National Aeronautics and Space Administration

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

March 11, 2020

Reply to Attn.of:

RE-20-037

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

MAR 1 2 202

NMED

Hazardous Waste

Burenu

Wy Wd 11

Subject: WSTF Monthly Environmental Activity Report for February 2020

Enclosed is the WSTF Monthly Environmental Activity Report for February 2020. 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 at \$\infty 5\cdot 5-524-5460.

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 February 2020:

- NASA completed seven waste shipments in February 2020.
- NASA sampled 23 of 23 groundwater monitoring wells scheduled for February 2020.
- NASA operated the Plume Front Treatment System on 10 of 29 days in February 2020 and treated 31.6 acre-feet of contaminated groundwater.
- NASA operated the Mid-plume Interception and Treatment System on 29 of 29 days in February 2020 and treated 0.86 acre-feet of contaminated groundwater and 24,736 gallons of investigation-derived waste.
- NASA continued fieldwork and additional project planning for Phase I of the investigation of the 700 Area Landfill (SWMU 49).
- NASA continued developing the remedy completion report for accelerated corrective measures at the three closed small arms firing ranges (SWMUs 29-31).
- NASA completed the site-wide airborne gravity-magnetic geophysical survey and two pilot-scale tests of passive 3-D seismic technology.
- NASA continued groundwater extraction in accordance with the *Targeted Mobile Remediation Process Pilot Test Work Plan*.
- NASA continued extraction of perched groundwater at monitoring well 600-G-138.
- NASA submitted several documents in February 2020: responses to disapprovals or approvals with modifications; request for extension of time; fee assessments; Biennial Hazardous Waste Report; an investigation report; and, required submittals to other NMED bureaus or entities.
- There were no reportable non-compliance issues in February 2020.



Monthly Environmental Activity Report February 2020

Report Deadline: March 15, 2020

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

February 2020

NM8800019434

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 J. Davis

Chief, Environmental Office

3 11 2020

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

Executive Summary

The following summarizes important information associated with NASA White Sands Test Facility (WSTF) environmental program activities in February 2020:

- NASA completed seven waste shipments in February 2020.
- NASA sampled 23 of 23 groundwater monitoring wells scheduled for February 2020.
- NASA operated the Plume Front Treatment System on 10 of 29 days in February 2020 and treated 31.6 acre-feet of contaminated groundwater.
- NASA operated the Mid-plume Interception and Treatment System on 29 of 29 days in February 2020 and treated 0.86 acre-feet of contaminated groundwater and 24,736 gallons of investigation-derived waste.
- NASA continued fieldwork and additional project planning for Phase I of the investigation of the 700 Area Landfill (SWMU 49).
- NASA continued developing the remedy completion report for accelerated corrective measures at the three closed small arms firing ranges (SWMUs 29-31).
- NASA completed the site-wide airborne gravity-magnetic geophysical survey and two pilot-scale tests of passive 3-D seismic technology.
- NASA continued groundwater extraction in accordance with the *Targeted Mobile Remediation Process Pilot Test Work Plan*.
- NASA continued extraction of perched groundwater at monitoring well 600-G-138.
- NASA submitted several documents in February 2020: responses to disapprovals or approvals
 with modifications; request for extension of time; fee assessments; Biennial Hazardous Waste
 Report; an investigation report; and, required submittals to other NMED bureaus or entities.
- There were no reportable non-compliance issues in February 2020.

1.0 Waste Management Activities

1.1 NASA completed the following waste shipments in February 2020.

Date	Shipped To	Type of Waste	No. of Containers	Amount of Waste	Disposition
2/5/20	SCSWA, Las Cruces, NM	Asbestos	1	517 kg (20 CY roll- off)	Disposal in Special Landfill Cell at Corralitos Landfill
2/20/20	ACT-Albuquerque, NM	Hazardous	9	1,289 kg	Stored/bulked for transport to other TSDF
2/20/20	Veolia, Henderson, CO	Hazardous	20	738 kg	Incineration
2/20/20	U.S. Ecology, NV	Hazardous	4	4,852 kg	Landfill
2/20/20	Veolia, Phoenix, AZ	Universal	19	386 kg	Recycle
2/26/20	U.S. Ecology, NV	Non- Hazardous	1	18,040 kg	Landfill
2/27/20	Big Green Box, Anaheim, CA	Universal	1	15 kg	Recycle

^{1.2} NMED is reviewing the *Closure Certification Report for the NASA WSTF FTU (Fuel Treatment Unit)* (August 6, 2019).

2.0 Environmental Monitoring

- 2.1 NASA performed sampling at 23 of 23 groundwater monitoring wells or zones scheduled for sampling in February 2020, in accordance with the *Groundwater Monitoring Plan*. This includes two monitoring wells that were rescheduled from March 2020 to accommodate TMRP sampling requirements and one new monitoring well that was equipped with sampling equipment quickly enough to allow for sampling of one zone in February 2020. Previous deviations from the planned sampling schedule are described below:
 - The dedicated sampling pump in well BLM-18-430 failed during scheduled sampling in January 2020. NASA acquired a replacement pump for installation and sampling in March 2020.
 - Well 200-LV-150, scheduled for sampling in November 2019, failed to recharge adequately to collect representative groundwater samples. NASA is evaluating this well to determine if future sampling is possible. This well may be a candidate for no purge sampling methods.
 - Well BLM-28-515, which was reconfigured with a dedicated packer and bladder pump and scheduled for initial sampling in July 2019, cannot be sampled because of sampling system issues described in previous monthly reports.
 - The Water FLUTe sampling system was removed from well WW-4 to support the collection of groundwater samples in accordance with the *Abbreviated Investigation Work Plan Groundwater Data Representativeness Phase 1: Water FLUTe Well Evaluation* (July 30, 2019; revised). Routine groundwater sampling required by the *Groundwater Monitoring Plan* is not possible at this time.

- Well 200-KV-150, scheduled for sampling in December 2018, failed to recharge adequately to
 collect representative samples. NASA completed an evaluation of this well and expects to
 install new dedicated sampling equipment and sample the well in March 2020.
- 2.2 NASA performed other regulatory groundwater sampling requirements (such as those included in the Remediation System Monitoring Plan, landfill post-closure care, and discharge plans) as scheduled and as allowed by operational status. NASA did not sample well PFE-2 because the well was not operational due to a previous equipment failure. During February 2020, NASA continued planning to replace the pump and motor.
- 2.3 NASA developed the March 2020 groundwater sampling schedule and plans to sample 42 groundwater monitoring wells or zones based on *Groundwater Monitoring Plan* requirements.

3.0 Corrective Actions/Investigations

3.1 Plume Front Treatment System Operations

Volume			Volume	Volume	
Days Operated	Average Flow Rate (gpm)	Extracted/ Treated (acre-feet)	Volume Injected	Discharged to Grade (acre-feet)	Discharged to Modu-tank (acre-feet)
10 of 29	817	31.6	31.6	0.50	0.0

Shutdown Date	Restart Date	Shutdown Status	Discussion	
2/5/20	2/6/20	Unplanned	The system shut down automatically because of a communications failure.	
2/10/20	2/29/20	Planned	The system was shut down to perform scheduled maintenance.	

3.2 Mid-plume Interception and Treatment System Operations

Days Operated	Average Flow Rate (gpm)	Volume of Groundwater 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)
29 of 29	7.2	0.86	0.93	24,736

Shutdown Date	Restart Date	Shutdown Status	Discussion
2/6/20	2/7/20	Unplanned	The system shut down automatically when the IDW filters became plugged, lowering throughput before the automated filter changeover.
2/9/20	2/10/20	Unplanned	The system shut down automatically when the IDW filters became plugged, lowering throughput before the automated filter changeover.

3.3 200 Area Investigation

• NMED is reviewing the NMED Disapproval Response for 200 Area and 600 Area Vapor Intrusion Assessment Report (January 30, 2020).

3.4 Test Stand 301A Release Assessment

• NMED is reviewing the *Response to Disapproval of NASA WSTF Test Stand 301A Abbreviated Investigation Report* (September 24, 2019).

3.5 400 Area

• NMED is reviewing the 400 Area Supplemental Groundwater and Soil Vapor Monitoring Plan (May 28, 2019), the related 300 Area Supplemental Abbreviated Drilling Work Plan for two additional multiport soil vapor and groundwater monitoring wells in the 300 Area (May 30, 2019), and the 400 Area Closure Investigation Report – NMED Second Disapproval Response (December 30, 2019).

3.6 600 Area Perched Groundwater Extraction Pilot Test and Investigation

- In February 2020, NASA continued extraction of perched groundwater 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.*Approximately 104 gallons of perched groundwater were removed from 600-G-138 during the month. Extracted groundwater was containerized for treatment and disposal at the MPITS in accordance with DP-1255.
- NMED is reviewing the Synopsis of the Findings of the 600 Area Closure Geophysical Seismic Refraction Tomography and Reflection Surveys with Revised Soil Boring Locations Submitted for NMED Approval (December 19, 2019).

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

- In February 2020, NASA and the subcontracted drilling company completed installation of the five remaining soil borings at the STGT Wastewater Lagoons. NASA collected and managed samples of subsurface soil and shipped them to the off-site laboratories for analysis. This activity completed soil sampling described in the NMED-approved work plan.
- NASA is coordinating soil vapor sampling activities at the STGT Wastewater Lagoons. NASA
 anticipates completing these activities in March 2020, which will complete all investigation
 fieldwork described in the NMED-approved work plan.
- NMED is reviewing the NASA WSTF 100 Area Wastewater Lagoons Closure (SWMU 2) Interim Status Report (May 29, 2019), the NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report (November 25, 2019), the NASA White Sands Test Facility (WSTF) 600 Area Wastewater Lagoons Closure (SWMU 34) Investigation Report (November 26, 2019), and the Response to Approval with Modifications for NASA WSTF STGT Wastewater Lagoons Liner Management Plan Addendum (December 5, 2019).
- NASA continued data evaluation and preparation of investigation reports for the 100 Area and STGT Wastewater Lagoons.

3.8 SWMU 10 (200 Area Hazardous Waste Transmission Lines)

• NMED is reviewing the *Response to Disapproval of the NASA WSTF 200 Area HWTL (SWMU 10) Investigation Report* (July 30, 2019).

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

• NMED is reviewing the *Response to Fourth Disapproval of NASA WSTF SWMU 16 (600 Area BLM Off-Site Soil Pile) Investigation Report* (December 18, 2019).

3.10 SWMU 19 (800 Area Below Grade Storage Tank)

• NMED is reviewing the Response to Disapproval of Revised SWMU 19 (800 Area Below Grade Storage Tank) Investigation Report (June 27, 2019).

3.11 SWMUs 21-27 (Septic Tanks)

• NMED is reviewing the *Response to Disapproval of NASA WSTF Septic Tanks (SWMUs 21-27) Investigation Report* (July 23, 2019).

3.12 SWMUs 29-31 (Small Arms Firing Ranges)

- NASA completed all fieldwork required to respond to NMED's February 21, 2019, *Second Disapproval of Small Arms Firing Ranges (SWMUs 29-31) Remedy Completion Report* (March 30, 2018). NASA managed approximately 4 cubic yards of lead-impacted soil and shipped the waste off-site in February 2020.
- While developing the complete risk assessment report for the firing ranges, NASA determined that additional time was required to perform the risk assessment. NASA submitted the *Second Request for Extension of Time for NASA WSTF Small Arms Firing Ranges (SWMUs 29-31) Response to Second Disapproval Remedy Completion Report* on January 29, 2020. NMED approved the request on February 21, 2020, extending the due date for submittal of the report to April 24, 2020.

3.13 SWMU 47 (500 Area Fuel Storage)

• NMED is reviewing the *Response to Disapproval of 500 Area Fuel Storage Area (SWMU 47) Investigation Work Plan* (November 21, 2019).

3.14 SWMU 49 (700 Area Landfill)

- NASA continued reviewing analytical data from the 159 passive soil vapor samplers recovered from conduits, landfill methane monitoring wells, and groundwater monitoring wells (Investigation Phase 1A) as described in the SWMU 49 (700 Area Landfill) Phase I Investigation Work Plan (August 8, 2019; revised).
- NASA and the subcontracted geophysics firm performed the EMI and magnetic gradient field surveys between February 24 and 28, 2020. The subcontractor is processing and interpreting the results of the geophysical surveys for submittal to NASA in report format.
- NASA continued procurement of ground penetrating radar and passive seismic surveys as described in the NMED-approved landfill investigation work plan.

3.15 SWMU 50 (TDRSS Diesel Release)

• NMED is reviewing the *First Tracking and Data Relay Satellite System (TDRSS) Diesel Release (SWMU 50) Investigation Report* (March 14, 2019).

3.16 Augmented Soil Background Study

• NMED approved the *Augmented Soil Background Study Abbreviated Investigation Work Plan* (June 24, 2019) with modifications on February 3, 2020 and directed NASA to address three comments and provide a revised work plan no later than April 10, 2020.

3.17 Monitoring Well Installation and Decommissioning

- NASA received the groundwater sampling systems for installation in new groundwater monitoring wells BLM-42 and PL-12 as described in the *Work Plan for Abandonment of NASA WSTF Monitoring Well BLM-37 and Replacement with Monitoring Well BLM-42* (January 30, 2018) and the *NASA WSTF Drilling Work Plan for Groundwater Monitoring Well PL-12* (December 27, 2017). NASA completed installation of the sampling systems on February 24, 2020 and initiated groundwater sampling on February 28, 2020. Because of past delays receiving sampling equipment, NASA submitted the *Third Request for Extension of Time for BLM-42 and PL-12 Well Completion Reports* on February 6, 2020. NMED approved the request on February 17, 2020, extending the due date for submittal of well completion reports to April 30, 2020.
- NASA continued managing investigation-derived waste generated during the installation and
 development of new monitoring well PL-12 in accordance with the approved work plan and
 requests for "contained-in" determinations, approved by NMED on October 8, October 22, and
 October 22, 2019. In February 2020, NASA and the subcontracted waste management firm
 began waste disposal.

3.18 Westbay Monitoring Well Reconfiguration

- NASA continues to evaluate whether the BLM-28 borehole can be used for future groundwater monitoring.
- NMED is reviewing the Work Plan for Abandonment of NASA WSTF Well BLM-30 and Replacement with Monitoring Well BLM-43 (August 29, 2019).

3.19 Targeted Mobile Remediation Process (TMRP)

- During February 2020, NASA continued TMRP fieldwork in accordance with the *Targeted Mobile Remediation Process Pilot Test Work Plan* (April 26, 2019; updated).
- NASA completed groundwater extraction at monitoring well ST-366 on February 3, 2020, removing an additional 715 gallons of groundwater, for a total extraction of 14,304 gallons from the well during this episode.
- NASA completed groundwater extraction at monitoring well NASA 6 on February 13, 2020, removing an additional 341 gallons of groundwater with the dedicated groundwater sampling pump. NASA extracted at total of 596 gallons from the well during this episode.
- NASA completed groundwater extraction at monitoring well ST-3-735 on February 20, 2020, removing an additional 5,162 gallons of groundwater, for a total extraction of 8,067 gallons from the well during this episode.
- NASA initiated groundwater extraction at monitoring well ST-3-586 on February 13, 2020 and removed 9,524 gallons from this well during the month. NASA expects to continue groundwater extraction at well ST-3-586 into March 2020.
- NASA initiated groundwater extraction at monitoring well 400-A-151 on February 24, 2020 using the dedicated groundwater sampling pump. NASA extracted 45 gallons from this well during the month and observed that the water level did not decline. NASA expects to continue groundwater extraction at this well in a later episode using a pump with a higher purge rate.
- NASA initiated groundwater extraction at well MPE-3 on February 27, 2020, removing 2,455 gallons from the well during the month. NASA expects to continue groundwater extraction at well MPE-3 into March 2020.

- NASA initiated groundwater extraction at monitoring well BW-1-268 on February 28, 2020 using the dedicated groundwater sampling pump. NASA extracted 36 gallons from this well during the month and expects to continue extraction into March 2020.
- NASA transported extracted groundwater to the MPITS in accordance with the approved work plan and Discharge Plan DP-1255.

3.20 Groundwater Data Representativeness Evaluation

• NASA submitted the *Groundwater Data Representativeness Phase 1: Water FLUTe Well Evaluation Abbreviated Investigation Report* on February 27, 2020.

3.21 Site-Wide Geophysical Survey Investigation

- NASA continued activities in accordance with the *Site-wide Geophysical Survey Investigation Work Plan* (December 12, 2019; revised). On January 31, 2020 the contractor for the airborne gravity magnetic survey mobilized to WSTF. The subcontractor performed the survey between February 1 and 6, 2020 and is currently processing and interpreting the results of the geophysical survey for submittal to NASA in report format.
- A second subcontractor performed a passive 3-D seismic pilot study in the Western Boundary Fault Zone between January 31 and February 20, 2020. A third subcontractor is scheduled to perform a passive 3-D seismic pilot study in March 2020.

4.0 Non-compliance Issues

The NASA Hazardous Waste 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 February 2020
 - NASA submitted the *Third Request for Extension of Time for BLM-42 and PL-12 Well Completion Reports* on February 6, 2020. NMED approved the request on February 17, 2020, extending the due date for submittal of well completion reports to April 30, 2020.
 - NASA submitted the *Fee Assessment for NASA WSTF 600 Area Closure Geophysical Survey Status Report, November 2019* on February 12, 2020.
 - NASA submitted the NASA WSTF Groundwater Monitoring Plan Update for 2019 on February 12, 2020. The submittal provided a response to NMED's December 12, 2019 Approval with Modifications Groundwater Monitoring Plan.
 - NASA submitted the Fee Assessment for NASA WSTF 600 Area Wastewater Lagoons Closure (SWMU 34) Investigation Report on February 25, 2020.
 - NASA submitted the Fee Assessment for NASA WSTF 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report on February 25, 2020.

- NASA submitted the NASA WSTF 2019 Biennial Hazardous Waste Report on February 26, 2020.
- NASA submitted the *Groundwater Data Representativeness Phase 1: Water FLUTe Well Evaluation Abbreviated Investigation Report* on February 27, 2020.
- 5.2 Pertinent documents submitted to other NMED bureaus or entities in February 2020
 - NASA submitted the 2019 Solid Waste Management Annual Report White Sands Test Facility (WSTF) 700 Area Post-Closure Care Solid Waste Landfill to the NMED Solid Waste Bureau on February 11, 2020.
 - NASA submitted the NASA WSTF Semi-annual Report for Discharge Permit (DP)-1255 Second Half 2019 to the NMED Ground Water Quality Bureau on February 26, 2020.
- 5.3 Status of documents previously submitted to the NMED Hazardous Waste Bureau for which activity was recorded in February 2020
 - NASA submitted the NASA WSTF Small Arms Firing Ranges (SWMUs 29-31) Remedy Completion Report on March 30, 2017. NASA received NMED's April 28, 2017 fee assessment for review of the report and submitted the \$6,500 review fee to NMED on May 31, 2017. NASA received NMED's September 7, 2017 disapproval of the report. NASA submitted the Request for Extension of Time for Response to Small Arms Firing Ranges (SWMUs 29-31) on November 8, 2017. NMED approved the request for extension on December 1, 2017, extending the due date from December 29, 2017 to March 30, 2018. NASA submitted the Response to Disapproval Small Arms Firing Ranges (SWMUs 29-31) Remedy Completion Report on March 30, 2018. NMED disapproved the report on February 21, 2019 and directed NASA to address seven NMED comments and submit a revised report no later than December 31, 2019. NASA submitted the Request for Extension of Time for NASA WSTF Small Arms Firing Ranges (SWMUs 29 – 31) Response to Second Disapproval Remedy Completion Report on October 28, 2019. NMED approved the request on November 13, 2019, extending the due date for the revised report from December 31, 2019 to February 28, 2019. NASA submitted the Second Request for Extension of Time for NASA WSTF Small Arms Firing Ranges (SWMUs 29-31) Response to Second Disapproval Remedy Completion Report on January 29, 2020. NMED approved the request on February 21, 2020, extending the due date for submittal of the report to April 24, 2020.
 - NASA submitted the Augmented Soil Background Study Abbreviated Investigation Work Plan on July 11, 2018. NASA received NMED's August 29, 2018 fee assessment for review of the work plan on September 10, 2018 and provided the \$10,000 review fee to NMED on October 1, 2018. NMED disapproved the work plan on March 27, 2019 and directed NASA to submit a revised work plan no later than June 28, 2019. NASA submitted the Response to Disapproval of Augmented Soil Background Study Abbreviated Investigation Work Plan on June 24, 2019. NMED approved the work plan with modifications on February 3, 2020 and directed NASA to address three NMED comments and provide a revised work plan no later than April 10, 2020.
 - NASA submitted the *Abbreviated Investigation Work Plan Groundwater Data*Representativeness Phase I: Water FLUTe Well Evaluation on December 21, 2018. NASA received NMED's January 30, 2019 fee assessment for review of the plan and provided the \$1,000 review fee to NMED on March 19, 2019. NMED approved the work plan with modifications on May 13, 2019. NASA submitted the Response to Approval with Modifications of Abbreviated Investigation Work Plan Groundwater Data Representativeness Phase I: Water FLUTe Well Evaluation on July 30, 2019. NASA submitted the Groundwater Data

- Representativeness Phase 1: Water FLUTe Well Evaluation Abbreviated Investigation Report on February 27, 2020.
- NASA submitted the *Targeted Mobile Remediation Process Interim Status Report Project Year 1* on July 24, 2019. NASA received NMED's August 19, 2019 fee assessment for review of the report on August 28, 2019 and provided the \$2,000 review fee to NMED on September 17, 2019. NMED approved the report on January 29, 2020.
- NASA submitted the NASA WSTF Periodic Monitoring Report Second Quarter 2019 on July 30, 2019. NASA received NMED's August 19, 2019 fee assessment for review of the report on August 28, 2019 and provided the \$2,000 review fee to NMED on September 12, 2019. NMED approved the report with modifications on February 6, 2020 and directed NASA to address nine NMED comments and submit a revised report no later than April 10, 2020. NMED also directed NASA to submit a report documenting the 200 and 600 Area groundwater dye tracer investigation no later than July 31, 2020.
- NASA submitted the NASA White Sands Test Facility (WSTF) 200 Area Wastewater Lagoons Closure (SWMU 8) Investigation Report on November 25, 2019. NASA received NMED's January 15, 2020 fee assessment for review of the report on February 3, 2020 and provided the \$7,500 review fee on February 25, 2020.
- NASA submitted the NASA White Sands Test Facility (WSTF) 600 Area Wastewater Lagoons Closure (SWMU 34) Investigation Report on November 26, 2019. NASA received NMED's January 15, 2020 fee assessment for review of the report on February 3, 2020 and provided the \$7,500 review fee on February 25, 2020.
- NASA submitted the *Synopsis of the Findings of the 600 Area Closure Geophysical Seismic Refraction Tomography and Reflection Surveys with Revised Soil Boring Locations* Submitted for NMED Approval on December 19, 2019. NASA received NMED's January 15, 2020 fee assessment for review of the report on February 3, 2020 and provided the \$2,000 review fee on February 12, 2020.
- NASA submitted the NASA WSTF 2020 Soil Vapor Risk Based Concentrations (RBC) Memorandum on January 14, 2020. NASA received NMED's February 21, 2020 fee assessment for review of the report on March 3, 2020 and is processing the payment.
- NASA submitted the *NASA WSTF Periodic Monitoring Report Fourth Quarter 2019* on January 30, 2020. NASA received NMED's February 21, 2020 fee assessment for review of the report on March 3, 2020 and is processing the payment.