/L	NQ	Y	UF	2024-1443	REG	SW-846-8260D	0.333	77.57
RLWTF-24-306062	RLWTF_MES	07/23/2024	74-87-3	Chlormethane	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	100
RLWTF-24-306062	RLWTF_MES	07/23/2024	Cr	Chromium	3	ug/L	U	N	F	2024-1443	REG	EPA-300/8	0.3	2.29
RLWTF-24-306067	RLWTF_MES	07/23/2024	Co	Cobalt	0.3	ug/L	U	N	F	2024-1443	REG	EPA-200/8	0.3	50
RLWTF-24-306062	RLWTF_MES	07/23/2024	Cu	Copper	0.3	ug/L	U	N	F	2024-1443	REG	EPA-200/8	0.3	1,000
RLWTF-24-306067	RLWTF_MES	07/23/2024	CN(TOTAL)	Cyanide (Total)	0.00167	mg/L	U	N	F	2024-1443	REG	EPA-335.4	0.00167	0.2
RLWTF-24-306062	RLWTF_MES	07/23/2024	50-29-3	DDT[4'-4']	0.01	ug/L	U	N	UF	2024-1443	FD	SW-846-8081B	0.01	2.29
RLWTF-24-306067	RLWTF_MES	07/23/2024	50-29-3	DDT[4'-4']	0.0103	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.0103	2.29
RLWTF-24-306062	RLWTF_MES	07/23/2024	106-93-4	Dibromoethane[1,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	0.05
RLWTF-24-306062	RLWTF_MES	07/23/2024	74-95-3	Dibromomethane	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	7.997
RLWTF-24-305953	RLWTF_MES	07/23/2024	95-50-1	Dichlorobenzene[1,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	600
RLWTF-24-306062	RLWTF_MES	07/23/2024	106-46-7	Dichlorobenzene[1,4-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	75
RLWTF-24-306062	RLWTF_MES	07/23/2024	91-94-1	Dichlorobenzene[3,3-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	1.25

Attachment 4

Table 1. Analytical Results from Quarterly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on July 23, 2024, Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	CCC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
RLWTF-24-300602	RLWTF_MES	07/23/2024	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.335	197.2
RLWTF-24-300602	RLWTF_MES	07/23/2024	75-34-3	Dichloroethane[1,1-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	25
RLWTF-24-300602	RLWTF_MES	07/23/2024	107-06-2	Dichloroethane[1,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	5
RLWTF-24-300602	RLWTF_MES	07/23/2024	75-35-4	Dichloroethene[1,1-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	7
RLWTF-24-300602	RLWTF_MES	07/23/2024	156-59-2	Dichloroethene[1,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	70
RLWTF-24-300602	RLWTF_MES	07/23/2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	100
RLWTF-24-300602	RLWTF_MES	07/23/2024	120-83-2	Dichlorophenol[2,4-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	45.3
RLWTF-24-300602	RLWTF_MES	07/23/2024	78-87-5	Dichloropropene[1,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	5
RLWTF-24-300602	RLWTF_MES	07/23/2024	542-75-6	Dichloropropene[cis/trans-1,3-]	0.5	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.5	4.7
RLWTF-24-300593	RLWTF_MES	07/23/2024	60-57-1	Diethylrin	0.01	ug/L	U	N	UF	2024-1443	ED	SW-846-8081B	0.01	0.0175
RLWTF-24-300602	RLWTF_MES	07/23/2024	60-57-1	Diethylrin	0.0103	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.0103	0.0175
RLWTF-24-300602	RLWTF_MES	07/23/2024	84-66-2	Diethylphthalate	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	14,800.5
RLWTF-24-300602	RLWTF_MES	07/23/2024	131-11-3	Dimethyl Phthalate	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	611.6
RLWTF-24-300602	RLWTF_MES	07/23/2024	84-74-2	Di-n-butylphthalate	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	884.99
RLWTF-24-300602	RLWTF_MES	07/23/2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	1.52
RLWTF-24-300602	RLWTF_MES	07/23/2024	51-28-5	Dinitrophenol[2,4-]	5.27	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	5.27	38.67
RLWTF-24-300602	RLWTF_MES	07/23/2024	121-14-2	Dinitrotoluene[2,4-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	2.37
RLWTF-24-300602	RLWTF_MES	07/23/2024	606-20-2	Dinitrotoluene[2,6-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	0.49
RLWTF-24-300602	RLWTF_MES	07/23/2024	123-91-1	Dioxane[1,4-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	4.59
RLWTF-24-300602	RLWTF_MES	07/23/2024	122-39-4	Diphenylamine	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	122
RLWTF-24-300593	RLWTF_MES	07/23/2024	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2024-1443	FD	SW-846-8081B	0.00665	9.87
RLWTF-24-300602	RLWTF_MES	07/23/2024	959-98-8	Endosulfan I	0.00683	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.00683	9.87
RLWTF-24-300593	RLWTF_MES	07/23/2024	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.0103	9.87
RLWTF-24-300602	RLWTF_MES	07/23/2024	33213-65-9	Endosulfan II	0.0103	ug/L	U	N	UF	2024-1443	FD	SW-846-8081B	0.01	2.23
RLWTF-24-300593	RLWTF_MES	07/23/2024	72-20-8	Endrin	0.01	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.0103	2.23
RLWTF-24-300602	RLWTF_MES	07/23/2024	100-41-4	Ethylbenzene	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	700
RLWTF-24-300602	RLWTF_MES	07/23/2024	206-44-0	Fluoranthene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	80,198
RLWTF-24-300602	RLWTF_MES	07/23/2024	86-73-7	Fluorene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	28,642
RLWTF-24-300597	RLWTF_MES	07/23/2024	F(-1)	Fluoride	0.033	mg/L	U	N	F	2024-1443	FD	EPA-300-0	0.033	1.6
RLWTF-24-300607	RLWTF_MES	07/23/2024	77-47-4	Hexachlorocyclopentadiene	3.16	ug/L	U	N	UF	2024-1443	REG	EPA-300-0	0.033	1.6
RLWTF-24-300593	RLWTF_MES	07/23/2024	67-72-1	Heptachlor	0.00665	ug/L	U	N	UF	2024-1443	FD	SW-846-8081B	0.00665	0.022
RLWTF-24-300602	RLWTF_MES	07/23/2024	76-44-8	Heptachlorobenzene	0.00683	ug/L	U	N	UF	2024-1443	REG	SW-846-8081B	0.00683	0.022
RLWTF-24-300602	RLWTF_MES	07/23/2024	118-74-1	Hexachlorobutadiene	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	0.1
RLWTF-24-300602	RLWTF_MES	07/23/2024	87-68-3	Isophorone	0.033	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	1.39
RLWTF-24-300602	RLWTF_MES	07/23/2024	Pb	Lead	0.5	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	0.41
RLWTF-24-300602	RLWTF_MES	07/23/2024	Manganese	2	ug/L	U	N	F	2024-1443	REG	SW-846-8270E	3.16	3.28	
RLWTF-24-300602	RLWTF_MES	07/23/2024	Mercury	0.067	ug/L	U	N	UF	2024-1443	REG	SW-846-8330B	0.0825	1,000	
RLWTF-24-300607	RLWTF_MES	07/23/2024	Fe	Iron	30	ug/L	U	N	F	2024-1443	REG	EPA-200-7	30	1,000
RLWTF-24-300602	RLWTF_MES	07/23/2024	78-59-1	Isophorone	3.69	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.69	78/63
RLWTF-24-300607	RLWTF_MES	07/23/2024	Ni	Nickel	0.5	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.333	100
RLWTF-24-300602	RLWTF_MES	07/23/2024	90-12-0	Methylnaphthalene[1-]	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	11,38
RLWTF-24-300602	RLWTF_MES	07/23/2024	91-57-6	Methylnaphthalene[2-]	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	35.11
RLWTF-24-300607	RLWTF_MES	07/23/2024	Mo	Molybdenum	0.2	ug/L	U	N	F	2024-1443	REG	EPA-200-8	0.2	1,000
RLWTF-24-300602	RLWTF_MES	07/23/2024	91-20-3	Naphthalene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	30
RLWTF-24-300607	RLWTF_MES	07/23/2024	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	0.391	mg/L	NO	Y	F	2024-1443	REG	EPA-353.2	0.017	10
RLWTF-24-300605	RLWTF_MES	07/23/2024	NO2-N	Nitrite as Nitrogen	0.078	mg/L	J	Y	F	2024-1443	REG	EPA-300-0	0.033	1
RLWTF-24-300602	RLWTF_MES	07/23/2024	98-95-3	Nitrobenzene	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	1.4
RLWTF-24-300602	RLWTF_MES	07/23/2024	1634-04-4	Methyl-Tert-Butyl Ether	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	0.0017
RLWTF-24-300602	RLWTF_MES	07/23/2024	75-09-2	Methylene-Chloride	0.5	ug/L	U	N	UF	2024-1443	REG	SW-846-8260D	0.6	5
RLWTF-24-300607	RLWTF_MES	07/23/2024	90-12-0	Methylnaphthalene[1-]	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	11,38
RLWTF-24-300602	RLWTF_MES	07/23/2024	91-57-6	Methylnaphthalene[2-]	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	0.316	35.11
RLWTF-24-300607	RLWTF_MES	07/23/2024	91-20-3	Naphthalene	0.316	ug/L	U	N	F	2024-1443	REG	EPA-200-8	0.316	30
RLWTF-24-300607	RLWTF_MES	07/23/2024	91-20-3	Nitrosodimethylamine[N-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	0.0049
RLWTF-24-300602	RLWTF_MES	07/23/2024	62-75-9	Nitrosodimethylamine[N-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846-8270E	3.16	0.0049

Attachment 4

Table 1. Analytical Results from Quarterly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on July 23, 2024, Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
RLWTF-24-30602	RLWTF_MES	07/23/2024	924-16-3	Nitroso-di-n-butylamine[N-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	0.03
RLWTF-24-30602	RLWTF_MES	07/23/2024	930-55-2	Nitrosopyrrolidine[N-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	0.37
RLWTF-24-30602	RLWTF_MES	07/23/2024	108-60-1	Oxybis[1-chloropropanol][2,2,-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	9.81
RLWTF-24-30602	RLWTF_MES	07/23/2024	608-93-5	Pentachlorobenzene	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	3.07
RLWTF-24-30602	RLWTF_MES	07/23/2024	87-00-2	Pentachlorophenol	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	1
RLWTF-24-30602	RLWTF_MES	07/23/2024	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2024-1443	REG	SW-846:6850	0.05	13.82
RLWTF-24-30602	RLWTF_MES	07/23/2024	355-46-4	Perfluorohexanesulfonic acid	0.614	ng/L	U	N	UF	2024-1443	REG	EPA:537M	0.64	401.1
RLWTF-24-30602	RLWTF_MES	07/23/2024	1763-23-1	Perfluoroctanesulfonic acid	0.745	ng/L	U	N	UF	2024-1443	REG	EPA:537M	0.745	60.16
RLWTF-24-30602	RLWTF_MES	07/23/2024	335-67-1	Perfluorooctanoic acid	0.745	ng/L	U	N	UF	2024-1443	REG	EPA:537M	0.745	60.16
RLWTF-24-30602	RLWTF_MES	07/23/2024	pH	7.3	SU	-	U	U	U	2024-1443	REG	SM 4500-H + B	-	6.9
RLWTF-24-30602	RLWTF_MES	07/23/2024	85-01-8	Phenanthrene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	0.316	17.041
RLWTF-24-30602	RLWTF_MES	07/23/2024	108-95-2	Phenol	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	5
RLWTF-24-30602	RLWTF_MES	07/23/2024	1610-18-0	Prometone	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	249.93
RLWTF-24-30602	RLWTF_MES	07/23/2024	129-00-0	Pyrene	0.316	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	0.316	117.42
RLWTF-24-30602	RLWTF_MES	07/23/2024	Ra-226+228	Radium-226 and Radium-228	0.444	pCi/L	U	N	UF	2024-1443	REG	Generic:Radium by Calculation	-	5
RLWTF-24-30602	RLWTF_MES	07/23/2024	121-82-4	RDX	0.0825	ug/L	U	N	UF	2024-1443	REG	SW-846:8330B	0.0825	9.6577
RLWTF-24-30602	RLWTF_MES	07/23/2024	Se	Selenite	1.5	ug/L	U	N	F	2024-1443	REG	EPA:200.8	1.5	50
RLWTF-24-30602	RLWTF_MES	07/23/2024	Ag	Silver	0.3	ug/L	U	N	F	2024-1443	REG	EPA:200.8	0.3	50
RLWTF-24-30602	RLWTF_MES	07/23/2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	100
RLWTF-24-30602	RLWTF_MES	07/23/2024	SO4(2-)	Sulfate	0.133	mg/L	U	N	F	2024-1443	REG	EPA:300.0	0.133	600
RLWTF-24-30602	RLWTF_MES	07/23/2024	126-33-0	Sulfonane	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	20.03
RLWTF-24-30602	RLWTF_MES	07/23/2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	1.66
RLWTF-24-30602	RLWTF_MES	07/23/2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	10
RLWTF-24-30602	RLWTF_MES	07/23/2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	5
RLWTF-24-30602	RLWTF_MES	07/23/2024	Tl	Thallium	0.6	ug/L	U	N	F	2024-1443	REG	EPA:200.8	0.6	2
RLWTF-24-30602	RLWTF_MES	07/23/2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	1,000
RLWTF-24-30602	RLWTF_MES	07/23/2024	TDS	Total Dissolved Solids	18	mg/L	NQ	Y	F	2024-1443	FD	EPA:160.1	2.38	1,000
RLWTF-24-30602	RLWTF_MES	07/23/2024	TDS	Total Dissolved Solids	18	mg/L	NQ	Y	F	2024-1443	REG	SW-846:8260D	0.333	1.66
RLWTF-24-30602	RLWTF_MES	07/23/2024	TKN	Total Kjeldahl Nitrogen	3.14	mg/L	NQ	Y	F	2024-1443	REG	EPA:351.2	0.033	-
RLWTF-24-30602	RLWTF_MES	07/23/2024	8001-35-2	Toxaphene [Technical Grade]	0.15	ug/L	U	N	UF	2024-1443	FD	SW-846:8081B	0.15	0.158
RLWTF-24-30602	RLWTF_MES	07/23/2024	8001-35-2	Toxaphene [Technical Grade]	0.154	ug/L	U	N	UF	2024-1443	REG	SW-846:8081B	0.15	0.158
RLWTF-24-30602	RLWTF_MES	07/23/2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	70
RLWTF-24-30602	RLWTF_MES	07/23/2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	200
RLWTF-24-30602	RLWTF_MES	07/23/2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	5
RLWTF-24-30602	RLWTF_MES	07/23/2024	79-01-6	Trichloroethene	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	5
RLWTF-24-30602	RLWTF_MES	07/23/2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	1,140
RLWTF-24-30602	RLWTF_MES	07/23/2024	95-95-4	Trichlorophenol[2,4,5-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	1,170
RLWTF-24-30602	RLWTF_MES	07/23/2024	88-06-2	Trichlorophenol[2,4,6-]	3.16	ug/L	U	N	UF	2024-1443	REG	SW-846:8270E	3.16	15.88
RLWTF-24-30602	RLWTF_MES	07/23/2024	118-96-7	Trinitrotoluene[2,4,6-]	0.0825	ug/L	U	N	UF	2024-1443	REG	SW-846:8330B	0.0825	9.8
RLWTF-24-30602	RLWTF_MES	07/23/2024	U	Uranium	0.067	ug/L	U	N	F	2024-1443	REG	EPA:200.8	0.067	30
RLWTF-24-30602	RLWTF_MES	07/23/2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	2
RLWTF-24-30602	RLWTF_MES	07/23/2024	1330-20-7	Xylene [Total]	1	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	1	620
RLWTF-24-30602	RLWTF_MES	07/23/2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.333	197.95
RLWTF-24-30602	RLWTF_MES	07/23/2024	Xylene[m+p]	Xylene[1,3-Xylene[1,4-]	0.5	ug/L	U	N	UF	2024-1443	REG	SW-846:8260D	0.5	386
RLWTF-24-30602	RLWTF_MES	07/23/2024	Zinc	Zinc	3.3	ug/L	U	N	F	2024-1443	REG	EPA:200.7	3.3	10,000

Notes:

¹ ug/L - micrograms per liter

² mg/L - milligrams per liter

³ ng/L - nanograms per liter

⁴ SU - standard units

⁵ pCi/L - picocuries per liter

⁶ U - The analyte is classified as not detected

J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

UJ - The analyte is classified as not detected, with an expectation that the reported results is more uncertain than usual

Attachment 4

Table 1. Analytical Results from Quarterly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on July 23, 2024, Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷

³N - In the Detected column means the analyte was not detected

Y - In the Detected column means the analyte was detected

⁴UF - In the Field Preparation Code column means the sample was not filtered

F - In the Field Preparation Code column means the sample was filtered

⁵REG - In the Sample Purpose column means the sample was a regular sample

FD - In the Sample Purpose column means the sample was a field duplicate

⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated

⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

Attachment 4

Table 2. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to the Mechanical Evaporator System on August 1, 2024, Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit	Groundwater Limit ⁶
RLWTF-24-300516	RLWTF_MES	08/01/2024	Cl(-1)	Chloride	0.158	mg/L	J	Y	F	2024-1503	REG	EPA-300.0	0.067	250
RLWTF-24-300516	RLWTF_MES	08/01/2024	F(-1)	Fluoride	0.033	mg/L	U	N	F	2024-1503	REG	EPA-300.0	0.033	1.6
RLWTF-24-300516	RLWTF_MES	08/01/2024	NO3-NO2-N	Nitrate-Nitrite as Nitrogen	0.218	mg/L	NQ	Y	F	2024-1503	REG	EPA-353.2	0.017	10
RLWTF-24-300518	RLWTF_MES	08/01/2024	ClO4	Perchlorate	0.05	ug/L	U	N	UF	2024-1503	REG	SW-846-6850	0.05	13.8
RLWTF-24-300516	RLWTF_MES	08/01/2024	TDS	Total Dissolved Solids	19	mg/L	NQ	Y	F	2024-1503	REG	EPA-160.1	2.38	1,000
RLWTF-24-300516	RLWTF_MES	08/01/2024	TKN	Total Kjeldahl Nitrogen	8.55	mg/L	NQ	Y	F	2024-1503	REG	EPA-351.2	0.165	-

¹ mg/L - milligrams per liter
² ug/L - micrograms per liter

³ Y - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

⁴ U - The analyte is classified as not detected

⁵ NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

⁶ Y - In the Detected column means the analyte was detected

⁷ N - In the Detected column means the analyte was not detected

⁸ F - In the Field Preparation Code column means the sample was not filtered

⁹ UF - In the Field Preparation Code column means the sample was a regular sample

¹⁰ REG - In the Sample Purpose column means the sample was a regular sample
¹¹ Groundwater limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit
 Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Attachment 4

Table 3. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on September 4, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-24-300534	NPDES Outfall 051	09/04/2024	Acrolein	107-02-8	1.67	ug/L	U	N	2024-1712	REG	SW-846-8260D	1.67	0.042	
NP051-24-300534	NPDES Outfall 051	09/04/2024	Acrylonitrile	107-13-1	1.67	ug/L	U	N	2024-1712	REG	SW-846-8260D	1.67	0.523	
NP051-24-300534	NPDES Outfall 051	09/04/2024	Aluminum	309-00-2	0.00665	ug/L	U	N	2024-1712	REG	SW-846-8081B	0.0665	0.0198	
NP051-24-300532	NPDES Outfall 051	09/04/2024	Al	19.3	19.3	ug/L	U	F	2024-1712	REG	EPA-200-8	19.3	5,000	
NP051-24-300534	NPDES Outfall 051	09/04/2024	Anthracene	120-12-7	0.304	ug/L	U	N	2024-1712	REG	SW-846-8270E	0.304	1720	
NP051-24-300532	NPDES Outfall 051	09/04/2024	Sb	12674-11-2	Antimony	1	ug/L	U	N	2024-1712	REG	EPA-200-8	1	6
NP051-24-300534	NPDES Outfall 051	09/04/2024	Acroclor-1016	11104-28-2	Acroclor-1221	0.0333	ug/L	U	N	2024-1712	REG	SW-846-8082A	0.0333	0.5
NP051-24-300534	NPDES Outfall 051	09/04/2024	Acroclor-1232	11141-16-5	Acroclor-1242	0.0333	ug/L	U	N	2024-1712	REG	SW-846-8082A	0.0333	0.5
NP051-24-300534	NPDES Outfall 051	09/04/2024	Acroclor-1242	53469-21-9	Acroclor-1248	0.0333	ug/L	U	N	2024-1712	REG	SW-846-8082A	0.0333	0.5
NP051-24-300534	NPDES Outfall 051	09/04/2024	Acroclor-1248	12672-29-6	Acroclor-1248	0.0333	ug/L	U	N	2024-1712	REG	SW-846-8082A	0.0333	0.5
NP051-24-300534	NPDES Outfall 051	09/04/2024	Acroclor-1254	11097-69-1	Acroclor-1260	0.0333	ug/L	U	N	2024-1712	REG	SW-846-8082A	0.0333	0.5
NP051-24-300532	NPDES Outfall 051	09/04/2024	As	11096-82-5	Arsenic	2	ug/L	U	N	2024-1712	REG	EPA-200-8	2	10
NP051-24-300534	NPDES Outfall 051	09/04/2024	Atraaine	1912-24-9	Azobenzene	3.04	ug/L	U	N	2024-1712	REG	SW-846-8270E	3.04	3
NP051-24-300534	NPDES Outfall 051	09/04/2024	Ba	103-33-3	Barium	0.67	ug/L	U	N	2024-1712	REG	EPA-200-8	0.67	2,000
NP051-24-300532	NPDES Outfall 051	09/04/2024	Benzene	71-43-2	Benzidine	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	Benzene	92-87-5	Benzidine	3.96	ug/L	U	N	2024-1712	REG	SW-846-8270E	3.96	0.001
NP051-24-300534	NPDES Outfall 051	09/04/2024	Benzylalpyrene	50-32-8	Benzol[b]fluoranthene	0.304	ug/L	U	N	2024-1712	REG	SW-846-8270E	0.304	0.2
NP051-24-300534	NPDES Outfall 051	09/04/2024	Benzol[bifluoranthene]	205-99-2	Benzol[k]fluoranthene	0.304	ug/L	U	N	2024-1712	REG	SW-846-8270E	0.304	0.34
NP051-24-300534	NPDES Outfall 051	09/04/2024	Benzol[2-ethylhexyl]phthalate	207-08-9	Benzylum	0.2	ug/L	U	N	2024-1712	REG	EPA-200-8	0.34	3.43
NP051-24-300532	NPDES Outfall 051	09/04/2024	Boron	B	Boron	24.2	ug/L	J	Y	2024-1712	REG	EPA-200-7	15	750
NP051-24-300534	NPDES Outfall 051	09/04/2024	Bromodichloromethane	319-84-6	BHCl[alpha]-	0.00665	ug/L	U	N	2024-1712	REG	SW-846-8081B	0.00665	0.069
NP051-24-300534	NPDES Outfall 051	09/04/2024	BHC[beta]-	319-85-7	BHC[gamma]-	0.00665	ug/L	U	N	2024-1712	REG	SW-846-8081B	0.00665	0.243
NP051-24-300534	NPDES Outfall 051	09/04/2024	Bis[2-chloroethyl]ether	58-89-9	Bis[2-chloroethyl]ether	0.00665	ug/L	U	N	2024-1712	REG	SW-846-8081B	0.00665	0.415
NP051-24-300534	NPDES Outfall 051	09/04/2024	Bis[2-ethylhexyl]phthalate	111-81-7	Bromomethane	3.04	ug/L	U	N	2024-1712	REG	SW-846-8270E	3.04	0.14
NP051-24-300532	NPDES Outfall 051	09/04/2024	Boron	B	Bromine	0.3	ug/L	U	N	2024-1712	REG	EPA-200-8	0.34	55.64
NP051-24-300534	NPDES Outfall 051	09/04/2024	Bromodichloromethane	75-27-4	Bromoform	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	1.34
NP051-24-300534	NPDES Outfall 051	09/04/2024	Bromoform	75-25-2	Bromomethane	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	32.85
NP051-24-300534	NPDES Outfall 051	09/04/2024	Cadmium	74-83-9	Cadmium	0.337	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.337	7.54
NP051-24-300532	NPDES Outfall 051	09/04/2024	Carbon Tetrachloride	56-23-5	Chloroform	0.333	ug/L	U	N	2024-1712	REG	EPA-200-7	0.333	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	Chlordane[alpha/gamma]	57-74-9	Chloroform	0.0765	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.0765	0.448
NP051-24-300534	NPDES Outfall 051	09/04/2024	Cl[-]	Cl[-]	Chloride	49.7	mg/L	NQ	Y	2024-1712	FD	EPA-300-0	0.67	250
NP051-24-300532	NPDES Outfall 051	09/04/2024	Chloride	49.8	Chloride	49.8	mg/L	NQ	Y	2024-1712	REG	EPA-300-0	0.67	250
NP051-24-300534	NPDES Outfall 051	09/04/2024	Chlorobenzene	108-66-3	Chlorobenzene	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	77.57
NP051-24-300534	NPDES Outfall 051	09/04/2024	Chloroform	106-46-7	Chloroform	6.02	ug/L	NQ	Y	2024-1712	REG	SW-846-8260D	0.333	300
NP051-24-300534	NPDES Outfall 051	09/04/2024	Chloromethane	74-87-3	Chloromethane	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	20.32
NP051-24-300532	NPDES Outfall 051	09/04/2024	Cr	91-94-1	Chromium	3	ug/L	U	N	2024-1712	REG	EPA-200-8	3	50
NP051-24-300532	NPDES Outfall 051	09/04/2024	Co	104-92-8	Cobalt	0.3	ug/L	J	Y	2024-1712	REG	EPA-200-8	0.3	50
NP051-24-300532	NPDES Outfall 051	09/04/2024	Copper	106-46-7	Copper	0.3	ug/L	U	N	2024-1712	REG	EPA-200-8	0.3	1,000
NP051-24-300534	NPDES Outfall 051	09/04/2024	Cyanide(TOTAL)	109-03-0	Cyanide(TOTAL)	0.00167	mg/L	U	N	2024-1712	REG	EPA-335.4	0.0167	0.2
NP051-24-300532	NPDES Outfall 051	09/04/2024	Dinit[4,-]	50-29-3	Dinit[4,-]	0.01	ug/L	U	N	2024-1712	REG	SW-846-8081B	0.01	2.29
NP051-24-300534	NPDES Outfall 051	09/04/2024	Di bromoethane[1,2,-]	106-93-4	Di bromoethane[1,2,-]	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	0.05
NP051-24-300534	NPDES Outfall 051	09/04/2024	Di bromomethane	74-95-3	Di bromomethane	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	7,997
NP051-24-300534	NPDES Outfall 051	09/04/2024	Dichlorobenzene[1,2,-]	95-50-1	Dichlorobenzene[1,2,-]	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	600
NP051-24-300534	NPDES Outfall 051	09/04/2024	Dichlorobenzene[1,4,-]	106-46-7	Dichlorobenzene[1,4,-]	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	75
NP051-24-300534	NPDES Outfall 051	09/04/2024	Dichlorobenzidine[3,3,-]	91-94-1	Dichlorobenzidine[3,3,-]	3.04	ug/L	U	N	2024-1712	REG	SW-846-8270E	3.04	1.25
NP051-24-300534	NPDES Outfall 051	09/04/2024	Dichlorodifluoromethane	75-71-8	Dichlorodifluoromethane	0.355	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.355	197.2
NP051-24-300534	NPDES Outfall 051	09/04/2024	Dichloroethane[1,1,-]	75-34-3	Dichloroethane[1,1,-]	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	25
NP051-24-300532	NPDES Outfall 051	09/04/2024	Dichloroethene[1,2,-]	107-06-2	Dichloroethene[1,2,-]	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	Dichloroethene[1,1,-]	75-35-4	Dichloroethene[1,1,-]	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	7
NP051-24-300534	NPDES Outfall 051	09/04/2024	Dichloroethene[1,2,-]	156-59-2	Dichloroethene[1,2,-]	0.333	ug/L	U	N	2024-1712	REG	SW-846-8260D	0.333	70

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Table 3. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on September 4, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-24-300534	NPDES Outfall 051	09/04/2024	156-60-5	Dichloroethene[trans-1,2-]	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	.300
NP051-24-300534	NPDES Outfall 051	09/04/2024	120-83-2	Dichlorophenol[2,4-]	3.12	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	3.12	45.3
NP051-24-300534	NPDES Outfall 051	09/04/2024	78-87-5	Dichloropropene[1,2-]	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	542-75-6	Dichloropropene[trans-1,3-]	0.5	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.5	4.71
NP051-24-300534	NPDES Outfall 051	09/04/2024	60-57-1	Dieldrin	0.01	ug/L	U	N	UF	2024-1712	REG	SW-846-8081B	0.01	0.0175
NP051-24-300534	NPDES Outfall 051	09/04/2024	84-66-2	Diethylphthalate	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.304	14,800.5
NP051-24-300534	NPDES Outfall 051	09/04/2024	131-11-3	Dimethyl Phthalate	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.304	611.56
NP051-24-300534	NPDES Outfall 051	09/04/2024	84-74-2	Diisobutylphthalate	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.304	884.8
NP051-24-300534	NPDES Outfall 051	09/04/2024	534-52-1	Dinitro-2-methylphenol[4,6-]	3.12	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	3.12	1.52
NP051-24-300534	NPDES Outfall 051	09/04/2024	51-28-5	Dinitrophenol[2,4-]	5.19	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	5.19	38.67
NP051-24-300534	NPDES Outfall 051	09/04/2024	121-14-2	Dinitrotoluene[2,4-]	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	2.37
NP051-24-300534	NPDES Outfall 051	09/04/2024	606-20-2	Dinitrotoluene[2,6-]	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	0.49
NP051-24-300534	NPDES Outfall 051	09/04/2024	123-91-1	Dioxane[1,4-]	3.04	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	3.04	4.59
NP051-24-300534	NPDES Outfall 051	09/04/2024	122-39-4	Diphenylamine	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	122
NP051-24-300534	NPDES Outfall 051	09/04/2024	959-98-8	Endosulfan I	0.00665	ug/L	U	N	UF	2024-1712	REG	SW-846-8081B	0.00665	98.7
NP051-24-300534	NPDES Outfall 051	09/04/2024	33213-65-9	Endosulfan II	0.01	ug/L	U	N	UF	2024-1712	REG	SW-846-8081B	0.01	98.7
NP051-24-300534	NPDES Outfall 051	09/04/2024	72-20-8	Endrin	0.01	ug/L	U	N	UF	2024-1712	REG	SW-846-8081B	0.01	2.23
NP051-24-300534	NPDES Outfall 051	09/04/2024	100-41-4	Ethylenzene	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	700
NP051-24-300534	NPDES Outfall 051	09/04/2024	206-44-0	Fluoranthene	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.304	802.2
NP051-24-300534	NPDES Outfall 051	09/04/2024	86-73-7	Fluorene	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.304	287.6
NP051-24-300532	NPDES Outfall 051	09/04/2024	F-1]	Fluoride	0.033	mg/L	U	N	F	2024-1712	FD	EPA-300.0	0.033	1.6
NP051-24-300532	NPDES Outfall 051	09/04/2024	F-1]	Fluoride	0.033	mg/L	U	N	F	2024-1712	REG	EPA-300.0	0.033	1.6
NP051-24-300534	NPDES Outfall 051	09/04/2024	76-44-8	Heptachlorobenzene	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8081B	0.00665	0.022
NP051-24-300534	NPDES Outfall 051	09/04/2024	118-74-1	Hexachlorobutadiene	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	0.1
NP051-24-300534	NPDES Outfall 051	09/04/2024	87-68-3	Hexachlorocyclopentadiene	3.04	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	3.04	1.39
NP051-24-300534	NPDES Outfall 051	09/04/2024	77-47-4	Hexachloroethane	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	0.41
NP051-24-300534	NPDES Outfall 051	09/04/2024	67-72-1	Hexachloroethane	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	3.28
NP051-24-300534	NPDES Outfall 051	09/04/2024	2691-91-0	HMX	0.00809	ug/L	U	N	UF	2024-1712	REG	SW-846-8330B	0.0809	1,000
NP051-24-300532	NPDES Outfall 051	09/04/2024	Iron	30	ug/L	U	N	F	2024-1712	REG	EPA-200.7	30	1,000	
NP051-24-300534	NPDES Outfall 051	09/04/2024	78-59-1	Isopropone	3.55	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.55	780.63
NP051-24-300532	NPDES Outfall 051	09/04/2024	Pb	Lead	0.5	ug/L	U	N	F	2024-1712	REG	EPA-200.8	0.5	15
NP051-24-300532	NPDES Outfall 051	09/04/2024	Mn	Manganese	2	ug/L	U	N	F	2024-1712	REG	EPA-200.7	2	200
NP051-24-300532	NPDES Outfall 051	09/04/2024	Hg	Mercury	0.067	ug/L	U	N	F	2024-1712	REG	EPA-245.2	0.067	2
NP051-24-300534	NPDES Outfall 051	09/04/2024	Fe	Methyl tert-Butyl Ether	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8270D	0.333	300
NP051-24-300532	NPDES Outfall 051	09/04/2024	Pb	Methylene Chloride	0.5	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.5	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	90-12-0	Methyl Naphthalene[1-]	0.304	ug/L	NQ	Y	F	2024-1712	REG	SW-846-8270E	0.304	11,38
NP051-24-300532	NPDES Outfall 051	09/04/2024	91-57-6	Methyl Naphthalene[2-]	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.304	35.11
NP051-24-300532	NPDES Outfall 051	09/04/2024	No	Molybdenum	0.2	ug/L	U	N	F	2024-1712	REG	EPA-245.2	0.2	1,000
NP051-24-300534	NPDES Outfall 051	09/04/2024	91-20-3	Naphthalene	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.304	30
NP051-24-300532	NPDES Outfall 051	09/04/2024	Ni	Nickel	0.6	ug/L	U	N	F	2024-1712	REG	EPA-200.8	0.6	200
NP051-24-300534	NPDES Outfall 051	09/04/2024	NO2+N2O2-N	Nitrate-Nitrite as Nitrogen	0.413	mg/L	NQ	Y	F	2024-1712	REG	EPA-353.2	0.017	10
NP051-24-300533	NPDES Outfall 051	09/04/2024	NO2-N	Nitrite as Nitrogen	0.15	mg/L	NQ	Y	F	2024-1692	REG	EPA-300.0	0.033	1
NP051-24-300534	NPDES Outfall 051	09/04/2024	98-95-3	Nitrosophenol	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	9.81
NP051-24-300534	NPDES Outfall 051	09/04/2024	108-60-1	Oxybis(1-chloropropane)[2-1]	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	3.07
NP051-24-300534	NPDES Outfall 051	09/04/2024	608-93-5	Pentachlorobenzene	3.12	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	3.12	1
NP051-24-300534	NPDES Outfall 051	09/04/2024	924-16-3	Pentachlorophenol	0.05	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.05	13.82
NP051-24-300534	NPDES Outfall 051	09/04/2024	355-46-4	Perchlorate	0.597	ng/L	U	N	UF	2024-1712	REG	EPA-537M	0.597	401.1
NP051-24-300534	NPDES Outfall 051	09/04/2024	1763-27-1	Perfluorooctanesulfonic acid	0.724	ng/L	U	N	UF	2024-1712	REG	EPA-537M	0.724	60.16
NP051-24-300534	NPDES Outfall 051	09/04/2024	355-67-1	Perfluorooctanoic acid	0.724	ng/L	U	N	UF	2024-1712	REG	EPA-537M	0.724	60.16

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Field Sample ID	Location ID	Sample Date	Parameter Name	Parameter Code	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷
NP051-24-300534	NPDES Outfall 051	09/04/2024	pH	bH	7.2	SU						SW-846-8270E	0.304	170.4
NP051-24-300534	NPDES Outfall 051	09/04/2024	85-01-8	Pheanthrene	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.12	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	108-95-2	Phenol	3.12	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	3.04	249.93
NP051-24-300534	NPDES Outfall 051	09/04/2024	1610-18-0	Prometon	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	0.304	117.42
NP051-24-300534	NPDES Outfall 051	09/04/2024	129-00-0	Pyrene	0.304	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E		
NP051-24-300534	NPDES Outfall 051	09/04/2024	Ra-226+r228	Radium-226 and Radium-228	0.796	pCi/L	J	Y	UF	2024-1712	REG	Generic/Radium by Calculation	-	5
NP051-24-300548	NPDES Outfall 051	09/04/2024	Ra-226+r228	Radium-226 and Radium-228	1.88	pCi/L	J	Y	UF	2024-1712	FD	Generic/Radium by Calculation	-	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	121-82-4	RDX	0.0809	ug/L	U	N	UF	2024-1712	REG	SW-846-8330B	0.0809	9.66
NP051-24-300532	NPDES Outfall 051	09/04/2024	Se	Selenium	1.5	ug/L	U	N	F	2024-1712	REG	EPA-200.8	1.5	50
NP051-24-300534	NPDES Outfall 051	09/04/2024	Ag	Silver	0.300	ug/L	U	N	F	2024-1712	REG	EPA-200.8	0.3	50
NP051-24-300534	NPDES Outfall 051	09/04/2024	100-42-5	Styrene	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	100
NP051-24-300532	NPDES Outfall 051	09/04/2024	SO4(2-)	Sulfate	0.42	mg/L	NQ	Y	F	2024-1712	REG	EPA-300.0	0.133	600
NP051-24-300534	NPDES Outfall 051	09/04/2024	126-33-0	Sulfolane	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	20.03
NP051-24-300534	NPDES Outfall 051	09/04/2024	95-94-3	Tetrachlorobenzene[1,2,4,5]	3.04	ug/L	U	N	UF	2024-1712	REG	SW-846-8270E	3.04	1.66
NP051-24-300534	NPDES Outfall 051	09/04/2024	79-34-5	Tetrachloroethane[1,1,2,2-]	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	10
NP051-24-300534	NPDES Outfall 051	09/04/2024	127-18-4	Tetrachloroethene	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	5
NP051-24-300532	NPDES Outfall 051	09/04/2024	Tl	Thallium	0.6	ug/L	U	N	F	2024-1712	REG	EPA-200.8	0.6	2
NP051-24-300534	NPDES Outfall 051	09/04/2024	108-88-3	Toluene	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	1,000
NP051-24-300527	NPDES Outfall 051	09/04/2024	TDS	Total Dissolved Solids	168	mg/L	J	Y	F	2024-1712	FD	EPA-160.1	2.38	1,000
NP051-24-300532	NPDES Outfall 051	09/04/2024	TDS	Total Dissolved Solids	146	mg/L	J	Y	F	2024-1712	REG	EPA-160.1	2.38	1,000
NP051-24-300532	NPDES Outfall 051	09/04/2024	TKN	Total Kjeldahl Nitrogen	5.03	mg/L	NQ	Y	F	2024-1712	REG	EPA-351.2	0.15	15
NP051-24-300534	NPDES Outfall 051	09/04/2024	8001-35-2	Toxaphene [Technical Grade]	0.15	ug/L	U	N	UF	2024-1712	REG	SW-846-8081B	0.15	0.158
NP051-24-300534	NPDES Outfall 051	09/04/2024	120-82-1	Trichlorobenzene[1,2,4-]	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	70
NP051-24-300534	NPDES Outfall 051	09/04/2024	71-55-6	Trichloroethane[1,1,1-]	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	200
NP051-24-300534	NPDES Outfall 051	09/04/2024	79-00-5	Trichloroethane[1,1,2-]	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	79-01-6	Trichloroethylene	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	5
NP051-24-300534	NPDES Outfall 051	09/04/2024	75-69-4	Trichlorofluoromethane	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	1,140
NP051-24-300534	NPDES Outfall 051	09/04/2024	95-95-4	Trichlorophenol[2,4,5-]	3.12	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	3.12	1,170
NP051-24-300534	NPDES Outfall 051	09/04/2024	88-06-2	Trichlorophenol[2,4,6-]	3.12	ug/L	UJ	N	UF	2024-1712	REG	SW-846-8270E	3.12	11,88
NP051-24-300534	NPDES Outfall 051	09/04/2024	118-96-7	Trinitrotoluene[2,4,6-]	0.117	ug/L	J	Y	F	2024-1712	REG	SW-846-8330B	0.0809	9.8
NP051-24-300532	NPDES Outfall 051	09/04/2024	U	Uranium	0.067	ug/L	U	N	F	2024-1712	REG	EPA-200.8	0.067	30
NP051-24-300534	NPDES Outfall 051	09/04/2024	75-01-4	Vinyl Chloride	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	2
NP051-24-300534	NPDES Outfall 051	09/04/2024	1330-20-7	Xylene [Total]	1	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	1	620
NP051-24-300534	NPDES Outfall 051	09/04/2024	95-47-6	Xylene[1,2-]	0.333	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.333	192,995
NP051-24-300534	NPDES Outfall 051	09/04/2024	Xylene[1,3+Xylene[1,4-]	0.5	ug/L	U	N	UF	2024-1712	REG	SW-846-8260D	0.5	386	
NP051-24-300532	NPDES Outfall 051	09/04/2024	Zn	Zinc	3.3	ug/L	U	N	F	2024-1712	REG	EPA-200.7	3.3	10,000

Notes:

¹ ug/L - micrograms per liter

² mg/L - milligrams per liter

³ ng/L - nanograms per liter

⁴ SU - standard units

⁵ pCi/L - picocuries per liter

⁶ Y - In the Detected column means the analyte was detected

⁷ J - The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual

⁸ NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected

⁹ UJ - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual

¹⁰ N - In the Detected column means the analyte was not detected

¹¹ Y - In the Field Preparation Code column means the sample was not filtered

¹² F - In the Field Preparation Code column means the sample was filtered

¹³ REG - In the Sample Purpose column means the sample was a regular sample

¹⁴ FD - In the Sample Purpose column means the sample was a field duplicate

Attachment 4

Table 3. Analytical Results from Monthly Sampling of RLWTF Treated Effluent Discharged to NPDES Outfall 051 on September 4, 2024. Permit Condition No. 29.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit ⁶	Groundwater Limit ⁷

⁶ There is not a Report Detection Limit for Radium-226 and Radium-228 since this result is calculated

⁷ Groundwater Limit represents standards for groundwater as identified in 20.6.2.3103 NMAC where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for diphenylhydrazine reported as azobenzene, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for N-nitrosodiphenylamine reported as diphenylamine, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Groundwater Limit for combined Endosulfan I and Endosulfan II is 98.7 µg/L, which represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit

Total Kieldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water limit-The DP-1132 standard for Total Nitrogen is 15 mg/L (Condition No. 16)

Groundwater Limit for combined Naphthalene plus monomethylnaphthalenes is 30 µg/L, which represents the NMAC 20.6.2.3103 Groundwater Standard

Attachment 5

Groundwater Monitoring Report - Third Quarter 2024

EPC-DO: 24-288

LA-UR-24-30963

Date: October 29, 2024

Quarterly Groundwater Monitoring Report – Third Quarter 2024

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MCA-RLW-2, Third Quarter 2024.....	3
MCOI-6, Third Quarter 2024.....	4

MCA-RLW-1, Third Quarter 2024

a	Sample Date	7/1/2024
b	Sample Time	0935
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCA-RLW-1
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,864.5
g	Total depth of the well (ft below ground surface (bgs))	22.2
h	Total volume of water in the monitoring well prior to sample collection (gal)	N/A
i	Total volume of water purged prior to sample collection (gal)	N/A
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): N/A Oxidation/Reduction Potential (MV): N/A Temp (deg C): N/A pH (SU): N/A Turbidity (NTU): N/A Specific Conductance (μ S/cm): N/A
k	Description of sample methods	N/A
l	Chain-of-Custody	N/A
m	Location Map	Attachment 6
	Analytical Results	N/A

Notes:

N/A – Not applicable. Well was not sampled when visited on July 1, 2024, due to insufficient water in the well. The well only contained 0.12 ft of standing water.

MCA-RLW-2, Third Quarter 2024

a	Sample Date	7/1/2024
b	Sample Time	0915
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCA-RLW-2
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,806.3
g	Total depth of the well (ft below ground surface (bgs))	40.4
h	Total volume of water in the monitoring well prior to sample collection (gal)	N/A
i	Total volume of water purged prior to sample collection (gal)	N/A
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): N/A Oxidation/Reduction Potential (MV): N/A Temp (deg C): N/A pH (SU): N/A Turbidity (NTU): N/A Specific Conductance (μ S/cm): N/A
k	Description of sample methods	N/A
l	Chain-of-Custody	N/A
m	Location Map	Attachment 6
	Analytical Results	N/A

Notes:

N/A – Not applicable. Well was not sampled when visited on July 1, 2024, due to insufficient water in the well. The well only contained 0.27 ft of standing water.

MCOI-6, Third Quarter 2024

a	Sample Date	7/18/2024
b	Sample Time	1136
c	Individuals collecting sample	N3B Staff
d	Monitoring well identification	MCOI-6
e	Physical description of monitoring well location	See Location Map, Attachment 6
f	Ground-water surface elevation (ft above mean sea level (msl))	6,136.62
g	Total depth of the well (ft below ground surface (bgs))	712.6
h	Total volume of water in the monitoring well prior to sample collection (gal)	29.88
i	Total volume of water purged prior to sample collection (gal)	127.06
j	Physical parameters including temperature, conductivity, pH, oxidation/reduction potential	DO (mg/L): 7.42 Oxidation/Reduction Potential (MV): 188.3 Temp (deg C): 17.9 pH (SU): 7.41 Turbidity (NTU): 1.9 Specific Conductance (μ S/cm): 533
k	Description of sample methods	Attachment 5 Page 5
l	Chain-of-Custody	Attachment 5 Page 5
m	Location Map	Attachment 6
	Analytical Results	Attachment 5 Page 6, Table 1

IB SMO

; Alamos NM

Chain of Custody/Analysis Request

WCOI-6

Lab Agreement #:

Project Number:

Analysis Turnaround Time:

24 Hour - Other -

> Standard

7 Days - Value -

> Standard

14 Days -

> Standard

21 Days -

> Standard

28 Days -

> Standard

Site Name:

N3B LANL

Rad Screening Info:

Lab Reporting Limit Type:

Method Detection Limit

SW-846:11GMP-Metals

SW-846:9012-CNFM

EPAs:351.2-TKN+SW-846:9060-TOC

EPAs:350.1-NH3+353.2-NO3/NO2+365.4-PO4

EPAs:351.2-TDS,Al+SW-846:9060-CIO4-Anions

SW-846:7470-Hg

1.

Field Sample ID

Sample Date

Sample Time

Sample Matrix

CAMO-24-331123

07/18/2024

11:36

W

1.

CAMO-24-331124

07/18/2024

11:36

W

1.

Print Name: Jaclyn SuplizioDate/Time: 07/18/2024
11:30Print Name: John KnightDate/Time: 07/18/2024
11:30Print Name: John KnightDate/Time: 07/18/2024
11:30Print Name: John KnightDate/Time: 07/18/2024
11:30

Initial Instructions:

Inquished by: <u>J. M.</u>	Print Name: <u>Jaclyn Suplizio</u>	Date/Time: 07/18/2024 11:30	Received by: <u>J. Knight</u>	Print Name: <u>John Knight</u>	Date/Time: 07/18/2024 11:30
Inquished by: <u>J. M.</u>	Print Name: <u>Jaclyn Suplizio</u>	Date/Time: 07/18/2024 11:30	Received by: <u>J. Knight</u>	Print Name: <u>John Knight</u>	Date/Time: 07/18/2024 11:30

Attachment 5

Table 1. Analytical Results from Third Quarter 2024 Groundwater Sampling of Perched/Intermediate Monitoring Well MCOI-6, Permit Condition No. 36.

Field Sample ID	Location ID	Sample Date	Parameter Code	Parameter Name	Report Result	Report Units ¹	Validation Qualifier ²	Detected ³	Field Preparation Code ⁴	COC #	Sample Purpose ⁵	Lab Method	Report Method Detection Limit	Groundwater Limit ⁶
CAMO-24-331124	MCOI-6	07-18-2024	Cl(-1)	Chloride	44.6	mg/L	NQ	Y	F	N3B-2024-4056	REG	SW-846;9056A	0.670	250
CAMO-24-331124	MCOI-6	07-18-2024	F(-1)	Fluoride	0.223	mg/L	NQ	Y	F	N3B-2024-4056	REG	SW-846;9056A	0.0330	1.6
CAMO-24-331124	MCOI-6	07-18-2024	NO3-NO2-N	Nitrate-Nitrite as Nitrogen	15.1	mg/L	NQ	Y	F	N3B-2024-4056	REG	EPA-333.2	0.425	10
CAMO-24-331124	MCOI-6	07-18-2024	ClO4	Perchlorate	139	ug/L	NQ	Y	F	N3B-2024-4056	REG	SW-846;6850	2.50	13.8
CAMO-24-331124	MCOI-6	07-18-2024	TDS	Total Dissolved Solids	387	mg/L	NQ	Y	F	N3B-2024-4056	REG	EPA-160.1	2.38	1,000
CAMO-24-331123	MCOI-6	07-18-2024	TKN	Total Kjeldahl Nitrogen	0.0330	mg/L	UJ	N	UF	N3B-2024-4056	REG	EPA-351.2	0.0330	-

Notes:

¹mg/L - milligrams per liter.
²ug/L - micrograms per liter.

³NQ - No validation qualifier flag is associated with this result, and the analyte is classified as detected.

⁴U - The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual.

⁵Y - In the detected column means the analyte was detected.

⁶N - In the detected column means the analyte was not detected.

⁷F - In the Field Preparation Code column means the sample was filtered.

⁸UF - In the Field Preparation Code column means the sample was not filtered.

⁹REG - In the sample purpose column means the sample was a regular sample.

¹⁰Groundwater limit represents standards for groundwater as identified in NMAC 20.6.2.3103 where available, otherwise the value represents NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.
 Total Kjeldahl Nitrogen does not contain either a 20.6.2.3103 NMAC standard or NMED Risk Assessment Guidance, Table A-1, Tap Water Limit.

Attachment 6

Monitoring Well Location Map

EPC-DO: 24-288

LA-UR-24-30963

Date: October 29, 2024

ATTACHMENT 6

