National Aeronautics and
Space Administration

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

October 11, 2024

Reply to Attn of: RE-24-142

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 Third Quarter 2024

Enclosed is the NASA White Sands Test Facility (WSTF) Quarterly Environmental Activity Report for Third 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.

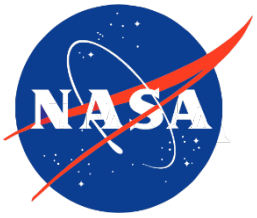
Amanda Skarsgard
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For: Timothy J. Davis
Chief, Environmental Office

3 Enclosures

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

National Aeronautics and Space Administration



Quarterly Environmental Activity Report

Third Quarter 2024

NM8800019434

Report Deadline: October 15, 2024

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

Third 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.

Amanda Skarsgard Digitally signed by Amanda Skarsgard
Date: 2024.10.11 13:18:05 -06'00'

For: Timothy J. Davis
Chief, Environmental Office

See Electronic Signature
Date

National Aeronautics and Space Administration

Johnson Space Center
White Sands Test Facility
12600 NASA Road
Las Cruces, NM 88012
www.nasa.gov/centers/wstf

www.nasa.gov

Executive Summary

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

- NASA completed shipments of hazardous waste and scrap metal in July 2024; medical, universal, TSCA, and hazardous waste and scrap metal in August 2024; and hazardous waste, used oil, and scrap metal in September 2024.
- NASA sampled 33 of 33 groundwater monitoring wells scheduled for July 2024, 37 of 37 wells scheduled for August 2024, and 50 of 50 wells scheduled for September 2024, including 14 wells scheduled for annual PFAS sampling. NASA scheduled 40 groundwater monitoring wells for sampling in October 2024.
- NASA operated the MPITS and PFTS for seven and 25 days in July 2024; eight and 31 days in August 2024; and 17 and 30 days in September 2024, respectively.
- NASA responded to NMED correspondence related to WSTF risk-based concentrations in soil vapor and a response to approval with modifications of the vapor intrusion report for work performed in the 200 and 600 Areas.
- NASA completed fieldwork in accordance with the NMED-approved plan for additional investigation fieldwork at or near the 300 and 400 Area Closures, performing groundwater sampling and preparing well completion reports for three monitoring wells.
- NASA continued supplemental groundwater and soil vapor monitoring in the 400 Area in accordance the NMED-approved plan and provided the monitoring report for the first quarterly monitoring event.
- NASA continued extraction of perched groundwater at monitoring well 600-G-138.
- NASA submitted the final (of four) revised wastewater lagoon investigation report and addressed NMED comments in their approval with modifications of a previously submitted wastewater lagoon investigation report.
- NASA continued developing the Remedy Completion Report documenting work at SWMU 16.
- NASA received NMED's determination of administrative incompleteness for a petition for corrective action status review of SWMUs 21-27, 30, and 31and began addressing NMED comments and preparing for the public comment process.
- NASA prepared and submitted the investigation report for SWMU 54.
- NASA continued work to address NMED comments in several approvals with modification or disapprovals related to ongoing well projects.
- NASA submitted 31 documents to the NMED Hazardous Waste Bureau in the third quarter of 2024.
- There were no reportable non-compliance issues in July, August, or September 2024.

1.0 Waste Management Activities

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

Date	Shipped To	Type of Waste	No. of Containers	Amount of Waste
7/18/24	US Ecology, Beatty, NV	Hazardous	10	5,263 kg
7/18/24	Veolia, Henderson, CO	Hazardous (Waste Fuel)	3	560 kg
7/18/24	Veolia, Henderson, CO	Hazardous (Lab Pack)	11	160 kg
7/24/24	W Silver, Santa Teresa, NM	Scrap Metal	1	3,366 kg
8/19/24	Stericycle, El Paso, TX	Medical Waste	1	6.1 ft^3
8/20/24	W Silver, Santa Teresa, NM	Scrap Metal	1	8,763 kg
8/26/24	ACT Enviro, Albuquerque, NM	Hazardous	2	170 kg
8/26/24	US Ecology, Beatty, NV	Hazardous	2	100 kg
8/26/24	Veolia, Henderson, CO	Hazardous (Lab Pack)	12	226 kg
8/26/24	Veolia, Henderson, CO	Hazardous (Waste Fuel)	1	137 kg
8/26/24	Veolia, Henderson, CO	Universal	7	298 kg
8/26/24	Veolia, Phoenix, AZ	TSCA Waste	1	19 kg
9/9/24	US Ecology, Beatty, NV	Hazardous	2	284 kg
9/9/24	Mesa Oil, Belen, NM	Used Oil	24	3,364 kg
9/26/24	US Ecology, Beatty, NV	Hazardous	8	596 kg
9/26/24	Veolia, Henderson, CO	Hazardous (Lab Pack)	11	358 kg
9/26/24	Veolia, Henderson, CO	Hazardous (Waste Fuel)	1	167 kg

Date	Shipped To	Type of Waste	No. of Containers	Amount of Waste
9/26/24	W Silver, Santa Teresa, NM	Scrap Metal	1	14,588 kg

2.0 Environmental Monitoring

2.1 NASA performed sampling at 33 of 33 groundwater monitoring wells and zones scheduled for sampling in July 2024, 37 of 37 wells and zones in August 2024, and 36 of 36 wells and zones in September 2024 in accordance with the approved Groundwater Monitoring Plan (GMP). NASA also performed annual PFAS sampling at 14 wells and zones in September as specified in the approved GMP. Previous deviations from the planned sampling schedule are described below and have been reported to NMED in previous quarterly reports:

- 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, which was submitted for NMED review on April 29, 2024.
- 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 expects to abandon and replace 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 third 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 October 2024 groundwater sampling schedule and plans to sample 40 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)
Jul-24	7 of 31	10.2	0.21	0.22	961
Aug-24	8 of 31	9.6	0.24	0.26	2,046
Sep-24	17 of 30	10.0	0.41	0.48	297

Shutdown Date	Restart Date	Shutdown Status	Discussion
7/1/24	7/23/24	Unplanned	The system was shut down because of a failed component in the UV reactor power supply.
7/25/24	7/29/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
8/2/24	8/12/24	Planned	The system was shut down to perform repairs to the UV reactor and to complete maintenance on the air stripper.
8/15/24	8/19/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
8/20/24	9/4/24	Planned	The system was shut down to perform maintenance on the air stripper.
9/5/24	9/9/24	Planned	The system was shut down for further maintenance and to allow aquifer levels to recover over the weekend.
9/13/24	9/16/24	Planned	The system was shut down to allow aquifer levels to recover over the weekend.
9/19/24	9/23/24	Planned	The system was shut down for maintenance and to allow aquifer levels to recover over the weekend.
9/27/24	9/30/24	Planned	The system was shut down for maintenance and to allow aquifer levels to recover over the weekend.

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)
Jul-24	25 of 31	816	76.2	76.5	0.19	0.001
Aug-24	31 of 31	787	107.3	107.9	0.33	0
Sep-24	30 of 30	811	106.9	107.5	0.72	0.006

Shutdown Date	Restart Date	Shutdown Status	Discussion
7/1/24	7/3/24	Unplanned	The system shut down automatically due to a compressor fault that resulted in low air pressure.
7/5/24	7/8/24	Unplanned	The system shut down automatically due to a compressor fault that resulted in low air pressure.
7/9/24	7/10/24	Planned	The system was shut down to troubleshoot the air compressor and adjust a setting.

Shutdown Date	Restart Date	Shutdown Status	Discussion
7/25/24	7/29/24	Unplanned	The system shut down automatically because of a leak detection alarm.
8/26/24	8/27/24	Unplanned	The system shut down automatically due to 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 adapted the 2024 RBCs to incorporate NMED input from 2023 and submitted the *NASA White Sands Test Facility (WSTF) 2024 Soil Vapor Risk Based Concentrations (RBCs) Memorandum* on September 27, 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 addressed four NMED comments and submitted the *Response to Approval with Modifications for the 200 and 600 Area Vapor Intrusion Assessment Report (VIAR)* on July 19, 2024. 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 fieldwork in July 2024 in accordance with the NMED-approved *300 Area Supplemental Abbreviated Drilling Work Plan*. In addition to the NMED-approved scope of two MSVGM wells, NASA performed a matrix diffusion study using CORE Discreet Fracture Network (DFN) in the bedrock at two boreholes in conjunction with heat pulse flow meter and optical televiewer logging. NASA also integrated the NMED-required replacement for monitoring well NASA 9 (400-001-GW) into the fieldwork. NASA performed sampling at the three new wells and began developing the well completion reports for submittal to NMED. NASA submitted the *Well Completion Reports (WCR) for NASA White Sands Test Facility (WSTF) 400-001-GW* on August 30, 2024.
- NASA continued soil vapor and groundwater monitoring activities in the 400 Area in accordance with the NMED-approved *400 Area Supplemental Groundwater and Soil Vapor Monitoring Plan* (July 11, 2023). NASA received, verified, and validated all analytical data for the first quarterly groundwater and soil vapor sampling event. However, lingering delays caused by other project constraints required the submittal of the *Request for Second 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 July 22, 2024. NMED approved the request, extending the due date for submittal of the first quarterly report to August 30, 2024. That approval also specified due dates for the second, third, and fourth quarterly monitoring reports as November 30, 2024, February 28, 2025, and May 30, 2025, respectively. NASA received and began reviewing analytical data from the second quarterly monitoring event and performed sampling for the third quarterly monitoring event between August 26 and 28, 2024. NASA submitted the *400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024* on August 30, 2024. NASA subsequently identified a discrepancy in the report and provided the *Resubmittal of NASA White Sands Test*

Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024 on September 5, 2024.

3.5 600 Area Perched Groundwater Extraction Pilot Test and Investigation

- In July, August, and September 2024, NASA extracted approximately 212, 238, and 165 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 2.89 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.
- NMED is reviewing the *600 Area Perched Groundwater Extraction Pilot Test Interim Status Report – Project Year 11* (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 addressed NMED comments in the disapproval of the *NASA White Sands Test Facility (WSTF) 100 Area Wastewater Lagoons Closure (SWMU 2) Investigation Report* (August 3, 2020) from July 5, 2022. NASA submitted the *Response to Disapproval of the NASA WSTF 100 Area Wastewater Lagoons Closure (SWMU 2) Investigation Report* on August 29, 2024.
- NMED is reviewing the *Response to Disapproval of 600 Area Lagoons (SWMU 34) IR and Risk Assessment* (February 21, 2024) and the *Response to Disapproval of NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report* (April 29, 2024).
- On September 3, 2024, NMED approved the *Response to Disapproval of NASA White Sands Test Facility (WSTF) STGT Wastewater Lagoons Closure (AOC 51) Investigation Report* (November 20, 2023) with modifications that included five comments. NASA addressed the comments and submitted the *Response to Approval w/Mods for STGT Wastewater Lagoons (AOC 51) IR* on September 9, 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 27, 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 third quarter of 2024, NASA continued 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 submitted the *Request for Extension of Time for NASA White Sands Test Facility (WSTF) 600 Area Bureau of Land Management Off-site Soil Pile (SWMU 16) Remedy Completion Report* on July 22, 2024. NMED approved the request on July 31, 2024, extending the due date for submittal of the report to November 20, 2024.

3.9 SWMUs 21-27 (Septic Tanks)

- NMED reviewed NASA's April 4, 2024 *NASA White Sands Test Facility Petition for Corrective Action Status Review* for SMWUs 21-27, 30, and 31. On September 3, 2024, NMED provided NASA with the *Administratively Incomplete Petition for Corrective Action Status Review White Sands Test Facility SWMUS 21-27, 30, and 31*. NMED directed NASA to address eight comments and submit a revised petition no later than October 31, 2024. Within the comments, NMED provided direction on requirements for public notice, which NASA expects to implement in October and November 2024.

3.10 SWMUs 29-31 (Small Arms Firing Ranges)

- NMED reviewed NASA's April 4, 2024 *NASA White Sands Test Facility Petition for Corrective Action Status Review* for SMWUs 21-27, 30, and 31. On September 3, 2024, NMED provided NASA with the *Administratively Incomplete Petition for Corrective Action Status Review White Sands Test Facility SWMUS 21-27, 30, and 31*. NMED directed NASA to address eight comments and submit a revised petition no later than October 31, 2024. Within the comments, NMED provided direction on requirements for public notice, which NASA expects to implement in October and November 2024.
- Corrective action complete work at SWMU 29, collocated with the STGT wastewater lagoon (AOC 51) was on hold pending NMED approval of the revised lagoon investigation report that concluded no additional investigation or corrective action is required. Following NMED approval of the revised *NASA White Sands Test Facility (WSTF) STGT Wastewater Lagoons Closure (AOC 51) Investigation Report* on September 3, 2024, NASA determined that the STGT small arms firing range (SWMU 29) will be included in NASA's next Class 3 Permit modification request for corrective action complete status determination.

3.11 SWMU 33 (Test Stand 302 Cooling Water Pond)

- NASA continued project planning for investigating SWMU 33 in accordance with the *NASA WSTF 300 Area Test Stand 302 Cooling Water Pond (SWMU 33) Investigation Work Plan and Historical Information Summary* (revised on April 26, 2024).

3.12 SWMU 49 (700 Area Landfill)

- NMED approved the *700 Area (SWMU 49) Landfill Phase II Work Plan* (October 25, 2023) with modifications on July 31, 2024. NMED directed NASA to address two comments and submit a revised work plan no later than October 31, 2024.

3.13 SWMU 54 (500 Area Former Oxidizer Burner)

- NASA developed the investigation report and risk screening evaluation 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 evaluated the analytical results and determined that there is no unacceptable risk to site receptors from residual site contamination. NASA then submitted the *500 Area Former Oxidizer Burning (SWMU 52) Investigation Report* to NMED on July 25, 2024.

3.14 Groundwater Monitoring Well Abandonment, Installation, and Reconfiguration

- 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. To adequately address the comment, NASA determined that additional well development is required, which requires additional time. NASA submitted the *Request for Extension of Time for Submittal of NASA White Sands Test*

Facility (WSTF) Response to the Disapproval of Reconfiguration Report for Well BW-4 on July 22, 2024. NMED approved the request on July 31, 2024, extending the due date for submittal of the revised report to November 30, 2024.

- 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 submitted the *NASA WSTF Westbay Well Reconfiguration Work Plan for Wells PL-7, PL-8, PL-10, ST-5, and WW-3 Extension Request* on August 2, 2024. NASA submitted the *Response to Disapproval of the NASA WSTF Westbay Well Reconfiguration Work Plan for Wells PL-7, PL-8, PL-10, ST-5, and WW-3* on August 30, 2024.
- NASA has been planning for several well replacement and/or installation projects during 2024. As a result of ongoing and anticipated future agency budget cuts, NASA's ability to meet the approved schedules for submitting well completion reports has been negatively impacted. As a result, NASA submitted the *Status of Several NASA White Sands Test Facility (WSTF) Abandonment and Well Completion Reports* on July 31, 2024.

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 continued planning for project implementation.

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 addressed the comments and submitted the *Groundwater Data Representativeness Phase 2 Disapproval Response: Water FLUTe Well Evaluation Abbreviated Investigation Report* on July 31, 2024.

3.17 Dye Tracer Test Investigation

- See Section 3.14, bullet #3.

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 third quarter of 2024

- *Request for a "No Longer Contained-in" Determination for Drilling Mud and Cuttings Associated with the Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan*, July 11, 2024

- *NASA White Sands Test Facility (WSTF) Quarterly Environmental Activity Report for Second Quarter 2024*, July 16, 2024
- *Fee Assessment for the NASA WSTF Groundwater Monitoring Plan, April 2024 (NMED Invoice Number HWB-NASA-24-004)*, July 18, 2024
- *Fee Assessment for the NASA WSTF Interim Status Report for 600 Area Perched Groundwater Extraction Pilot Test Project Year 11 (NMED Invoice Number HWB-NASA-24-003)*, July 18, 2024
- *Response to Approval with Modifications for the 200 and 600 Area Vapor Intrusion Assessment Report (VIAR)*, July 19, 2024
- *Request for Extension of Time for NASA White Sands Test Facility (WSTF) 600 Area Bureau of Land Management Off-site Soil Pile (SWMU 16) Remedy Completion Report*, July 22, 2024
- *Request for Second Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024*, July 22, 2024
- *Request for Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) Response to the Disapproval of Reconfiguration Report for Well BW-4*, July 22, 2024
- *NASA WSTF Remediation System Monitoring Plan Annual Update for 2024*, July 23, 2024
- *NASA White Sands Test Facility (WSTF) 500 Area Former Oxidizer Burner (SWMU 54) Investigation Report (IR)*, July 25, 2024
- *Response to Approval with Modifications of the NASA White Sands Test Facility (WSTF) Background Groundwater Study Investigation Report*, July 30, 2024
- *NASA Johnson Space Center White Sands Test Facility 2023 Annual Hazardous Waste Fees*, July 30, 2024
- *NASA WSTF Periodic Monitoring Report – Second Quarter 2024*, July 31, 2024
- *Groundwater Data Representativeness Phase 2 Disapproval Response: Water FLUTe Well Evaluation Abbreviated Investigation Report*, July 31, 2024
- *Status of Several NASA White Sands Test Facility (WSTF) Abandonment and Well Completion Reports*, July 31, 2024
- *NASA WSTF Westbay Well Reconfiguration Work Plan for Wells PL-7, PL-8, PL-10, ST-5, and WW-3 Extension Request*, August 2, 2024
- *Fee Assessment for the NASA WSTF Periodic Monitoring Report for First Quarter 2024 (NMED Invoice Number HWB-NASA-24-005)*, August 6, 2024
- *Request for Second Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 2024 Soil Vapor Risk Based Concentrations (RBCs) Memorandum*, August 12, 2024
- *Fee Assessment for the 2024 Remediation System Monitoring Plan Update (NMED Invoice Number HWB-NASA-24-006)*, August 15, 2024
- *Fee Assessment for the Second Quarter 2024 Period Monitoring Report (NMED Invoice Number HWB-NASA-24-008)*, August 15, 2024
- *Fee Assessment for the 500 Area Former Oxidizer (SWMU 54) Investigation Report (NMED Invoice Number HWB-NASA-24-007)*, August 15, 2024

- *2004 Plume-Front Treatment System (PFTS) Project Plans Request*, August 16, 2024
- *Response to Approval with Modifications NASA WSTF Periodic Monitoring Report – Third Quarter 2023*, August 16, 2024
- *Response to Disapproval of the NASA WSTF 100 Area Wastewater Lagoons Closure (SWMU 2) Investigation Report*, August 29, 2024
- *Response to Disapproval of the NASA WSTF Westbay Well Reconfiguration Work Plan for Wells PL-7, PL-8, PL-10, ST-5, and WW-3*, August 30, 2024
- *NASA White Sands Test Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024*, August 30, 2024
- *Submittal of Well Completion Reports (WCR) for NASA White Sands Test Facility (WSTF) 400-001-GW*, August 30, 2024
- *Resubmittal of NASA White Sands Test Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024*, September 5, 2024
- *Exception Report of the 45-day Exceedance on Return of Hazardous Waste Shipping Manifests 024161896JJK and 024161897JJK*, September 5, 2024
- *Response to Approval w/Mods for STGT Wastewater Lagoons (AOC 51) IR*, September 9, 2024
- *NASA White Sands Test Facility (WSTF) 2024 Soil Vapor Risk Based Concentrations (RBCs) Memorandum*, September 27, 2024

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

- *NASA White Sands Test Facility (WSTF) Discharge Permit DP-697 Quarterly Analytical Results – Second Quarter 2024*, Ground Water Quality Bureau, July 1, 2024
- *NASA White Sands Test Facility (WSTF) Discharge Plan DP-584 Annual Report*, Ground Water Quality Bureau, July 3, 2024
- *NASA White Sands Test Facility (WSTF) Discharge Permit DP-1170 Semi-annual Monitoring Report*, Ground Water Quality Bureau, July 11, 2024
- *NASA White Sands Test Facility 30-Day Notification for Permanent Closure of Underground Storage Tanks*, Petroleum Storage Tank Bureau, July 15, 2024
- *NASA White Sands Test Facility (WSTF) – FF, NM3590607 – Request for Reduced Monitoring for Drinking Water Radionuclides*, Drinking Water Bureau, July 16, 2024
- *Compliance Report (NESHAP)(RICE)*, Air Quality Bureau, July 18, 2024
- *NASA White Sands Test Facility (WSTF) Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units – 40 CFR Part 60, Subpart Dc (NSPS Dc) Semi-annual Report for Period January 1 through June 30, 2024*, Air Quality Bureau, July 18, 2024
- *NASA White Sands Test Facility (WSTF) Semi-annual Report for Discharge Permit (DP)-1255 – First Half of 2024*, Ground Water Quality Bureau, July 22, 2024
- *Analytical Results for Discharge Permit DP-392 (NASA White Sands Test Facility 100 Area, 200 Area, and 600 Area Sewage Lagoons)*, Ground Water Quality Bureau, July 24, 2024

- *Request for Additional Time to Perform NASA White Sands Test Facility (WSTF) Groundwater Remediation Systems Totalizing Flow Meter Verification*, Ground Water Quality Bureau, July 29, 2024
- *NASA White Sands Test Facility 700 Area Landfill Detection Monitoring Results for 2024 First Semi-annual Sampling Event*, Solid Waste Bureau, August 8, 2024
- *NASA White Sands Test Facility Closure Reports Permanent Closure of Underground Storage Tanks*, Petroleum Storage Tank Bureau, August 30, 2024
- *Notice of Exemption for Emergency Generator at B101*, Air Quality Bureau, September 13, 2024
- *Routine Report MACT Report - Opacity/Visible Emissions Test Results (ZZZZ)*, Air Quality Bureau, September 18, 2024
- *Visible Emissions Observation at the 300 and 400 Area Flares*, Air Quality Bureau, September 18, 2024
- *LCRR Lead Service Line Inventory*, Drinking Water Bureau, September 18, 2024
- *NASA White Sands Test Facility - FF Third Quarter 2024 Disinfectant Residual Monitoring Report*, Drinking Water Bureau, September 19, 2024
- *Notice of Exemption for Emergency Generator at Building 300*, Air Quality Bureau, September 26, 2024

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

- NASA submitted the *NASA White Sands Test Facility (WSTF) 700 Area Landfill (SWMU 49) Phase II Abbreviated Investigation Work Plan* on October 25, 2023. NASA received NMED's December 4, 2023 fee assessment for review of the plan and submitted the $15,000 review fee to NMED on December 19, 2023. NMED approved the report with modifications on July 31, 2024 and directed NASA to address two comments and submit a revised report no later than October 31, 2024.
- NASA submitted the *Response to Approval with Modifications 400 Area Closure Investigation Report – Revision 3* and the *Response to Approval with Modifications 400 Area Supplemental Groundwater and Soil Vapor Monitoring Plan* on July 11, 2023. NASA submitted the *NASA White Sands Test Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024* on August 30, 2024. NASA subsequently identified a discrepancy in the report and provided the *Resubmittal of NASA White Sands Test Facility (WSTF) 400 Area Supplemental Groundwater and Soil Vapor Monitoring Report – First Quarter 2024* on September 5, 2024.
- 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 than July 31, 2024. NASA submitted the *Response to Approval with Modifications for the 200 and 600 Area Vapor Intrusion Assessment Report (VIAR)* on July 19, 2024.
- NASA submitted the *Groundwater Data Representativeness Phase 2: Water FLUTe Well Evaluation Abbreviated Investigation Report* on April 27, 2023. NASA received NMED's May 1, 2023 fee assessment and invoice for review of the report and provided the $10,000 review fee on June 26, 2023. NMED disapproved the report on February 6, 2024 and directed NASA

to address eight comments and provide a revised report no later than July 31, 2024. NASA submitted the *Groundwater Data Representativeness Phase 2 Disapproval Response: Water FLUTe Well Evaluation Abbreviated Investigation Report* on July 31, 2024.

- NASA submitted the *Request for a "No Longer Contained-in" Determination for Drilling Mud and Cuttings Associated with the Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan* on July 11, 2024. NMED approved the request on July 24, 2024 and directed NASA to dispose of the waste as solid waste at an appropriate off-site facility.
- NASA submitted the *Request for Fifth Extension of Time for NASA White Sands Test Facility (WSTF) 100 Area Wastewater Lagoons Closure (SWMU 2) Investigation Report Response to Disapproval* on February 28, 2024. NMED approved the request on March 22, 2024, extending the due date for submittal of the report to August 30, 2024. NASA submitted the *Response to Disapproval of the NASA WSTF 100 Area Wastewater Lagoons Closure (SWMU 2) Investigation Report* on August 29, 2024.
- NASA submitted the *Response to Disapproval of NASA White Sands Test Facility (WSTF) STGT Wastewater Lagoons Closure (AOC 51) Investigation Report* on November 20, 2023. NMED approved the investigation report on September 3, 2024 and directed NASA to address five comments and submit a revised report no later than November 21, 2024. NASA submitted the *Response to Approval w/Mods for STGT Wastewater Lagoons (AOC 51) IR* on September 9, 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 *Response to Approval with Modifications of the NASA White Sands Test Facility (WSTF) Background Groundwater Study Investigation Report* on July 30, 2024.
- NASA submitted the *NASA WSTF Westbay Well Reconfiguration Work Plan for Wells PL-7, PL-8, PL-10, ST-5, and WW-3* on April 29, 2021. NASA received NMED's June 15, 2021 assessment and invoice for review of the work plan and provided the $10,000 review fee on July 14, 2021. NMED disapproved the work plan on February 6, 2024 and directed NASA to address a substantial comment and provide a revised work plan no later than July 31, 2024. NASA submitted the *NASA WSTF Westbay Well Reconfiguration Work Plan for Wells PL-7, PL-8, PL-10, ST-5, and WW-3 Extension Request* on August 2, 2024. NASA submitted the *Response to Disapproval of the NASA WSTF Westbay Well Reconfiguration Work Plan for Wells PL-7, PL-8, PL-10, ST-5, and WW-3* on August 30, 2024.
- NASA submitted the *Reconfiguration Report for NASA Well BW-4* on March 21, 2023. NASA received NMED's April 6, 2023 fee assessment and invoice for review of the report and provided the $2,000 review fee on May 11, 2023. NMED disapproved the report on February 6, 2024 and directed NASA to address a comment and submit a revised report no later than July 31, 2024. NASA submitted the *Request for Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) Response to the Disapproval of Reconfiguration Report for Well BW-4* on July 22, 2024. NMED approved the request on July 31, 2024, extending the due date for submittal of the revised report to November 30, 2024.
- NASA submitted the *Response to Approval with Modifications of the Accelerated Corrective Measures Work Plan for the NASA WSTF SWMU 16 (600 Area BLM Off-Site Soil Pile)* on May 22, 2023. NASA completed investigation fieldwork in accordance with the approved work plan

and submitted the *Request for Extension of Time for NASA White Sands Test Facility (WSTF) 600 Area Bureau of Land Management Off-site Soil Pile (SWMU 16) Remedy Completion Report* on July 22, 2024. NMED approved the request on July 31, 2024, extending the due date for submittal of the report to November 20, 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 well completion reports for well 400-001-GW to August 31, 2024 and wells 300-001-SVG and 300-002-SVG to October 4, 2024. NASA submitted the *Submittal of Well Completion Reports (WCR) for NASA White Sands Test Facility (WSTF) 400-001-GW* on August 30, 2024.
- NASA submitted the *Request for Extension of Time for NASA White Sands Test Facility (WSTF) Periodic Monitoring Report – Third Quarter 2023* on October 12, 2023. NMED approved the request on October 25, 2023, extending the due date for submittal of the PMR to December 22, 2023. NASA submitted the *NASA WSTF Periodic Monitoring Report – Third Quarter 2023* on December 21, 2023. NASA received NMED's January 24, 2024 fee assessment for review of the report and provided the $5,000 review fee on February 7, 2024. NMED approved the report on June 18, 2024 with modifications and directed NASA to address two comments and submit a revised report no later than August 30, 2024. NASA submitted the *Response to Approval with Modifications NASA WSTF Periodic Monitoring Report – Third Quarter 2023* on August 16, 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 received NMED's July 11, 2024 fee assessment and invoice for review of the report and provided the $5,000 review fee on August 6, 2024.
- NASA submitted the *NASA White Sands Test Facility Petition for Corrective Action Status Review* on April 4, 2024. The petition requested a corrective action complete status determination for nine WSTF solid waste management units. NMED provided the Administratively Incomplete Determination for the petition on September 3, 2024. NMED directed NASA to address eight comments and submit a revised petition by October 31, 2024.
- NASA submitted the *NASA WSTF Groundwater Monitoring Plan Update for 2024* on April 29, 2024. NASA received NMED's July 2, 2024 fee assessment and invoice for review of the plan and provided the $10,000 review fee on July 18, 2024.
- NASA submitted the *600 Area Perched Groundwater Extraction Pilot Test Interim Status Report – Project Year 11* on April 29, 2024. NASA received NMED's July 2, 2024 fee assessment and invoice for review of the report and provided the $8,000 review fee on July 18, 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. NASA submitted the *Request for Second Extension of Time for Submittal of NASA White Sands Test Facility (WSTF) 2024 Soil Vapor Risk Based Concentrations (RBCs) Memorandum* on August 12, 2024. NMED approved the request on August 15, extending the due date for submittal of the memo to September 30, 2024. NASA

submitted the *NASA White Sands Test Facility (WSTF) 2024 Soil Vapor Risk Based Concentrations (RBCs) Memorandum* on September 27, 2024.

- NASA submitted the *NASA WSTF Remediation System Monitoring Plan Annual Update for 2024* on July 23, 2024. NASA received NMED's August 7, 2024 fee assessment and invoice for review of the plan update and provided the $10,000 review fee on August 15, 2024.
- NASA submitted the *NASA White Sands Test Facility (WSTF) 500 Area Former Oxidizer Burner (SWMU 54) Investigation Report (IR)* on July 25, 2024. NASA received NMED's August 7, 2024 fee assessment and invoice for review of the report and provided the $20,000 review fee on August 15, 2024.
- NASA submitted the *NASA WSTF Periodic Monitoring Report – Second Quarter 2024* on July 30, 2024. NASA received NMED's August 7, 2024 fee assessment and invoice for review of the report and provided the $5,000 review fee on August 15, 2024.