National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
White Sands Test Facility
P.O. Box 20
Las Cruces, NM 88004-0020

July 16, 2024

Reply to Attn of: RE-24-084

Mr. JohnDavid Nance, Bureau Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

Subject: NASA White Sands Test Facility (WSTF) Quarterly Environmental Activity Report for Second Quarter 2024

Enclosed is the NASA White Sands Test Facility (WSTF) Quarterly Environmental Activity Report for Second Quarter 2024. This reporting format includes an Executive Summary that provides important events/observations as Enclosure 1, a paper copy of the report as Enclosure 2, and a CD-ROM with the report in PDF as Enclosure 3.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions or comments concerning this submittal, please contact Amanda Skarsgard of my staff at 575-524-5460.

Timothy Davis

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Timothy J. Davis
Chief, Environmental Office

3 Enclosures

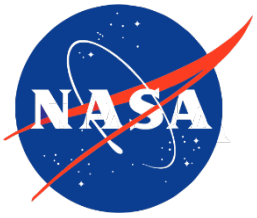
cc:
Mr. Gabriel Acevedo
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

Executive Summary

The following summarizes important information associated with NASA White Sands Test Facility (WSTF) environmental program activities in the second quarter (April – June) of 2024:

- NASA completed shipments of hazardous waste and waste paint in April 2024; asbestos, medical, universal, and hazardous waste in May 2024; and hazardous and universal waste in June 2024.
- NASA sampled 40 of 40 groundwater monitoring wells scheduled for April 2024, 33 of 35 wells scheduled for May 2024, and 32 of 32 wells scheduled for June 2024. NASA scheduled 32 groundwater monitoring wells for sampling in July 2024.
- NASA operated the MPITS and PFTS for 18 and 21 days in April 2024; 20 and 24 days in May 2024; and 18 and 30 days in June 2024, respectively.
- NASA implemented the NMED-approved plan for additional investigation fieldwork at or near the 300 and 400 Area Closures, performing soil sampling and completing the installation and development of three monitoring wells.
- NASA initiated supplemental groundwater and soil vapor monitoring in the 400 Area in accordance the NMED-approved plan.
- NASA continued extraction of perched groundwater at monitoring well 600-G-138.
- NASA submitted an additional revised wastewater lagoon investigation report and continued addressing NMED comments in their disapproval of the remaining investigation report.
- NASA continued developing the Remedy Completion Report documenting work at SWMU 16.
- NASA is addressing NMED comments in the approval with modifications of the SWMU 33 IWP and began project planning.
- NASA performed investigation fieldwork for SWMU 54 and began preparing the investigation report.
- NASA continued project planning for several additional monitoring well projects and is working to address NMED comments in several related approvals with modification or disapprovals.
- NASA continued project planning for TMRP phase 2 in accordance with the NMED-approved work plan.
- NASA submitted 14 documents to the NMED Hazardous Waste Bureau in the second quarter of 2024.
- There were no reportable non-compliance issues in April, May, or June 2024.

National Aeronautics and Space Administration



Quarterly Environmental Activity Report

Second Quarter 2024

NM8800019434

Report Deadline: July 15, 2024

NASA Johnson Space Center White Sands Test Facility
Quarterly Environmental Activity Report

Second Quarter 2024

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Timothy Davis Digitally signed by Timothy Davis
Date: 2024.07.16 10:46:15 -06'00'

Timothy J. Davis
Chief, Environmental Office

See Electronic Signature

Date

National Aeronautics and Space Administration

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Executive Summary

The following summarizes important information associated with NASA White Sands Test Facility (WSTF) environmental program activities in the second quarter (April – June) of 2024:

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- NASA operated the MPITS and PFTS for 18 and 21 days in April 2024; 20 and 24 days in May 2024; and 18 and 30 days in June 2024, respectively.
- NASA implemented the NMED-approved plan for additional investigation fieldwork at or near the 300 and 400 Area Closures, performing soil sampling and completing the installation and development of three monitoring wells.
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- NASA continued project planning for several additional monitoring well projects and is working to address NMED comments in several related approvals with modification or disapprovals.
- NASA continued project planning for TMRP phase 2 in accordance with the NMED-approved work plan.
- NASA submitted 14 documents to the NMED Hazardous Waste Bureau in the second quarter of 2024.
- There were no reportable non-compliance issues in April, May, or June 2024.

1.0 Waste Management Activities

1.1 NASA completed the following waste shipments in the second quarter of 2024.

Date	Shipped To	Type of Waste	No. of Containers	Amount of Waste
4/18/24	Veolia, Henderson, CO	Hazardous (Lab Pack)	7	99 kg
4/18/24	US Ecology, Beatty, NV	Waste Acids / M&O Coolant	2	226 kg
4/18/24	ACT, Albuquerque, NM	Waste Paint Related	1	17 kg
5/1/24	South Central Solid Waste Authority, Las Cruces, NM	Asbestos	1	3 yd3
5/8/24	Stericyle, El Paso, TX	Medical Waste	2	1 ft3
5/16/24	Veolia, Phoenix, AZ	Universal	6	233 kg
5/16/24	Veolia, Henderson, CO	Hazardous (Lab Pack)	9	379 kg
5/16/24	Veolia, Henderson, CO	Waste Fuel	1	205 kg
5/16/24	US Ecology, Beatty, NV	Contaminated Debris	5	479 kg
6/20/24	Veolia, Henderson, CO	Hazardous (Lab Pack)	15	486 kg
6/20/24	Veolia, Phoenix, AZ	Universal	15	202 kg

2.0 Environmental Monitoring

2.1 NASA performed sampling at 40 of 40 groundwater monitoring wells or zones scheduled for sampling in April 2024, 33 of 35 wells or zones in May 2024, and 32 of 32 wells or zones in June 2024 in accordance with the approved Groundwater Monitoring Plan (GMP). NASA was unable to sample two wells scheduled for sampling in May 2024 due to equipment limitations. NASA resolved those issues, rescheduled the wells for sampling in June 2024, and completed the required sampling (see also the first bullet below). Previous deviations from the planned sampling schedule are described below and have been reported to NMED in previous monthly reports:

- Wells 600A-001-GW and 600A-002-GW (scheduled for sampling in November 2022) were not sampled because of equipment failure. NASA obtained replacement sampling equipment in December 2022 for use in January 2023. Upon further evaluation, NASA determined that previous development of these wells using on-site equipment after colloidal borescope tests may have been inadequate. In October 2023, a subcontracted drilling company performed some additional development of the two groundwater monitoring wells, but low water levels and

slow groundwater recharge prevented complete development. NASA acquired additional development equipment and performed longer-term well development, which was completed in May 2024. NASA attempted to sample the wells in May 2024, but sampling equipment failures prevented sampling. NASA repaired the sampling equipment and performed initial sampling at wells 600A-001-GW and 600A-002-GW in June 2024.

- NASA could not sample well PL-7-480 in August 2022, because the Westbay zone did not produce water. The water level at this location has dropped below this sample port and it cannot be sampled. NASA removed the zone from the sampling schedule in the 2024 GMP update.
- Wells BLM-1-435 (scheduled for sampling in April 2021) and PL-3-453 (scheduled for sampling in December 2020) have not been sampled, because the water levels are not sufficient for sampling. NASA continued planning the abandonment and replacement of wells BLM-1-435 and PL-3-453 in accordance with NMED-approved work plans.

2.2 NASA performed other regulatory groundwater sampling requirements as scheduled and as allowed by operational status. NASA did not sample well MPE-8 in the second quarter because it was not operational due to equipment failure. NASA is evaluating the well's equipment and operational capability and will provide updates in future reports.

2.3 NASA developed the July 2024 groundwater sampling schedule and plans to sample 32 groundwater monitoring wells or zones based on GMP requirements.

3.0 Corrective Actions/Investigations

3.1 Mid-plume Interception and Treatment System Operations

Month	Days Operated	Average Flow Rate (gpm)	Volume Extracted and Treated (acre-feet)	Volume of Groundwater Discharged to Infiltration Basin (acre-feet)	Volume of IDW Treated and Discharged to the Infiltration Basin (gallons)
Apr-24	18 of 30	8.3	0.53	0.58	412
May-24	20 of 31	7.6	0.54	0.55	202
Jun-24	18 of 30	7.9	0.42	0.44	2,755

Shutdown Date	Restart Date	Shutdown Status	Discussion
4/4/24	4/8/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
4/12/24	4/15/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
4/18/24	4/24/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
4/26/24	4/29/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.

Shutdown Date	Restart Date	Shutdown Status	Discussion
5/3/24	5/6/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
5/10/24	5/13/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
5/16/24	5/20/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
5/24/24	5/28/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
5/30/24	6/3/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
6/7/24	6/10/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
6/13/24	6/17/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
6/19/24	6/24/24	Unplanned	The system shut down automatically due to a disruption in the off-site electrical power supply.
6/26/24	6/26/24	Unplanned	The system shut down automatically because of an inadvertent activation of a float switch.

3.2 Plume Front Treatment System Operations

Month	Days Operated	Average Flow Rate (gpm)	Volume Extracted and Treated (acre-feet)	Volume Injected (acre-feet)	Volume Discharged to Grade (acre-feet)	Volume Discharged to Modu-Tank (acre-feet)
Apr-24	21 of 30	816	88.1	89.0	0.52	0.011
May-24	24 of 31	816	79.8	80.1	0.49	0.006
Jun-24	30 of 30	816	102.7	103.2	1.3	0.001

Shutdown Date	Restart Date	Shutdown Status	Discussion
4/2/24	4/12/24	Planned	The system was shut down to integrate communications for a new flow meter at the MPITS infiltration basin into the PLC at well PFI-3.
4/15/24	4/15/24	Unplanned	The system shut down automatically because of a disruption in the electrical power supply.
5/7/24	5/14/24	Planned	NASA shut the system down to perform routine maintenance of the UV reactor.

Shutdown Date	Restart Date	Shutdown Status	Discussion
6/17/24	6/17/24	Unplanned	The system shut down automatically due to a disruption in the off-site electrical power supply.
6/19/24	6/20/24	Unplanned	The system shut down automatically due to a disruption in the off-site electrical power supply.
6/30/24	7/1/24	Unplanned	The system shut down automatically because of electrical storm activity in the area that resulted in a disruption in the electrical power supply.

3.3 200 Area Investigation

- NMED disapproved the *2023 WSTF Soil Vapor Risk Based Concentration Memorandum* (January 26, 2023) on October 18, 2023, and provided two comments that NASA addressed in the January 18, 2024 *Response to Disapproval of the NASA WSTF 2023 Soil Vapor Risk Based Concentrations (RBC) Memorandum*. NASA is adapting the 2024 RBCs to incorporate NMED input from 2023. Additional time will be required to complete this update, so NASA submitted the *Request for Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 2024 Soil Vapor Risk Based Concentrations (RBCs) Memorandum* on June 12, 2024.
- NMED approved the *Response to Second Disapproval 200 and 600 Area Vapor Intrusion Assessment Report* (April 27, 2023) with modifications on April 18, 2024. NASA continues work to address four NMED comments and submit a revised report no later than July 31, 2024 as directed by NMED. NMED also directed NASA to prepare a follow-on soil vapor monitoring plan for the 200 and 600 Areas and provide it for NMED review no later than November 27, 2024.

3.4 300/400 Area

- NASA completed project planning for the installation of additional groundwater monitoring wells in the 300 Area Closures in accordance with the NMED-approved *300 Area Supplemental Abbreviated Drilling Work Plan* and initiated fieldwork in April 2024. In addition to the initial project scope, NASA planned to perform an NMED-approved matrix diffusion study at two boreholes in conjunction with heat pulse flow meter and optical televiewer logging.
- NASA and the responsible drilling and matrix diffusion subcontractors began investigation fieldwork on April 8, 2024. NASA completed drilling, soil sampling, CORE DFN (matrix diffusion) sampling, and geophysical logging at the borehole for well 300-002-GSV. NASA installed the multiport soil vapor and groundwater monitoring (MSVGM) well 300-002-GSV in the borehole by May 7, 2024 in accordance with the approved plan. Following completion of well 300-002-GSV, equipment was mobilized to the second 300 Area drilling location and NASA performed drilling, soil sampling, CORE DFN sampling, and geophysical logging at the borehole for well 300-001-GSV. NASA installed MSVGM well 300-001-GSV by June 4, 2024 in accordance with the approved plan. This completed drilling and well installation work in the 300 Area and equipment was mobilized to the 400 Area. NASA drilled and installed groundwater monitoring well 400-001-GW (required by NMED to replaced failed groundwater monitoring well NASA 9) by June 18, 2024. On June 25, 2024, the drilling subcontractor mobilized well development equipment and NASA completed development of groundwater monitoring wells 300-001-GSV, 300-002-GSV, and 400-001-GW by June 27, 2024.

- NASA performed the second quarterly groundwater and soil vapor sampling in accordance with the NMED-approved *400 Area Supplemental Groundwater and Soil Vapor Monitoring Plan* (July 11, 2023). NASA continued to receive and review analytical data from the first quarterly monitoring event and prepare the related quarterly monitoring report. Due to other project constraints, NASA submitted the *Request for Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024* on May 6, 2024. NMED approved the request on May 16, 2024, extending the due date for submittal of the report to July 30, 2024.

3.5 600 Area Perched Groundwater Extraction Pilot Test and Investigation

- In April, May, and June 2024, NASA extracted approximately 197, 244, and 164 gallons of perched groundwater, respectively, from monitoring well 600-G-138 in accordance with NMED's March 1, 2013, *Approval Time Extension for Implementation of the Perched Groundwater Extraction Pilot Test at the 600 Area*. Groundwater elevation measurements indicate there is approximately 3.18 feet of perched groundwater within this well. This perched groundwater thickness has been relatively consistent since the inception of extraction activities in 2013. Extracted groundwater was containerized for treatment at the Mid-plume Interception and Treatment System (MPITS) and discharged in accordance with DP-1255.
- NASA submitted the *600 Area Perched Groundwater Extraction Pilot Test Interim Status Report – Project Year 11* on April 29, 2024.
- NMED is reviewing the *600 Area Perched Groundwater Phase II Abbreviated Investigation Work Plan* (November 27, 2023).

3.6 SWMUs 2, 8, and 34 and AOC 51 (Wastewater Lagoons)

- NASA continued working to address NMED comments in their disapprovals of the *NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report* (November 25, 2019) from June 6, 2022 and the *NASA White Sands Test Facility (WSTF) 100 Area Wastewater Lagoons Closure (SWMU 2) Investigation Report* (August 3, 2020) from July 5, 2022.
- NASA revised the investigation report for the 200 wastewater lagoons (SWMU 8) and submitted the *Response to Disapproval of the NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report* on April 29, 2024. NASA subsequently submitted the *Quality Assurance Reports for the Response to Disapproval of the NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report* on May 29, 2024.
- NASA continued reviewing chemical analytical data to support revision of the remaining Investigation Report and development of the Risk Assessment report for the 100 Area wastewater lagoons.
- NMED is reviewing the *Response to Disapproval of NASA White Sands Test Facility (WSTF) STGT Wastewater Lagoons Closure (AOC 51) Investigation Report* (November 20, 2023) and the *Response to Disapproval of 600 Area Lagoons (SWMU 34) IR and Risk Assessment* (February 21, 2024).

3.7 SWMU 10 (200 Area Hazardous Waste Transmission Lines [HWTL])

- As indicated in the *Response to Approval with Modifications of the NASA WSTF 200 Area HWTL (SWMU 10) Investigation Report and Risk Assessment Report* (December 12, 2023), no further investigation work is required at SWMU 10. NASA is evaluating this SMWU for a corrective action complete determination.

3.8 SWMU 16 (600 Area BLM Off-site Soil Pile)

- NASA previously completed investigation fieldwork in accordance with the NMED-approved *Accelerated Corrective Measures Work Plan for the NASA WSTF SWMU 16 (600 Area BLM Off-Site Soil Pile)*. During the second quarter of 2024, NASA received analytical data from the subcontracted laboratories and initiated data processing to support ongoing preparation of the Remedy Completion Report. Because of continuing complications with the legacy data management system, complete processing of chemical analytical data, and the resulting data validation and risk assessment, is delayed. As a result, NASA expects that a request for extension of time for submittal of the Remedy Completion Report will be required.

3.9 SWMUs 21-27 (Septic Tanks)

- After reviewing the *Response to Second Disapproval of NASA White Sands Test Facility (WSTF) Septic Tanks (SWMUs 21-27) Investigation Report* (May 18, 2021), NMED approved the investigation report. NASA submitted the *NASA White Sands Test Facility Petition for Corrective Action Status Review* on April 4, 2024.

3.10 SWMUs 29-31 (Small Arms Firing Ranges)

- After reviewing the second revision to the *Small Arms Firing Ranges (SWMUs 29-31) Remedy Completion Report and Risk Assessment Report* (August 3, 2020), NMED approved the reports. NASA submitted the *NASA White Sands Test Facility Petition for Corrective Action Status Review* on April 4, 2024, which included SMWUs 30 and 31. Corrective action complete work at SWMU 29 is pending additional reporting and NMED input on the collocated wastewater lagoon (AOC 51).

3.11 SWMU 33 (Test Stand 302 Cooling Water Pond)

- NMED approved the *Response to Disapproval of NASA WSTF 300 Area Test Stand 302 Cooling Water Pond (SWMU 33) IWP and HIS* (September 14, 2022) with modifications on January 19, 2024. NMED directed NASA to address five comments and submit a revised work plan no later than April 30, 2024. NASA submitted the *Response to Approval with Modifications for the NASA WSTF 300 Area Test Stand 302 Cooling Water Pond (SWMU 33) Investigation Work Plan and Historical Information Summary* on April 26, 2024 and began project planning.

3.12 SWMU 49 (700 Area Landfill)

- NMED is reviewing the *NASA White Sands Test Facility (WSTF) 700 Area Landfill (SWMU 49) Phase II Abbreviated Investigation Work Plan* (October 25, 2023).

3.13 SWMU 54 (500 Area Former Oxidizer Burner)

- NASA completed project planning to perform the investigation in accordance with the *Response to Approval with Modifications of the NASA White Sands Test Facility (WSTF) 500 Area Former Oxidizer Burner (FOB) Investigation Work Plan (IWP) and Historical Information Summary (HIS)* (December 21, 2023). NASA completed procurements for the required soil boring and analytical support subcontractors. The subcontractor drilling company mobilized to WSTF on April 30, 2024 and NASA performed shallow soil sampling at 11 borings and shipped samples to the off-site laboratory for analysis.

- NASA received analytical from the off-site laboratory and began developing the investigation report and risk screening evaluation in accordance with the approved work plan. The investigation report is due to NMED no later than July 31, 2024.

3.14 Groundwater Monitoring Well Abandonment, Installation, and Reconfiguration

- NASA continued planning well drilling activities in accordance with the *Response to Approval with Modifications of the NASA WSTF Work Plan for Abandonment of NASA WSTF Well BLM-1-435 and Replacement with Monitoring Well 600C-003-GW*, which was submitted to NMED on January 30, 2024.
- NMED disapproved the *Reconfiguration Report for NASA Well BW-4* (March 21, 2023) on February 6, 2024. NMED provided a comment about the report and directed NASA to address it and provide a revised report no later than July 31, 2024. NASA is reviewing the comments and working on the revised report.
- NMED disapproved the *Reconfiguration Work Plans for Wells PL-6, PL-7, PL-8, PL-10, ST-5, and WW-3* (April 29, 2021) on February 6, 2024. NMED directed NASA to address a substantial comment regarding well replacement and to provide a revised report no later than July 31, 2024. NASA is reviewing the comment and working on the revised report.
- NASA continued to plan for the installation of wells 600B-001-GW (replacement for BLM-28), 600C-001-GW (deeper well adjacent to BLM-10-517), 600C-002-GW (replacement for PL-6), and BLM-43 (replacement for BLM-30).

3.15 Targeted Mobile Remediation Process (TMRP)

- NMED approved the *Targeted Mobile Remediation Process Pilot Test Work Plan, Phase 2* (April 25, 2023) on May 15, 2024 and NASA began planning for project implementation.
- NMED approved the *NASA White Sands Test Facility ST-1-541 Contaminated Groundwater Release Abbreviated Investigation Report* (May 16, 2023) with modifications on March 25, 2024, and directed NASA to address a comment and submit a revised report no later than June 18, 2024. NASA submitted the *Response to Approval with Modifications of the NASA WSTF ST-1-541 Contaminated Groundwater Release Abbreviated Investigation Report* on May 30, 2024.

3.16 Groundwater Data Representativeness Evaluation

- NMED disapproved the *Groundwater Data Representativeness Phase 2: Water FLUTe Well Evaluation Abbreviated Investigation Report* (April 27, 2023) on February 6, 2024. NMED directed NASA to address eight comments and submit a revised report no later than July 31, 2024. NASA is reviewing the comment and working on the revised report.

3.17 Dye Tracer Test Investigation

- NASA continued planning for the installation of three groundwater monitoring wells in accordance with the NMED-approved *Abbreviated Drilling Work Plan in Response to the NMED Approval with Modification of the Report on Tracer Testing in the WSTF 200/600 Areas and Mid-plume Constriction Area* (December 20, 2022). The due date for submittal of the well completion reports is December 31, 2024.

3.18 PFAS Monitoring

- In the 2022 update of the Groundwater Monitoring Plan, NASA informed NMED of an ongoing preliminary assessment of PFAS being conducted by NASA Headquarters. The NASA Headquarters contractor for the preliminary assessment performed groundwater sampling at WSTF in April 2022 and developed a report for NASA review. Based on the results of the preliminary assessment, NASA proposed the installation of additional monitoring wells as described in the *Response to Approval with Modifications Abbreviated Drilling Work Plan for*

the Installation of Monitoring Wells in the WSTF 100 and 600 Areas (Proposed Monitor Wells for PFAS Assessment) (April 13, 2023). NASA performed fieldwork in accordance with the plan in July through September 2023 and submitted the *NASA White Sands Test Facility (WSTF) Well Completion Report for PFAS Site Investigation Well Completion Summary Report* on March 29, 2024. NASA Headquarters expects the report detailing the field activities and findings to be ready for submittal to NMED in mid-2024.

4.0 Non-compliance Issues

The NASA RCRA Permit requires that other non-compliance conditions be reported to NMED. There were no instances of other non-compliance conditions during this reporting period that require notification under the Permit. The criteria for non-compliance reporting in this report (as defined by 40 CFR 270.30 (l)(10) and EPA interpretations at RCRA Faxbacks 13142 and 13686) would be any non-compliance with permit conditions that is not classified as minor recordkeeping, reporting, and similar oversights that were corrected once discovered. Additionally, there were no issues meeting the previously defined criteria (minor items immediately corrected) that were part of a repeating pattern of non-compliance.

5.0 Documents Submitted

5.1 Documents submitted to the Hazardous Waste Bureau in the second quarter of 2024

- *NASA White Sands Test Facility (WSTF) Quarterly Environmental Activity Report for First Quarter 2024*, April 12, 2024
- *Request for Extension of Time for Submittal of Three Well Completion Reports (WCRs) for NASA White Sands Test Facility (WSTF) Wells 300-001-SVG, 300-002-SVG, and 400-001-GW*, April 18, 2024
- *Fee Assessment for the Fourth Quarter 2023 Periodic Monitoring Report (PMR) - NMED Invoice Number HWB-NASA-24-001*, April 18, 2024
- *Response to Approval with Modifications for the NASA WSTF 300 Area Test Stand 302 Cooling Water Pond (SWMU 33) Investigation Work Plan and Historical Information Summary*, March 26, 2024
- *NASA WSTF Groundwater Monitoring Plan Update for 2024*, April 29, 2024
- *600 Area Perched Groundwater Extraction Pilot Test Interim Status Report – Project Year 11*, April 29, 2024
- *Response to Disapproval of the NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report*, April 30, 2024
- *Request for Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024*, May 6, 2024
- *Fee Assessment for the 100-001-GW and 600C-005-GW Well Completion Reports (NMED Invoice Number HWB-NASA-24-002)*, May 21, 2024
- *NASA WSTF Periodic Monitoring Report – First Quarter 2024*, May 23, 2024
- *Quality Assurance Reports for the Response to Disapproval of the NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report*, May 29, 2024

- *NASA White Sands Test Facility (WSTF) National Response Center (NRC) Incident #1399862, Five-Day Written Notification*, May 29, 2024
- *Response to Approval with Modifications of the NASA WSTF ST-1-541 Contaminated Groundwater Release Abbreviated Investigation Report*, May 30, 2024
- *Request for Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 2024 Soil Vapor Risk Based Concentrations (RBCs) Memorandum*, June 12, 2024

5.2 Pertinent documents submitted to other NMED bureaus in the second quarter of 2024

- *30-Day Notification of UST Temporary Closure,* Petroleum Storage Tank Bureau, April 25, 2024
- *NASA White Sands Test Facility (WSTF) Groundwater Remediation Systems Totalizing Flow Meter Verification Report for MPITS Infiltration Basin*, Ground Water Quality Bureau, May 10, 2024
- *NASA JSC White Sands Test Facility- FF, NM3590607 – 300/400 Area Water Safety Improvements and Gardner Springs Arroyo Waterline – Notice of Project Completion*, Drinking Water Bureau, May 14, 2024
- *Fee Assessment for Discharge Permit Renewal, DP-392, NASA White Sands Test Facility, 100, 200, and 600 Area Sewage Lagoons*, Ground Water Quality Bureau, June 18, 2024
- *Annual Opacity/Emissions Eval for Emergency Generators*, Air Quality Bureau, June 27, 2024
- *Quarterly Opacity/Emissions Evaluation for Firing Range Generator (Unit 17)*, Air Quality Bureau, June 27, 2024

5.3 Status of documents previously submitted to the NMED Hazardous Waste Bureau for which additional correspondence was recorded in the second quarter of 2024

- NASA submitted the *NMED Disapproval Response for 200 Area and 600 Area Vapor Intrusion Assessment Report* on January 30, 2020. NMED disapproved the report on September 20, 2022 and directed NASA to address three multipart comments and submit a revised report no later than April 28, 2023. NASA submitted the *Response to Second Disapproval 200 and 600 Area Vapor Intrusion Assessment Report* on April 27, 2023. NMED approved the revised report on April 18, 2024 with modifications. NMED directed NASA to address four comments and submit a revised report no later then July 31, 2024.
- NASA submitted the *Response to Disapproval of 300 Area Supplemental Abbreviated Drilling Work Plan* on July 14, 2021. NMED approved the *300 Area Supplemental Abbreviated Drilling Work Plan* on May 2, 2023 and directed NASA to submit a well completion report no later than April 30, 2024. NASA submitted the *Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan (ADWP)* on September 13, 2023. On November 1, 2023, NMED approved NASA's recommendation to add scope to the investigation and directed NASA to submit a report documenting the results of well installation and investigation activities no later than June 30, 2024. NASA submitted the *Request for Extension of Time for Submittal of Three Well Completion Reports (WCRs) for NASA White Sands Test Facility (WSTF) Wells 300-001-SVG, 300-002-SVG, and 400-001-GW* on April 18, 2024. NMED approved the request on May 6, 2024, extending the due date for submittal of the three well completion reports to August 30, 2024.
- NASA submitted the *Request for Fourth Extension of Time for NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report (IR) Response to Disapproval* on November 22, 2023. NMED approved the request on January 9, 2024,

extending the due date for submittal of the investigation report to April 30, 2024. NASA submitted the *Response to Disapproval of the NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report* on March 30, 2024. NASA subsequently submitted the *Quality Assurance Reports for the Response to Disapproval of the NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report* on May 29, 2024.

- NASA submitted the *Background Groundwater Study Investigation Report* on July 27, 2023. NASA received NMED's September 6, 2023 *Fee Assessment Background Groundwater Study Investigation Report* and provided the $5,000 review fee on September 18, 2023. NMED approved the report with modifications on May 6, 2024. NMED directed NASA to address three comments and submit a revised report no later than July 31, 2024.
- NASA submitted the *ST-1-541 Contaminated Groundwater Release Abbreviated Investigation Report* on May 16, 2023. NASA received NMED's July 10, 2023 fee assessment and invoice for review of the report and provided the $6,000 review fee on August 22, 2023. NMED approved the report with modifications on March 25, 2024 and directed NASA to address a comment and submit a revised report no later than June 18, 2024. NASA submitted the *Response to Approval with Modifications of the NASA WSTF ST-1-541 Contaminated Groundwater Release Abbreviated Investigation Report* on May 30, 2024.
- NASA submitted the *Correction to Targeted Mobile Remediation Process Pilot Test Work Plan, Phase 2* on June 6, 2023. NMED approved the work plan on May 15, 2024.
- NASA submitted the *NASA White Sands Test Facility (WSTF) Well Completion Report for PFAS Site Investigation Well Completion Summary Report* on March 29, 2024. NASA updated the names of these wells to 100-001-GW and 600C-005-GW to reflect the current WSTF well identification scheme. NASA received NMED's May 7, 2024 fee assessment and invoice for review of the report and provided the $6,000 review fee on May 21, 2024.
- NASA submitted the *NASA WSTF Periodic Monitoring Report – Fourth Quarter 2023* on March 7, 2024. NASA received NMED's April 2, 2024 fee assessment for review of the report and provided the $5,000 review fee on April 18, 2024.
- NASA submitted the *Request for Extension of Time for NASA White Sands Test Facility (WSTF) Periodic Monitoring Report – First Quarter 2024* March 28, 2024. NMED approved the request, extending the due date for submittal of the report to May 24, 2024. NASA submitted the *NASA WSTF Periodic Monitoring Report – First Quarter 2024* on May 23, 2024.
- NASA submitted the *Request for Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024* on May 6, 2024. NMED approved the request on May 16, 2024, extending the due date for submittal of the report to July 30, 2024.
- NASA submitted the *Request for Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 2024 Soil Vapor Risk Based Concentrations (RBCs) Memorandum* on June 12, 2024. NMED approved the request on June 20, 2024, extending the due date for submittal of the memo to August 30, 2024.