



Storm Water Pollution Prevention Plan for Technical Area 54 Areas G and L

Newport News Nuclear BWXT-Los Alamos, LLC
1200 Trinity Drive, Suite 150
Los Alamos, NM 87544
(505) 661-5918

May 2021

EM2021-0180

POINT OF CONTACT INFORMATION:

N3B Regulatory Compliance Director: Emily Day
(505) 695-4243; email: emily.day@em-la.doe.gov
1200 Trinity Drive, Suite 150, Los Alamos, NM 87544

TABLE OF CONTENTS

1.0	Facility Description and Contact Information	1
1.1	Facility Description	1
1.2	Contact Information/Responsible Parties.....	3
1.3	Storm Water Pollution Prevention Plan/Team Members	4
1.4	Site Description	6
1.5	General Location Map.....	7
1.6	Site Map	7
2.0	Potential Pollutant Sources	9
2.1	Potential Pollutants Associated with Industrial Activity	9
2.2	Spills and Leaks	11
2.3	Unauthorized Non-Storm Water Discharges Documentation	12
2.4	Salt Storage.....	12
2.5	Sampling Data Summary	12
3.0	Storm Water Control Measures	14
3.1	Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT)	14
3.1.1	Minimize Exposure.....	14
3.1.2	Good Housekeeping	15
3.1.3	Maintenance	16
3.1.4	Spill Prevention and Response.....	16
3.1.5	Erosion, Sediment, and Storm Water Runoff Controls	17
3.1.6	Employee Training.....	18
3.1.7	Non-Storm Water Discharges.....	18
3.1.8	Dust Generation and Vehicle Tracking of Industrial Materials	18
3.2	Sector-Specific Non-Numeric Effluent Limits	18
3.3	Numeric Effluent Limitations Based On Effluent Limitations Guidelines.....	18
3.4	Water Quality-Based Effluent Limitations and Water Quality Standards	18
4.0	Schedules and Procedures	20
4.1	Housekeeping	20
4.2	Equipment Maintenance	20
4.3	Employee Training	20
5.0	Inspection and Monitoring Requirements	22
5.1	Routine Facility Inspections	22
5.2	Quarterly Visual Assessment of Storm Water Discharges.....	23
5.3	Monitoring.....	25
5.3.1	Monitoring Schedule	25
5.3.2	Outfalls: Discharge Points and Substantially Identical Outfalls	26
5.3.3	Summary of Monitoring Requirements	29
5.3.4	Monitoring Results	39
5.3.5	Recordkeeping.....	41
6.0	Documentation to Support Eligibility Considerations under Other Federal Laws ...	42
6.1	Documentation Regarding Endangered Species.....	42
6.2	Documentation Regarding Historic Properties	45
7.0	Corrective Actions and Deadlines	46
7.1	SWPPP Review and Revision to Ensure Effluent Limits are Met.....	46
7.2	Conditions Requiring SWPPP Review to Determine if Modifications Are Necessary	46
7.3	Corrective Action Deadlines	46

8.0	SWPPP Certification	47
9.0	SWPPP Modifications	48
Attachment A.	General Location Map.....	49
Attachment B.	Site Maps	51
Attachment C.	Relevant Procedures	57
Attachment D.	Routine Facility Inspection Work Statement (Blank Example) and Reports	58
Attachment E.	Quarterly Visual Assessments Work Statement (Blank) and Reports	59
Attachment F.	SWPPP MODIFICATIONS	60
Attachment G.	Reference Documents	61

Figure

Figure 6.1-1	Endangered species habitat within LANL.....	43
--------------	---	----

Tables

Table 1.3-1	Storm Water PPT Roles and Responsibilities	5
Table 2.1-1	Area G Potential Pollutants Associated with Industrial Activity	9
Table 2.1-2	Area L Potential Pollutants Associated with Industrial Activity.....	10
Table 2.2-1	Areas G and L Locations Where Potential Spills/Leaks Could Occur.....	12
Table 5.2-1	Areas G and L Monitored Outfalls and Associated SIDPs	24
Table 5.3-1	Area G (West Map): Discharge Points (Monitored Outfalls) and SIOs	27
Table 5.3-2	Area G (East Map): Discharge Points (Monitored Outfalls) and SIOs	28
Table 5.3-3	Area L: Discharge Point (Monitored Outfall).....	28
Table 5.3-4	TA-54 Area G Outfall 051: Monitoring Requirements – 2021 MSGP Receiving Water: Pajarito Canyon (Lower LANL Boundary to Twomile Canyon)	30
Table 5.3-5	TA-54 Area G Outfall 053: Monitoring Requirements – 2021 MSGP Receiving Water: Pajarito Canyon (Lower LANL Boundary to Twomile Canyon)	32
Table 5.3-6	TA-54 Area G Outfall 069: Monitoring Requirements – 2021 MSGP Receiving Water: Pajarito Canyon (Lower LANL Boundary to Twomile Canyon)	34
Table 5.3-7	TA-54 Area G Outfall 072: Monitoring Requirements – 2021 MSGP Receiving Water: Cañada del Buey (within LANL)	35
Table 5.3-8	TA-54 Area L Outfall 050: Monitoring Requirements – 2021 MSGP Receiving Water: Cañada del Buey (within LANL)	37

1.0 Facility Description and Contact Information

1.1 Facility Description

Facility Information:

Name of Facility: Los Alamos National Laboratory (LANL), Technical Area 54 (TA-54), Areas G and L

Street: 1200 Trinity Drive, Suite 150

City: Los Alamos State: NM ZIP Code: 87544

County or Similar Subdivision: Los Alamos

National Pollutant Discharge Elimination System (NPDES) ID: NMR050012

Primary Industrial Activity SIC code: HZ

Sector (2021 MSGP, Appendix D and Part 8): Sector K

Subsector (2021 MSGP, Appendix D and Part 8): Subsector K1

Co-located Industrial Activity SIC code: Not Applicable (N/A)

Sector (2021 MSGP, Appendix D): N/A

Subsector (2021 MSGP, Appendix D): N/A

Latitude and Longitude:

Latitude: 35. 834764°N (decimal degrees)

Longitude: -106. 25167°W (decimal degrees)

Method for determining latitude/longitude (check one): ☐ USGS topographic map (scale: _____)
☐ GPS
☒ Other (specify): Google Earth

Horizontal Reference Datum (check one): ☐ NAD 27 ☐ NAD 83 ☒ WGS 84

Is the facility located in Indian country? ☐ YES ☒ NO

If *yes* to the above question then provide name of Reservation

If *no* to the above question then indicate N/A N/A

Are you considered a **Federal Operator** of the facility? ☒ YES ☐ NO

Federal Operator – an entity that meets the definition of “operator” in this permit and is either any department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, operating for any such department, agency, or instrumentality.

Estimated area of industrial activity at site exposed to storm water: 65 acres

1.1 Facility Description (continued)

Discharge Information:	
Does this facility discharge storm water into a municipal separate storm sewer system (MS4)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
If yes, provide name of MS4 operator:	N/A
Name(s) of surface water(s) that receive storm water from your facility:	
<p>The direction of storm water flow from the facility is primarily to the south into Pajarito Canyon with a lesser discharge to the north into Cañada del Buey. TA-54 Area G discharges to two separate impaired receiving water segments. Outfall 072 discharges to Assessment NM-128.A_00, Cañada del Buey (identified by New Mexico Environment Department [NMED] as impaired for polychlorinated biphenyls [PCBs] and adjusted gross alpha). Outfall 051, Outfall 053, and Outfall 069 all discharge to Assessment NM-128.A_08, Pajarito Canyon (Lower LANL boundary to Twomile Canyon); this receiving water is recognized by NMED as impaired for PCBs, total recoverable aluminum, dissolved copper, adjusted gross alpha, and total recoverable cyanide. Area L (Outfall 050) discharges to Assessment NM-128.A_00 (Cañada del Buey).</p>	
Does this facility discharge industrial storm water directly into any segment of "impaired water"? (Ref. 2021 MSGP, Appendix A definitions)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<p>If yes, identify name of the impaired water(s) and segment(s), if applicable: <u>Pajarito Canyon (Lower LANL boundary to Twomile Canyon) and Cañada del Buey (within LANL).</u></p> <p>Identify pollutant(s) causing impairment(s): <u>Pajarito – PCBs, total recoverable aluminum, dissolved copper, adjusted gross alpha, and total recoverable cyanide; Cañada del Buey – PCBs and adjusted gross alpha</u></p>	
Which pollutant(s) identified may be present in industrial storm water discharges from this facility?	
<p>Based on historic sampling results and studies of naturally occurring background levels, adjusted gross alpha, dissolved copper, cadmium, lead, mercury, PCBs, chemical oxygen demand, and total recoverable aluminum may be present in storm water samples collected from this facility.</p>	
Has a total maximum daily load (TMDL) been completed for any of the identified pollutants?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
If yes, list TMDL pollutants:	N/A
Does this facility discharge industrial storm water into receiving water designated as a Tier 2, Tier 2.5, or Tier 3 water? (Ref. 2021 MSGP, Appendix A definitions)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Are any of your storm water discharges subject to effluent limitation guidelines (ELGs)? (Ref. 2021 MSGP, Table 1-1)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
If yes, which guidelines apply?	N/A

1.2 Contact Information/Responsible Parties

Facility (Site) Operator(s):

Name: Newport News Nuclear BWXT-Los Alamos, LLC (N3B)
Address: 1200 Trinity Drive, Suite 150
Los Alamos, NM 87544
Phone: (505) 661-5918

Facility Owner(s):

Name: N3B Contact-Handled Transuranic (CH-TRU) Program
TA-54 Operations Center
Address: 1200 Trinity Drive, Suite 150
Los Alamos, NM 87544
Phone: (505) 257-8400

Primary POC: Gail Helm, Facility Operations Director
Organization: N3B CH-TRU Waste Operations
Phone: (505) 309-1319
Email: gail.helm@em-la.doe.gov

Secondary POC: John Guy or alternate, Shift Operations Manager
Organization: N3B CH-TRU Waste Operations
Phone: (505) 309-1320
Email: john.guy@em-la.doe.gov

Site SWPPP:

POC: Emily Day, Director
Organization: N3B Regulatory Compliance
Phone: (505) 695-4243
Email: emily.day@em-la.doe.gov

Facility SWPPP:

Primary POC: John Guy or alternate, Shift Operations Manager
Organization: N3B CH-TRU Waste Operations
Phone: (505) 309-1320
Email: john.guy@em-la.doe.gov

Secondary POC: Jennifer von Rohr, Environmental Professional
Organization: N3B Regulatory Compliance
Phone: (505) 695-4365
Email: jennifer.vonrohr@em-la.doe.gov

1.3 Storm Water Pollution Prevention Plan/Team Members

N3B-controlled Los Alamos National Laboratory (LANL) facilities located at Technical Area 54 (TA-54) Areas G and L operate under the National Pollutant Discharge Elimination System (NPDES) 2021 Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activity, which governs storm water discharge from industrial activities.

Under the MSGP, the U.S. Environmental Protection Agency (EPA) requires implementation of a site-specific Storm Water Pollution Prevention Plan (SWPPP). This SWPPP has been developed in accordance with the provisions of the Clean Water Act (33 U.S.C. 1251 et seq.) and the regulations established by the EPA for the NPDES MSGP for Storm Water Discharges Associated with Industrial Activity [Federal Register 86, 10269], herein referred to as the 2021 MSGP.

The U.S. Department of Energy (DOE) awarded the Los Alamos Legacy Cleanup Contract (LLCC) to N3B effective April 30, 2018. As part of the LLCC, N3B assumed control of TA-54 Areas G and L. A notice of intent to operate this facility under the 2015 MSGP was submitted to EPA Region 6 by N3B in April 2018; NPDES coverage for this facility was authorized by EPA on May 1, 2018. The 2015 MSGP expired on June 3, 2020, and has been administratively continued, pending the issuance of a new general permit. The 2021 MSGP, issued January 15, 2021, became effective March 1, 2021. N3B proposes to seek authorization to discharge under that permit.

In accordance with the 2021 MSGP, this SWPPP is intended to document the selection, design, and installation of storm water control measures used at this facility. By implementing the provisions of this document, N3B intends to comply with the 2021 MSGP permit discharge requirements. This SWPPP describes specific storm water control measures, also known as best management practices (BMPs) that are used to reduce or eliminate pollutants in storm water discharges and identifies processes and procedures in place to comply with the terms and conditions of the 2021 MSGP. BMPs include maintenance activities, formalized work practice reviews, training, activity scheduling, stabilization, structural controls, and additional documentation. Collectively, the incorporation of BMPs into facility operations effectively reduces the potential for the introduction of contaminants into waters of the United States and supports facility eligibility under the 2021 MSGP.

This SWPPP is intended to be a living document with updates incorporated, as necessary, to reflect facility or operational changes with the potential to impact storm water discharge from the facility. The 2021 MSGP requires prompt revision of this SWPPP to reflect such changes.

This SWPPP applies to storm water discharges associated with industrial activities from hazardous waste treatment, storage, and disposal facility operations, including ancillary operations conducted at TA-54 Areas G and L by N3B personnel and subcontractors. TA-54 Areas G and L are under the control of N3B's CH-TRU Program. Operations conducted at this facility fall within the MSGP requirements for Sector K, Subsector K1, Hazardous Waste Treatment, Storage, or Disposal Facilities.

Team Members

N3B has established a storm water Pollution Prevention Team (PPT), the members of which are responsible for: (1) the development, implementation, maintenance, and revision of this SWPPP; (2) maintenance of control measures; and (3) implementation of corrective actions as required by the 2021 MSGP. In addition, members receive SWPPP training as part of the membership requirements (see Table 1.3-1 and section 4.5, Employee Training, for a complete summary).

Storm water PPT members are N3B representatives from cross-functional integrated project teams, including the Environmental Remediation Surface Water Program (ER SWP), the CH-TRU Program, and

the Regulatory Compliance organization. Participants of the storm water PPT are selected based on their knowledge of TA-54 operations and the potential impact of these activities on storm water runoff.

Storm water PPT duties include collecting storm water samples, conducting visual assessments of storm water runoff for indications of contamination, conducting routine facility inspections, identifying and documenting corrective actions, reporting in accordance with 2021 MSGP requirements, and implementing and modifying this SWPPP.

Table 1.3-1
Storm Water PPT Roles and Responsibilities

Roles	Responsibilities
Regulatory Compliance Director	<ul style="list-style-type: none"> • Oversees implementation of the SWPPP and associated BMPs • Oversees the assigned duties of PPT members • Ensures corrective actions are remedied/corrected and properly documented • Ensures routine facility inspections are conducted in accordance with section 4.6, Routine Facility Inspections and Quarterly Visual Assessments, of this SWPPP • Ensures training required by the 2021 MSGP is available and the appropriate N3B personnel receive the training specified in section 4.3, Employee Training, of this SWPPP
ER SWP Lead	<ul style="list-style-type: none"> • Provides SWPPP technical guidance • Provides BMP guidance (during selection and installation) • Aids in performing and documenting inspections and assessments • Performs site compliance evaluations, including routine facility inspections described in section 4.6.1, Routine Facility Inspections, of this SWPPP
CH-TRU Shift Operations Manager	<ul style="list-style-type: none"> • Responsible for the implementation of good housekeeping practices • Oversees BMP maintenance • Ensures corrective actions are scheduled/implemented in a timely manner • Ensures operators receive annual SWPPP/2021 MSGP required training • Notifies Regulatory Compliance Lead when there is a development or change in facility operations that may require a revision to the SWPPP or change to control measures
CH-TRU Operations Staff	<ul style="list-style-type: none"> • Assists with cleanup as necessary (i.e., spill of released pollutants) • Directs the appropriate waste management of all resultant cleanup materials • Performs quarterly visual assessments described in section 4.6.2, Quarterly Visual Assessment of Storm Water Discharges, of this SWPPP • Assists the ER SWP in the performance of routine facility inspections
Regulatory Compliance Lead	<ul style="list-style-type: none"> • Develops SWPPP training • Provides SWPPP technical guidance • Conducts recordkeeping and regulatory reporting • Provides oversight of the SWPPP (e.g., revisions, etc.) • Ensures inspection documents and other records related to the SWPPP and storm water pollution control measures are managed in accordance with the existing NPDES permit
Maintenance Connection Storm Water Database Administrator	<ul style="list-style-type: none"> • Maintains and updates the Maintenance Connection (MainConn) database based on input from MSGP Storm Water Team personnel • Responsible for the generation of routine facility inspection work statements • Generates and updates MSGP corrective action status reports

1.4 Site Description

All facilities at TA-54 Areas G and L are operated by N3B's CH-TRU Program. The standard industrial classification (SIC) code applicable to TA-54 Areas G and L operations is 562211–Hazardous Waste Treatment and Disposal, which is regulated under Sector K, sub-sector K-1, of the 2021 MSGP. Laboratory operations are described by NAICS Code 541715 – Research and Development in the Physical, Engineering and Life Sciences. Descriptions of activities conducted within each area of industrial activity are provided as follows.

Area G

Area G is LANL's primary location for the storage and disposal of radioactive solid waste. Area G occupies approximately 62 acres of the southern portion of TA-54 and is located approximately 2 mi southeast of the intersection of Pajarito Road and Rex Drive. A series of pits and shafts in Area G are used for low-level waste (LLW) disposal and retrievable transuranic (TRU) waste storage. Several high tension-support domes, chemical sheds, and buildings are used to store mixed low-level waste (MLLW), LLW, TRU waste, and mixed TRU waste. No liquids are accepted for disposal in Area G.

Subsurface disposal pits and shafts used for waste disposal are located throughout Area G. These facilities are situated a minimum of 50 ft from the mesa's edge and as far as practicable from drainage areas that flow to adjacent receiving waters in Cañada del Buey and Pajarito Canyon.

Disposal pits are typically designed to be a maximum of 65 ft deep, with the average pit measuring up to 600 ft long and 100 ft wide. Pits are typically designed with a 6:1 sloped ramp at one end and walls that are stepped or sloped at an approximate 1:2 slope. Multiple pits throughout Area G may be active at any time. Loose materials placed in the pits are immediately covered with crushed tuff to prevent dispersal by the wind. Inactive pits are maintained in a covered condition. Shafts are used to store certain solid radioactive wastes, including retrievable high-activity TRU waste, which require separation to limit exposure. Shafts are spaced at a minimum of one shaft diameter (measured center to center) and vary in depth from 25 to 65 ft. Shafts can be either lined or unlined, depending on the type of waste they contain. Shafts are kept covered at all times, except during actual waste emplacement. When a shaft is closed, the top 6 to 10 ft is filled with crushed tuff, capped with either concrete or crushed tuff, and domed to divert surface runoff away from the shaft.

Multiple structures at Area G are used to temporarily store containers of chemical waste, hazardous waste, LLW, MLLW, TRU waste, and mixed TRU waste generated from LANL facilities. These waste containers are stored in buildings, sheds, high-tension support domes set on asphalt pads, and outside on asphalt pads. Wastes stored outside in containers on asphalt pads are held in one of three configurations:

- Transportainers, which are metal boxes that meet stringent U.S. Department of Transportation requirements for waste transportation: As designed, these containers are elevated from the ground surface during storage, preventing contact with storm water run-on or runoff.
- Large (3-, 4-, or 6-ft-diameter) airtight experimental metal vessels: The interiors of these vessels contain radioactive contamination; however, they are designed to be airtight to contain the experiments that were housed inside them. These containers are stored on pallets to prevent contact with storm water run-on or runoff.
- Covered waste containers (drums and boxes): These waste containers are stored on pallets to prevent contact with storm water run-on or runoff.

In support of the primary operations at TA-54 (waste management), a variety of ancillary operations are routinely conducted throughout Area G, including equipment, material, and vehicle storage; vegetation

and pest management; construction projects; vehicle refueling; building and facility maintenance; etc. These operations, as each relates to storm water management and potential for impact to discharges from the site, are discussed throughout this document.

Overall, because of the use of storm water controls and BMPs in conjunction with Area G operations, the potential for storm water contamination from facilities at TA-54 Area G is low. Based on historic operations and incidental spill records, operations with the highest potential for impact to receiving water are loading/off-loading activities (related to transportation to or from the buildings, domes, metal boxes, or asphalt pads), vehicle fueling, and vehicle use. Extra precautions are routinely implemented to prevent impact from these operations.

There are 15 outfalls (11 of which are substantially identical discharge points [SIDPs]; see section 5.3.2) in 4 separate drainage areas at Area G. These areas vary both in size and volume of storm water runoff. Runoff from the drainage areas flows into either Pajarito Canyon or Cañada del Buey. Both receiving waters are tributaries to the Rio Grande and classified by New Mexico Administrative Code 20.6.4.128 as ephemeral waters.

Area L

Area L, which is approximately 2.5 acres in size, is used for intermediate and long-term storage of solid and liquid chemical wastes, hazardous wastes, and MLLW. Sector K industrial activities conducted at this location include sampling, packaging, transporting, and storing of waste. Ancillary support activities conducted within Area L include material storage, building and facility maintenance, and pest and vegetation control.

Depending on the availability of appropriate off-site recycling or disposal facilities, waste collected at Area L is either stored on-site or transported off-site for treatment, storage, or disposal. Stored waste includes various types of radioactive or hazardous waste, mixed liquid waste, wastes containing PCBs, waste gas cylinders, and other waste. The waste is primarily stored in a drum or other closed container, placed on a pallet, and housed within a structure. Alternatively, closed drums or containers are stored on pallets under some other form of cover.

Impervious asphalt ground surface-constructed berms and storm drains convey storm water runoff from Area L to a single outfall where storm water discharge is sampled (see table in section 5.3.2 for outfall information). Runoff from this outfall flows north into Cañada del Buey.

1.5 General Location Map

A general location map that identifies LANL and the proximity of receiving waters is provided as Attachment A, General Location Map.

1.6 Site Map

Area G

Of the approximately 62 acres where MSGP industrial activities occur at Area G, approximately 17 acres (28%) consists of impervious surfaces, including structures, rooftops, covered metal bins, transportainers, and asphalt/concrete surfaces. The direction of storm water flow on the site is primarily to the south with discharge into Pajarito Canyon. A lesser amount of runoff from the site discharges to the north into Cañada del Buey. Both water segments ultimately flow east to the Rio Grande.

Area L

Area L consists of nearly 100% impervious surfaces (2.5 acres) that include rooftops, covered metal bins, and asphalt/concrete surfaces. Asphalt channels and corrugated metal pipe convey storm water runoff generated at Area L to a single outfall that discharges to the north into Cañada del Buey, which flows ultimately to the Rio Grande.

All of the receiving waters for the TA-54 Areas G and L facility flow to the Rio Grande, which is located approximately 3 miles to the east.

2.0 Potential Pollutant Sources

Industrial activities associated with waste operations at TA-54 Areas G and L are primarily centered on the collection, storage, characterization, consolidation, handling, and shipment of numerous types of regulated wastes. Ancillary support activities conducted at this facility include building and facility maintenance, equipment and vehicle maintenance, pest and vegetation control, construction and excavation, and vehicle refueling. Authorized non-storm water discharges associated with fire hydrant maintenance; fire suppression system maintenance; uncontaminated heating, ventilation, and air conditioning (HVAC) condensate; and safety shower/eye wash maintenance occur at all industrial areas. In addition, potable water is applied to unpaved roads in Area G as necessary for dust suppression. In the past, vehicle, equipment, and drum washing was conducted within the truck wash facility located in the northwestern portion of Area G. Currently, this facility is not functional; reactivation would require facility improvements to ensure complete capture of wash water for appropriate disposal, as well as revision of this SWPPP.

The following sections define activities and associated potential pollutants for each of the TA-54 areas that are covered by the 2021 MSGP. Section 2.1 also addresses solid waste management units (SWMUs) and areas of concern (AOCs) located within the described facilities.

2.1 Potential Pollutants Associated with Industrial Activity

Tables 2.1-1 and 2.1-2 identify specific industrial activities and associated pollutants at TA-54 Areas G and L that are potentially exposed to storm water. The list of potential pollutants associated with the industrial activities includes all significant materials that have been handled, managed, or stored at the site within the past 3 years.

Table 2.1-1
Area G Potential Pollutants Associated with Industrial Activity

Area G Industrial Activity	Associated Pollutants
Loading and unloading radioactive, hazardous, chemical, and mixed waste containers	Radionuclides, metals, VOCs ^a , SVOCs ^b , oils, PCBs, fuels, antifreeze
Outdoor waste storage in containers	Radionuclides, metals, VOCs, SVOCs, PCBs
Dirt staging/spoils pile and daily cover application	Sediment
Radioactive waste hauling and disposal (containerized and bulk) at Pit 38 and shafts	Radionuclides
Heavy equipment operation and maintenance	Fuels, oils, hydraulic fluid, antifreeze, grease, battery acid
Scrap metal staging (south-central portion of site)	Metals
Vehicle refueling	Fuels
Construction and excavation	Fuels, oils, paints, VOCs
Pest and vegetation control (mechanical and chemical)	Pesticides, herbicides, fuels
Building and facility maintenance	Oils, paints, cleaners, VOCs, SVOCs

^a VOCs = Volatile organic compounds.

^b SVOCs = Semivolatile organic compounds.

Area G Solid Waste Management Units and Areas of Concern

The following SWMUs and AOCs are located within and adjacent to the limits of this industrial area:

- SWMU 54-013(b) – Vehicle monitoring/decontamination area (Material Disposal Area G [MDA G]).
- SWMU 54-014(d) – Retrievable TRU waste storage trenches.
- SWMU 54-015(k) – Previously consolidated under 54-013(b)-99. This SWMU is an inactive subsurface TRU waste disposal area located above Pit 29.
- SWMU 54-017 – Inactive disposal pit (MDA G).
- SWMU 54-018 – Inactive disposal pit (MDA G).
- SWMU 54-020 – Disposal shafts.
- AOC 54-012(a) – Former compactor facility TA-54-02.
- AOC 54-015(a) – Former drum storage for TRU/mixed TRU waste at TA-54-08. Currently, this area is an interim-status Resource Conservation and Recovery Act (RCRA) storage unit.
- AOC 54-015(b) – Former TRU and LLW storage near TA-54-11.
- AOCs 54-015(c through f) – TRU and mixed TRU waste storage Pads 1 through 4 and associated structures. Dome 48 is located on Pad 3. Pads 2 and 4 were repaved in 2003 to form one continuous asphalt surface (Pad 10).
- AOC 54-015(j) – Mixed waste storage dome TA-54-49. The dome, which is located above Pit 32, is used for staging, swiping, stacking, and storing of TRU and mixed TRU waste.
- AOC 54-016(b) – Sump at TA-54-33 designed to collect waste from the removal of the corrosion inhibitor that is sprayed on TRU waste drums.

The majority of the SWMUs/AOCs listed above are inactive underground waste units (for disposal or storage) or are RCRA treatment, storage, and disposal units where current waste management activities are occurring. SWMUs and AOCs that have the potential to discharge to waters of the United States are covered under LANL's NPDES Individual Permit (NM0030759) and subject to the permit requirements contained therein, including monitoring and corrective actions.

Table 2.1-2
Area L Potential Pollutants Associated with Industrial Activity

Area L Industrial Activity	Associated Pollutants*
Loading and unloading radioactive, chemical, hazardous, and mixed waste containers	Radionuclides, metals, VOCs, SVOCs, oils, PCBs, fuels, antifreeze, corrosives (e.g., HF, HCl, H ₂ SO ₄ , NaOH, etc.), commercial chemical products (e.g., bleach, Lysol, fire retardants, and other products), cyanides, and air- and water-reactive material
Outdoor waste storage in containers	Radionuclides, metals, VOCs, SVOCs, PCBs, fuels, antifreeze, corrosives (e.g., HF, HCl, H ₂ SO ₄ , NaOH), commercial chemical products (e.g., bleach, Lysol, fire retardants, and other cleaning products), cyanides, and air- and water-reactive material
Heavy equipment maintenance	Fuels, oils, antifreeze, grease, and battery acid

Area L Industrial Activity	Associated Pollutants*
Heavy equipment operation and material handling	Fuels, oils, antifreeze, grease, and battery acid
Pest and vegetation control (mechanical and chemical)	Pesticides, herbicides, fuels
Building and facility maintenance	Oils, paints, cleaners, VOCs, SVOCs

* VOCs = volatile organic compounds; SVOCs = semivolatle organic compounds; HF = hydrofluoric acid; HCl = hydrochloric acid; H₂SO₄ = sulfuric acid; NaOH = sodium hydroxide.

Area L SWMUs and AOCs

There are several SWMUs/AOCs located within and adjacent to the limits of this industrial area. SWMUs/AOCs within the site limits include the following:

- SWMU 54-001(a) – Former bermed hazardous waste storage area for pails and drums. The site is the current location of building TA-54-215.
- SWMU 54-006 – Inactive disposal units under Area L asphalt, including Pit A, surface impoundments B and D, and disposal shafts.
- SWMU 54-012(b) – Former location of drum compactor.
- AOC 54-001(b) – Container accumulation, packaging, and storage (TA-54-31).
- AOC 54-001(d) – PCB storage area in building TA-54-39.
- AOC 54-001(e) – Sheltered concrete storage pad partitioned into six cells (TA-54-32).
- AOC 54-002 – Compressed gas storage area (Dome 215).
- AOC 54-009 – Barium treatment tanks. All tanks have been removed and units have been closed in accordance with RCRA.
- AOC 54-014(a) – Two lead stringer shafts at the northwest corner of Area L. The lead stringers were removed in the fall of 2004 and have been closed in accordance with the RCRA permit.

The majority of the SWMUs/AOCs listed above are inactive underground waste units (for disposal or storage) or are RCRA treatment, storage, and disposal units where current waste management activities are occurring. SWMUs and AOCs that have the potential to discharge to waters of the United States are covered under LANL's NPDES Individual Permit (NM0030759) and subject to the permit requirements contained therein, including monitoring and corrective actions.

2.2 Spills and Leaks

A number of areas throughout TA-54 Areas G and L have been identified as locations where the occurrence of a spill or leak could contribute pollutants to storm water discharges. These locations and the associated discharge points are described in Table 2.2-1.

Table 2.2-1
Areas G and L Locations Where Potential Spills/Leaks Could Occur

Area G Location	Discharge Points
Entrance to TSDF* structures and asphalt pads for loading/unloading/storage	Monitored Outfall 051. This feature is shown on the site maps in Attachment B.
Vehicle and equipment (e.g., forklift) parking on the south end of Pad 10 – heavy equipment and vehicle leaks	Monitored Outfall 069 and SIDPs 076, 077, 078, 079, 080, 081, 082 and 083. These features are shown on the site maps in Attachment B.
Travel corridor between TSDF structures and pads – heavy equipment leaks	Monitored Outfalls 051, 053, 069, and 072 and corresponding SIDPs 073, 074, 075, 076, 077, 078, 079, 080, 081, 082 and 083. These features are shown on the site maps in Attachment B.
Various flammable cabinets and storage facilities	Monitored Outfalls 051, 053, 069, and 072 and corresponding SIDPs 073, 074, 075, 076, 077, 078, 079, 080, 081, 082 and 083. These features are shown on the site maps in Attachment B.
Area L Location	Discharge Points
Entrance to TSDF structures and asphalt storage area for loading/unloading/storage	Monitored Outfall 050. This outfall is shown on the Area L site map provided in Attachment B.
Travel corridor between TSDF structures and pads – heavy equipment leaks	Monitored Outfall 050. This outfall is shown on the Area L site map provided in Attachment B.
Various flammable cabinets and storage facilities	Monitored Outfall 050. This outfall is shown on the Area L site map provided in Attachment B.

*TSDF = Treatment, storage, and disposal facility.

Description of Past Spills/Leaks

While N3B is aware of minor leaks of vehicle and equipment fluids (primarily fuels and hydraulic fluids) from various equipment used in conjunction with normal operations at TA-54 Areas G and L, no spills or releases are known to have discharged into a watercourse or canyon or migrated from the site during the period of N3B's control of operations at TA-54 (April 2018-present). Minor spills or leaks (if they occur) will be documented in accordance with N3B-AOP-TRU-3003, "Material Release or Spill," and N3B-SOP-RP-0005, "Radiological Emergency Response," as appropriate.

2.3 Unauthorized Non-Storm Water Discharges Documentation

N3B is unaware of unauthorized non-storm water discharges associated with TA-54 Areas G and L.

Unauthorized spills or unauthorized non-storm water discharges, if they occur, will be documented in accordance with corrective action documentation described in section 7.0 of this SWPPP.

2.4 Salt Storage

Salt is used during winter months as needed to deice walkways, parking areas, etc. Salt for this purpose is stored in labeled and covered containers at strategic locations throughout the facility. Salt piles are not maintained on-site.

2.5 Sampling Data Summary

Storm water runoff from TA-54 Area G is monitored by four automated samplers situated outside the facility boundary (Outfall 051, Outfall 072, Outfall 053, and Outfall 069); Area L is monitored by one

sampler (Outfall 050) located outside the Area L boundary on the northeastern side of the facility. The locations of all samplers are identified on site maps provided in Attachment B.

Sampling at these locations has been ongoing since approximately 2015. (This sampling was performed by Los Alamos National Security, LLC [LANS], before 2018.) Following assumption of control of the TA-54 facility in 2018, N3B initiated benchmark and impairment sampling for all applicable parameters at each monitored outfall. In accordance with Section 6.2.1.2 of the 2015 MSGP, beginning in monitoring year 2020, benchmark monitoring parameters were removed from outfalls where an average of four quarterly monitoring results were determined to be below the corresponding benchmark value for that parameter. Current monitoring requirements applicable to each monitored outfall are summarized in section 5.3.3 of this SWPPP.

During monitoring years 2019 and 2020, 22 benchmark-monitoring samples collected from the 5 monitored outfalls within TA-54 Areas G and L exceeded the benchmark value for total magnesium (64 µg/L). Following verification of each exceedance, N3B initiated corrective actions, including a site walkdown to identify potential contributing factors to each exceedance and opportunities for reducing total magnesium levels, such as modifications to existing storm water controls or changes to site operations. N3B additionally reviewed available documentation on total magnesium background values applicable to the TA-54 location, including “Background Metals Concentrations and Radioactivity in Storm Water on the Pajarito Plateau, Northern New Mexico” (LA-UR-13-22841, April 2013). This study documented urban background levels of total magnesium in the range of 359 µg/L to 7710 µg/L with a 95%/95% upper threshold limit of 6330 µg/L.

Of the 22 samples collected during monitoring years 2019 and 2020, 19 were within the urban background levels for total magnesium. Based on information presented here and monitoring results historically reported for this facility by the former operator (LANS) for the approximate period of 2008–2017, total magnesium levels reported for TA-54 have been largely attributable to background concentrations. Consequently, no facility modifications were proposed, as further pollutant reductions are not considered economically or technologically feasible. The 2021 MSGP removed total magnesium from the required benchmark parameters applicable to Sector K facilities.

Other parameters that have been detected in storm water samples collected from this facility by N3B include adjusted gross alpha, cadmium, aluminum, copper, lead, mercury, PCBs, and chemical oxygen demand. Benchmark exceedances reported for this facility since 2018 include magnesium, cadmium, chemical oxygen demand, lead and mercury. All monitoring results from this facility are available in the publically accessible Intellus database (<https://www.intellusnm.com/>).

3.0 Storm Water Control Measures

3.1 Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT)

N3B's CH-TRU organization is responsible for the operational and support activities conducted at TA-54 Areas G and L, including the implementation of storm water control measures designed to ensure operator safety, environmental protection, and proper use and maintenance of loading/unloading and waste management equipment. N3B maintenance personnel perform routine preventive and corrective maintenance work to ensure industrial equipment is in good working order. Operational procedures incorporate provisions for corrective, predictive, and preventative maintenance and allow for identification and correction of conditions that have the potential to cause breakdowns or failures that could result in the release of pollutants to the environment.

In selecting and citing constructed storm water controls and developing work procedures and practices for implementation at TA-54, N3B considered measures to minimize impacts from storm events such as precipitation events, fires etc. Examples of such measures include intensive inspections for seasonal impacts (N3B-DOP-TRU-1420, "Seasonal Facility Preservation Plan Rounds") and work modifications for weather or other conditions. The following sections describe the storm water control measures in use at TA-54 Areas G and L. Collectively, these measures are implemented to meet the permit's "non-numeric technology-based effluent limits" described in Part 2.1.2 of the 2021 MSGP.

3.1.1 Minimize Exposure

N3B recognizes that preventing storm water contact with pollutants is generally more effective and less costly than removal of pollutants from storm water; and that the use of a combination of control measures is generally more effective at minimizing pollutants than a single control measure. These principles are applied throughout operations at TA-54 Areas G and L.

Structural controls and work/organizational practices used to minimize the exposure of material storage areas and industrial activities to rain, snow, snowmelt, and runoff include the following:

- Where possible, waste management; loading/unloading; and vehicle, building, and facility maintenance activities are conducted indoors, under cover, or within a bermed area.
- Leaking vehicles/equipment are not stored on-site; rather, they are contained and promptly moved off-site for repair.
- Equipment and vehicle cleaning is performed indoors, under cover, or in bermed areas that prevent runoff and run-on and also capture any overspray.
- Appropriate spill cleanup/response materials are readily available in close proximity to where potential pollutants are used and stored; spill kits are routinely inspected.
- Wet cleanup practices that would result in the discharge of pollutants to storm water drainage systems are prohibited.
- Prompt cleanup of releases with absorbent pads, biodegradable/bioremediation dry absorbents (Oil Sponge or equivalent), or dispersant/bioremediation liquid products (e.g., Micro-Blaze for stains) is performed.
- Procedures for material storage and handling (such as spill control) are current and in place.
- Containers that could be susceptible to spillage or leakage are properly labeled to encourage proper handling and facilitate rapid spill response.

- All liquid products are stored within a designated area under cover and within secondary containment. Used oil filters are stored in designated covered bins under cover and within secondary containment.
- Monitoring and facility inspections are conducted to ensure compliance with this SWPPP.
- Pesticide/herbicide use is coordinated with mechanical measures, such as cutting vegetation and using traps for pests, as an overall attempt to minimize the use of these chemical products. All pesticide/herbicide applications are conducted in accordance with manufacturer recommendations, and applications are minimized to prevent runoff of excess product.
- Vehicle fueling is conducted within designated areas equipped with appropriate spill control measures and in accordance with N3B-DOP-TRU-1304, R1, "Industrial Truck and Equipment Refueling and Recharging."
- Surface grading, berms, and curbs are used throughout the facility to prevent discharges of contaminated flows and to divert run-on from identified areas of potential contamination sources.

3.1.2 Good Housekeeping

All waste management and storage areas are to be kept clean and neat, with stored materials clearly identified. Vehicles and other equipment are stored and maintained in areas intended for those purposes.

Operations personnel at TA-54 facilities perform regular inspections to assess general housekeeping, in addition to spill prevention and detection, and to identify potential compliance issues. N3B incorporates the following measures in normal TA-54 Areas G and L operations:

- Outside areas are routinely cleaned up.
- Active shop areas are swept daily.
- Operational areas are maintained in a clean and orderly state.
- Trash dumpsters are emptied on a regular basis and lids are kept closed when not in use.
- Waste containers within regulated waste storage areas are picked up on an as-needed basis before the container reaches its capacity. Only containers in good condition are used for waste storage.
- Facility inspections are routinely conducted to ensure that no potential contaminants are present in exposed areas.
- Vehicles and heavy equipment are routinely inspected for leaks and potential problems.
- Measures are implemented to minimize storm water run-on/runoff to maintenance areas.
- Releases are immediately cleaned up with absorbent pads, biodegradable dry absorbents (i.e., Oil Sponge or equal), or dispersant/bioremediation liquid products (e.g., Micro-Blaze for stains) on concrete or asphalt. Stained base course is removed, containerized, and managed appropriately.
- Maintenance activities are conducted indoors or under cover, when possible.
- Sumps and catch basins are routinely inspected and cleaned of accumulated debris/sediment when they become two-thirds (2/3) full (the debris surface is maintained at least 6 in. below the lowest outlet pipe) or in accordance with manufacturer specifications, whichever is lower.

- All liquid products are stored within labeled containers in a designated area under cover and in secondary containment.
- Wet cleanup practices that would result in the discharge of pollutants to storm water drainage systems are prohibited.
- Wastes are managed and disposed of in accordance with the appropriate procedures.
- Chemical use (such as pesticides, herbicides, cleaning products) is minimized to the extent possible. When these products are used, they are applied in accordance with manufacturer guidelines and in a manner that minimizes broad distribution or liquid discharge from the facility.

3.1.3 Maintenance

At TA-54 Area G and L facilities, preventive maintenance is performed proactively on heavy equipment on a routine schedule in accordance with appropriate procedures. Operators perform a pre-operation inspection on equipment before use. These inspections are intended to identify maintenance issues before they become larger issues.

N3B CH-TRU personnel perform routine inspections to identify facility maintenance issues. CH-TRU personnel additionally maintain appropriate spill response materials within the RCRA-permitted areas and vehicle/equipment maintenance areas.

The storm water PPT conducts quarterly routine facility inspections and quarterly visual assessments to assess site conditions and the functionality of site storm water controls. Each type of inspection is discussed in section 5.0 of this SWPPP.

Repair, maintenance, or replacement of BMPs will be conducted immediately (i.e., the day of discovery or if identified late in the day, the next day following discovery) if possible. If not completed immediately, reasonable steps will be taken to prevent the discharge of pollutants until the needed maintenance is completed. Documentation of repairs and maintenance to control measures will be maintained within this SWPPP.

3.1.4 Spill Prevention and Response

Operational controls are implemented to minimize the possibility of spills or releases caused by site operations and to minimize the potential for any off-site impacts in the event a spill does occur. In general, the approach to spill cleanup of a known substance is to first contain the spill by securing the spill source and deploying spill containment materials. If secondary containment is provided (e.g., secondary containment pallets for liquids), it will contain the spill. All spill responses will be in accordance with N3B-AOP-TRU-3003, "Material Release or Spill," and N3B-SOP-RP-0005, "Radiological Emergency Response," as appropriate. The following measures will be implemented as appropriate in the event of a spill or release:

- Spills/leaks will be cleaned up promptly using dry absorbents.
- Drip pans/absorbents will be strategically staged below any leaking equipment.
- Spill/overflow protection will be used.
- Stored containers will be labeled appropriately to identify contents.
- Secondary containment, barriers, and other measures will be used to prevent the discharge of pollutants from material storage and traffic areas.

- Spill-response training will be provided to all appropriate personnel.
- Spill-response kits appropriate to the materials stored will be maintained in areas where spills are likely to occur.

The TA-54 Operations Center can be reached at (505) 257-8400. If a fire or explosion occurs, or if the potential for such exists, the situation must be reported by dialing 911 or by activating a fire pull box. Personnel should dial 911 in the event of an employee injury. In the event of a spill, the CH-TRU Operations Center will notify Regulatory Compliance. Reporting, if necessary, will be completed by Regulatory Compliance in accordance with N3B and DOE policies and federal and state regulatory reporting requirements. In addition to fulfilling reporting requirements, spill reports will assist user groups and N3B management in assessing the cause of a spill and in executing appropriate corrective action.

There are two types of spill reporting required at N3B: internal spill recordkeeping and external agency notifications.

Copies of internal spill reports will be kept by the N3B Regulatory Compliance storm water PPT member and the responsible organization. External agency notifications (as determined by Regulatory Compliance) may consist of verbal or written notifications to the National Response Center, EPA Region 6, NMED, and/or the Pueblos.

3.1.5 Erosion, Sediment, and Storm Water Runoff Controls

Physical controls are in place throughout the site to minimize erosion, isolate storm water from potential pollutants, and manage sediment and storm water runoff from the site. Run-on to the site is minimized through the use of established native vegetation, earthen berms, and ditches in the site's border areas. Storm water controls are used on-site to divert, infiltrate, contain, or otherwise reduce storm water to minimize pollutants in discharges from the facility.

The following control measures are used on-site:

- rock check dams
- silt fences
- S-Fences and ProWattles
- rock gabions
- vegetation
- turf-reinforcement mats (TRMs)
- concrete blankets
- gravel and rock rundowns
- sediment ponds
- earthen, asphalt, or concrete berms, curbs, and swales
- energy dissipaters
- culverts
- site grading
- French drains
- standpipes

3.1.6 Employee Training

All employees who are involved with the implementation of this SWPPP and the provisions of the 2021 MSGP are trained to understand the requirements of the permit and the contents of this SWPPP. As may be relevant to specific job function, annual training includes:

- An overview of this SWPPP;
- Spill-response procedures, good housekeeping, maintenance requirements, and material management practices;
- The location of physical controls required by this permit and the required maintenance of those controls;
- Appropriate pollution prevention requirements;
- Inspection, documentation, and corrective action requirements of the 2021 MSGP; and
- Facility-specific emergency procedures.

3.1.7 Non-Storm Water Discharges

Evaluation of the TA-54 facility for non-storm water discharges that are not explicitly authorized by Part 1.2.2 of the 2021 MSGP is part of each routine facility inspection conducted in accordance with Section 5.1 of this SWPPP. In addition, as part of N3B's internal project review process, proposed operational and facility changes are evaluated for regulatory impacts, including the 2021 MSGP and any potential changes to this document.

3.1.8 Dust Generation and Vehicle Tracking of Industrial Materials

Industrial activities conducted on-site occur primarily within the central and eastern portions of Area G. The ground surface within these areas is comprised mostly of exposed tuff and base-course gravel. Dust generated in these areas is minimized by the sparse application of potable water. The application of water for dust suppression is accomplished with the use of a water truck equipped with a spray apparatus. Potable water is applied at a minimal rate to prevent a discharge from the facility and to minimize the potential for erosive effects.

3.2 Sector-Specific Non-Numeric Effluent Limits

TA-54 Areas G and L are subject to sector-specific requirements for industrial activity in "Sector K – Hazardous Waste Treatment, Storage, or Disposal Facilities," as specified in the 2021 MSGP Part 8, Subpart K. Sector K-specific non-numeric effluent limits applicable to Area G and L operations include biannual indicator monitoring for 16 individual polycyclic aromatic hydrocarbon (PAH) compounds during the first and fourth years of the permit term. Sampling and analytical requirements applicable to this facility are summarized in Section 5.3.3 of this SWPPP.

3.3 Numeric Effluent Limitations Based On Effluent Limitations Guidelines

TA-54 Areas G and L contain inactive landfills that are not subject to the provisions of RCRA Subtitle C. These facilities are not subject to the effluent limitation guidelines specified by Table 8.K-2 of the 2021 MSGP.

3.4 Water Quality-Based Effluent Limitations and Water Quality Standards

Monitoring required by the 2021 MSGP includes sampling of storm water runoff for sector-specific benchmark parameters and receiving-water specific impairment parameters. Details regarding this

monitoring are provided in section 5.3.3 of this SWPPP. Data from storm water samples collected through the implementation of this SWPPP are maintained in the publically accessible Intellus database (<https://www.intellusnm.com/>). Reporting of monitoring results is provided electronically to U.S. EPA via the Central Data Exchange NetDMR website (<https://cdx.epa.gov/>).

4.0 Schedules and Procedures

4.1 Housekeeping

Pickup and disposal of regulated wastes is scheduled and tracked by CH-TRU using an internal Waste Compliance and Tracking System (WCATS). Trash generated and stored on-site in dumpsters is regularly removed from the site for off-site disposal.

Waste inspections are scheduled and conducted based on the type of waste accumulation area where the waste is managed. These inspections include visual checks for leaks and for the condition of containers, tanks, and packaging.

Good housekeeping practices described in section 3.0 of this SWPPP are incorporated into everyday operations at TA-54 Area G and L. All areas are maintained in a clean and orderly state and inspected regularly. Standard operating and maintenance procedures are designed to minimize the potential for spills, releases, exposure of materials, and any other events that could adversely affect the quality of storm water that may be transported out of the area by runoff. Normal maintenance of control measures is conducted as soon as possible in order to minimize the potential for pollutant discharges. If not completed immediately (i.e., the day of discovery or if identified late in the day, the day following discovery), reasonable steps will be taken to prevent the discharge of pollutants until the needed maintenance is completed. Erosion and sediment controls, including established vegetation in perimeter areas of the facility and nonstructural controls such as spill kits will be routinely inspected and maintained in proper condition.

Procedures supporting the implementation of this SWPPP are listed in Attachment D.

4.2 Equipment Maintenance

All industrial equipment must be regularly inspected (i.e., for preventive maintenance and before use), tested, maintained, and repaired to avoid situations that may result in leaks, spills, and other releases of pollutants that could result in a discharge to receiving waters.

N3B CH-TRU maintains a list of all N3B-owned or -controlled equipment. This list identifies when equipment is due for preventive maintenance or inspection. Heavy equipment and vehicle maintenance and inspections are tracked by CH-TRU.

4.3 Employee Training

Employee training is essential for effective implementation and maintenance of this SWPPP. Objectives of the training program include:

- cover all required training topics identified in the 2021 MSGP,
- review the most current SWPPP with employees and managers,
- help employees recognize situations that could lead to storm water contamination,
- assist employees in recognizing issues that may require corrective action and identifying appropriate corrective actions, and
- train personnel in proper spill response and control procedures.

All employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of the 2021 MSGP, will receive training annually. This includes all operational site workers, managers, and supervisors at TA-54

and all storm water PPT members. Annual employee training ensures that personnel are aware of the regulatory requirements of the 2021 MSGP, monitoring results, control measures, and the components of this SWPPP. After training, the employees are able to recognize and avoid situations that could lead to storm water contamination, prevent spills and releases, and respond safely and effectively to a spill or release.

The TA-54 MSGP training includes an annual MSGP slide presentation and a review of this SWPPP to address the following topics:

- specific control measures used on-site;
- storm water monitoring results;
- inspections;
- planning;
- reporting;
- spill prevention, response, and cleanup;
- good housekeeping and material management practices to prevent storm water pollution;
- site-specific structures, equipment, and procedures designed to minimize storm water pollution and soil erosion;
- documentation requirements;
- recognition of pollutant sources; and
- site-specific endangered species and historical considerations.

Training activities are documented in accordance with N3B's training organization. Training records (inclusive of SWPPP training) are maintained by N3B's training organization.

5.0 Inspection and Monitoring Requirements

In accordance with the 2021 MSGP, inspections, assessments, and monitoring for indications of contaminants and potential issues or conditions of concern are routinely conducted at TA-54, Areas G and L. These requirements are discussed in the following sections.

5.1 Routine Facility Inspections

Routine facility inspections (RFIs) will be conducted on a quarterly basis by the PPT lead or designee. The individual conducting each inspection will be knowledgeable in the principles and practices of industrial storm water controls and pollution prevention. In addition, this individual will possess the education and ability to assess both the conditions at the industrial facility that could impact storm water quality and the effectiveness of the storm water controls in use to meet the requirements of the permit. Each RFI inspection will include visual assessments of storm water control measures used to comply with the 2021 MSGP and all facility areas where industrial materials or activities are exposed to storm water.

The PPT lead or designee performing the inspection will use the RFI work statement provided in Attachment D of this SWPPP to document each inspection. Prior to each RFI, the inspector will consider the results of visual and analytical monitoring for the prior year. The completed work statements will be signed by an authorized representative, and a copy of each work statement will be maintained in Attachment D of this plan.

Each RFI will be conducted during normal business hours. If possible, one RFI per year will be conducted during a period when a storm water discharge is occurring.

RFIs will record and evaluate the following, at a minimum:

- inspection date and time;
- name(s) and signature(s) of inspector(s);
- weather information and a description of any discharge(s) occurring at the time of the inspection;
- any control measures needing maintenance or repairs;
- any failed control measures that need replacement;
- descriptions of any discharges occurring at the time of the inspection;
- any previously unidentified discharges and/or pollutants from the site;
- any evidence of, or potential for, pollutants entering the drainage system;
- evidence of leaks or spills from industrial equipment, drums, tanks or other containers;
- observations regarding the condition of the outfalls;
- any incidents of noncompliance observed;
- reasonable steps taken or determined necessary for any required maintenance or identified repairs to reduce the potential of a discharge from the site; and
- any additional control measures needed to comply with the MSGP.

At a minimum, specific areas of the facility to be inspected will include the following:

- areas of the facility that are covered by the 2021 MSGP,
- areas where industrial materials or activities are exposed to storm water,
- areas identified as potential pollutant sources,
- locations where spills or leaks have been documented within the past three years,
- discharge points, including SIDPs (in the event that any discharge point is inaccessible, the inspection should include nearby downstream areas), and
- control measures used to comply with the 2021 MSGP.

Routine facility inspections occur on the following schedule for each calendar year (CY):

Quarter	CY Routine Facility Inspections		
1	January 1	–	March 31
2	April 1	–	June 30
3	July 1	–	September 30
4	October 1	–	December 31

Any required corrective actions identified during the inspection will be addressed in accordance with Part 5 of the 2021 MSGP, section 7 of this SWPPP, and all applicable N3B procedures.

5.2 Quarterly Visual Assessment of Storm Water Discharges

Quarterly visual assessments (QVAs) of storm water discharge will be conducted from each outfall/SIDP in use at TA-54 Areas G and L in accordance with Part 3.2 of the 2021 MSGP and N3B-QP-RGC-0004 *MSGP Storm Water Visual Assessments*. The purpose of these assessments is to identify visible evidence of pollution in storm water discharge from the facility. Visible evidence of pollutants triggers corrective action discussed in section 7 of this SWPPP.

Samples will be collected for each QVA in a manner that generates a sufficient volume of representative storm water from the monitored outfall or SIDP subject to evaluation. For areas that have more than one discharge point that discharge SIDPs, QVAs will not be required for each quarter at each outfall. Rather, these assessments will be implemented on a rotating basis. As allowed by Part 3.2.4.5 of the 2021 MSGP for monitored outfalls with associated SIDPs, the QVA can be conducted either on discharge from the monitored outfall or on a SIDP associated with that outfall, provided each outfall and SIDP are assessed during the permit term. In addition, if indications of pollutants are identified as the result of a QVA, corrective actions described in section 7 of this SWPPP will apply to the outfall and all associated SIDPs. Outfalls and SIDPs permitted for this facility are listed in Table 5.2-1.

Table 5.2-1
Areas G and L Monitored Outfalls and Associated SIDPs

TA-54 Area	Map	Monitored Outfall	Associated Substantially Identical Discharge Point(s)
G	TA-54 Area G West	051	n/a*
G	TA-54 Area G West	072	074, 075
G	TA-54 Area G East	053	073
G	TA-54 Area G East	069	076, 077, 078, 079, 080, 081, 082 083
L	TA-54 Area L	050	n/a

*n/a = Not applicable: no SIDPs are associated with the identified monitored outfall.

Additional details regarding each monitored outfall and any associated SIDP are provided in section 5.3.2 of this SWPPP.

Each QVA will

- involve the collection of a representative sample of a measurable discharge using a clean, clear glass or plastic sample container;
- be conducted on a sample collected in the first 30 min of discharge from a storm event. If the sample is not collected within the first 30 minutes, it must be collected as soon as practicable and the reason for any delay (e.g., adverse conditions or snowmelt) must be documented;
- be conducted at least 72 hr since the last storm event, or will document why it was collected sooner;
- include documentation of rationale, if a visual assessment is unable to be collected in a quarter (e.g., because of adverse conditions or a no-precipitation event); and
- include an additional assessment during the next qualifying storm event if it cannot be performed during a particular quarter.

As allowed by Part 3.2.4.2 of the 2021 MSGP for climates with irregular storm water discharges (e.g., due to limited rainfall or freezing conditions), N3B proposes to conduct quarterly visual assessments according to the following modified quarterly schedule:

Quarter	Modified Visual Assessment Schedule
1	April 1 – May 31
2	June 1 – July 31
3	August 1 – September 30
4	October 1 – November 30

Each QVA will evaluate representative storm water discharge for potential pollutants by evaluating the sample for the presence of the following water quality characteristics:

- color,
- odor,
- clarity,

- floating solids,
- settled solids,
- suspended solids,
- foam,
- oil sheen, and/or
- other obvious indicators of storm water pollution.

Each visual assessment will be documented using N3B Form 6341, “MSGP Storm Water Visual Assessment Form.” Copies of each assessment shall be maintained within this SWPPP document.

5.3 Monitoring

Monitoring activities applicable to TA-54 Areas G and L include

- Sector K-specific quarterly benchmark monitoring,
- state-specific monitoring,
- impaired waters monitoring, and
- indicator monitoring.

Analytical monitoring is performed on storm water discharges from the site. Monitoring events occur from storm events that result in an actual discharge from the site and that follow the preceding measurable storm events by at least 72 hr (3 days). For runoff from snowmelt, the monitoring is performed when a measurable discharge from the site occurs.

Samples are analyzed in accordance with the 40 Code of Federal Regulations Part 136 analytical methods, using test procedures with quantification limits that are sufficiently sensitive for the monitored parameter, based on benchmark values, water quality criteria, or screening level as applicable. Runoff samples are collected using automated samplers within the first 30 min of a measurable storm event. If it is not possible to collect a representative sample within the first 30 min of a measurable storm event, the sample is collected as soon as practicable after the first 30 min and documentation is kept with the SWPPP explaining why it was not possible to take samples within the first 30 min. An MSGP Sampling and Analysis Plan is developed every year, which identifies the current monitoring year, analytical requirements, analytical methods, preservation requirements, volume requirements, types of shipping containers, type of sampler to be used, and holding times for each analysis.

5.3.1 Monitoring Schedule

All monitoring for compliance with the 2021 MSGP will be conducted on a modified quarterly schedule as allowed by Part 4.1.6 of the 2021 MSGP for facilities in climates with irregular storm water discharges. The modified monitoring schedule that will be implemented for this facility is summarized below.

Biannual Period	Quarter	Modified Monitoring Schedule		
1	1	April 1	–	May 31
	2	June 1	–	July 31
2	3	August 1	–	September 30
	4	October 1	–	November 30

Certain circumstances, such as a lack of qualifying storm events or imposition of a stop-work order by DOE, could result in the collection of no samples during one or more quarters at one or more monitored outfalls. This situation will be documented as necessary, and collection of make-up samples will be attempted in the subsequent quarter as qualifying precipitation events allow. Impaired waters monitoring and NMED-required per- and polyfluoroalkyl substance (PFAS) sampling are performed on an annual basis. One sample is collected between April 1 and November 30 of each CY unless there is no qualifying storm event that results in a discharge from the facility, or if another unanticipated circumstance prohibits the collection of a sample (such as the issuance of a stop-work order by DOE). Indicator monitoring for PAHs is conducted biannually in the first and fourth years of permit coverage. If necessary, makeup samples will be collected in subsequent biannual periods.

5.3.2 Outfalls: Discharge Points and Substantially Identical Outfalls

Area G uses SIDPs for monitoring events. The outfalls are identified as SIDPs based on common potential pollutant sources, drainage areas, activities within the drainage areas, and general site topography and characteristics. (See Tables 5.3-2 and 5.3-3.) Site maps with detailed outfall information are provided in Attachment B. QVAs of SIDPs will be performed on a rotating basis throughout the permit term in which at least one SIDP assessment will apply to any other SIDP associated with its respective discharge point.

The following information supports the SIDP determinations.

TA-54 Area G

Monitored Outfall 051: Drainage is received from Dome 49, Dome 224, and surrounding areas and structures located to the north and northwest of Monitored Outfall 051. Drainage is collected in the area east of the southern end of 54-0049 and flows through culverts to Pajarito Canyon and monitored outfall 051. Drainage from 54-0049, 54-0224 and a spoils pile in this area also flows to a rip rap area southeast of 54-0224 and is discharged to Pajarito Canyon and monitored outfall 051 through a culvert system.

Monitored Outfall 072: Drainage flows to this outfall from the northwest portion of the site, structure 54-0033 and surrounding features and structures. Drainage flows to a small sediment basin located east of 54-0033 and discharges to the northeast to Cañada del Buey.

SIDP-074: Drainage flows from the northwest and northeast sides of structure 54-0033 through a riprap reinforced concrete swale and discharges northeast to Cañada del Buey. This SIDP is monitored at Monitored Outfall 072.

SIDP-075: Drainage flows from structure 54-0033, 54-0481, 54-0486, 54-0491, 54-0492, 54-0153, 54-0283 and surrounding areas to a culvert, a concrete/asphalt swale, and a gabion rundown that discharges northeast to Cañada del Buey. This SIDP is monitored at Monitored Outfall 072.

Monitored Outfall 053: This outfall receives drainage from the eastern portions of the site, including structures 54-0229, 54-0230, 54-0231, 54-0232, 54-0375 and surrounding areas. Drainage flows south in a natural channel in Pajarito Canyon to monitored outfall 053.

SIDP-073: Drainage is received from the east, from structures 54-0229, 54-0230, 54-0231, and 54-0232 and surrounding areas. Drainage is discharged to the west and then flows south to Pajarito Canyon. This SIDP is monitored at Monitored Outfall 053.

Monitored Outfall 069: Drainage to this outfall flows primarily from the north and west. Discharge from Monitored Outfall 069 flows south in an earthen swale to a natural channel in Pajarito Canyon past two rock check dams and then is collected in a sediment basin.

SIDP-076: Drainage is received from the north and west. Discharge is near the southwest corner of structure 54-0325 and then south to Pajarito Canyon. This SIDP is monitored at Monitored Outfall 069.

SIDP-077: Drainage is received from the north and west. Discharge is near the southeast corner of earthen berm 0112 east of structure 54-0367 and flows south to Pajarito Canyon. This SIDP is monitored at Monitored Outfall 069.

SIDP-078, 079, 080, 081 and 082: These SIDPs receive drainage from the west from structures 54-0229, 54-0230, 54-0231, and 54-0232. Drainage flows east to Pajarito Canyon. These SIDPs are monitored at Monitored Outfall 069.

SIDP-083: Drainage is received from structure 54-0229. Discharge is to Pajarito Canyon from the riprap rundown on the southwest side of 54-0229. This SIDP is monitored at Monitored Outfall 069.

**Table 5.3-1
Area G (West Map): Discharge Points (Monitored Outfalls) and SIDPs**

Outfall ID	Outfall Location	Activities/ Potential Pollutants	Runoff Coefficient	Control Measures
Monitored Outfall 051	Southeast of west TSDF ^a area; discharge to Pajarito Canyon	Radionuclides – LLW, mixed LLW, TRU and mixed TRU waste, metals, VOCs ^b , SVOCs ^c , oils, PCBs, fuels, antifreeze, pesticides/herbicides, paints, cleaners	73% (HIGH)	Culvert with flow velocity dissipaters, rock check dams, asphalt swales, riprap, silt fence
Monitored Outfall 072	Northeast fence line, east of structure 54-033; discharge to Cañada del Buey	Radionuclides – LLW, mixed LLW, TRU and mixed TRU waste, metals, VOCs, SVOCs, oils, PCBs, fuels, antifreeze, pesticides/herbicides, paints, cleaners	78% (HIGH)	Culvert, riprap, sediment pond, silt fence
SIDP-074	Northeast fence line, northeast side of structure 54-0033; discharge to Cañada del Buey		100% (HIGH)	Riprap-reinforced concrete swale
SIDP-075	North fence line, northwest of structure 54-0033; discharge to Cañada del Buey		100% (HIGH)	Culvert, concrete and asphalt swale, gabion rundown, silt fence

^a TSDF = Treatment, storage, and disposal facility.

^b VOCs = Volatile organic compounds.

^c SVOCs = Semivolatile organic compounds.

Table 5.3-2
Area G (East Map): Discharge Points (Monitored Outfalls) and SIDPs

Outfall ID	Outfall Location	Activities/ Potential Pollutants	Runoff Coefficient	Control Measures
Monitored Outfall 053	South of southern industrial area and east of structure 54-0230; discharge to Pajarito Canyon	Radionuclides – LLW, mixed LLW, TRU and mixed TRU, metals, VOCs ^a , SVOCs ^b , oils, PCBs, fuels, antifreeze, pesticides/herbicides, paints, cleaners	84% (HIGH)	Rock blanket, TRM, riprap, concrete drainage channel, sediment trap, gabion, weir, sediment basin with dike and outlet
SIDP 073	2-in. PVC ^c pipe hole in concrete curb/berm west of structures 54-0229–54-0232; discharge to Pajarito Canyon	Radionuclides – LLW, mixed LLW, TRU and mixed TRU, metals, VOCs, SVOCs, oils, PCBs, fuels, antifreeze, pesticides/herbicides, paints, cleaners	100% (HIGH)	Concrete curb/berm, rock rundown
Monitored Outfall 069	Northeast of structures 54-0229–54-0232; discharge to Pajarito Canyon	Radionuclides – LLW, mixed LLW, TRU and mixed TRU waste, metals, VOCs, SVOCs, oils, PCBs, fuels, antifreeze, pesticides/herbicides, paints, cleaners	100% (HIGH)	Rock check dams, silt fence
SIDPs 076, 077, 078, 079, 080, 081, 082 and 083	2-in. PVC pipe holes in concrete curb/berm east of structures 54-0229–54-0232; discharge to Pajarito Canyon	Radionuclides – LLW, mixed LLW, TRU and mixed TRU waste, metals, VOCs, SVOCs, oils, PCBs, fuels, antifreeze, pesticides/herbicides, paints, cleaners	100% (HIGH)	Concrete curb/berm, rock rundown

^a VOCs = Volatile organic compounds.

^b SVOCs = Semivolatile organic compounds.

^c PVC = Polyvinyl chloride.

Area L

Monitored Outfall 050: Drainage from the entire facility (Area L) flows in a general easterly direction to this monitored outfall, located at the northeastern corner of the site (Table 5.3-4). Discharge is to the northeast to Cañada del Buey.

Table 5.3-3
Area L: Discharge Point (Monitored Outfall)

Outfall ID	Outfall Location	Activities/Potential Pollutants	Runoff Coefficient	Control Measures
Monitored Outfall 050	Southeast corner of the facility boundary; discharge to Cañada del Buey	Radionuclides – LLW, mixed LLW, TRU and mixed TRU waste, metals, VOCs ^a , SVOCs ^b , oils, PCBs, fuels, antifreeze, pesticides/herbicides, paints, cleaners	95% (HIGH)	Culvert with flow velocity dissipater (standpipe)

^a VOCs = Volatile organic compounds.

^b SVOCs = Semivolatile organic compounds.

5.3.3 Summary of Monitoring Requirements

The benchmark, impairment, NMED-required, and indicator monitoring requirements applicable to each outfall are identified in the current MSGP Sampling and Analysis Plan (SAP) and summarized in the following sections. This plan is updated each CY, based on prior results and updated impairments, as needed. Note that while the current impairment monitoring requirements are based on the 2018–2020 State of New Mexico 303(d) list, the 2020–2022 303(d) list has been released and approved by the New Mexico Water Quality Control Commission and is pending approval by the EPA. The 2020–2022 impairments listed for the involved water segments remain unchanged from the 2018–2020 303(d) list.

Specific monitoring information contained in the SAP includes the following:

- Analytical constituent(s) per outfall
- Sample type (grab)
- Container type
- Holding times
- Analytical method
- Frequency of analysis (annually, bi-annually or quarterly)
- Preservation requirements
- Filtered status
- Sample volume

Note: Matrix type (snowmelt or rainfall) will be identified in field chain-of-custody form.

The 2021 MSGP allows for suspension of monitoring for quarterly benchmark and impaired waters pollutants when defined conditions are met. Therefore, monitoring requirements may change over the lifespan of the 2021 MSGP. Tables 5.3-4 through 5.3-8 list the monitoring requirements in effect at the beginning of coverage under the 2021 MSGP.

Table 5.3-4
TA-54 Area G Outfall 051: Monitoring Requirements – 2021 MSGP
Receiving Water: Pajarito Canyon (Lower LANL Boundary to Twomile Canyon)

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard/Benchmark Threshold	Units	Regulatory Standard Type
Impaired Water	— ^c	NM-128.A_08	PCBs Total Aroclors	UF	2.0	µg/L	NM 2018 Aquatic Acute
Impaired Water	—	NM-128.A_08	Al (total recoverable)	F10µ	660	µg/L	NM 2018 Aquatic Acute – Hardness Dependent
Impaired Water	—	NM-128.A_08	Cu (dissolved)	F	4.35	µg/L	NM 2018 Aquatic Acute – Hardness Dependent
Impaired Water	—	NM-128.A_08	Gross Alpha (adjusted)	UF	15	pCi/L	NM 2018 Livestock Watering
Impaired Water	—	NM-128.A_08	CN (total recoverable)	UF	5.2	µg/L	NM 2018 Wildlife Habitat
Quarterly Benchmark	K	—	Ag (total)	UF	0.80	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Ag (dissolved)	F	0.4	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	As (total)	UF	150	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark (State Requirement)	K	—	As (dissolved)	F	9	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Cd (total)	UF	0.73	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Cd (dissolved)	F	0.59	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	CN (total recoverable)	UF	5.2	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	COD	UF	120,000	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Hg (total)	UF	0.77	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	NH ₃	UF	2140	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Pb (total)	UF	24	µg/L	2021 MSGP Sector K QBM Hardness Dependent

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/Unfiltered ^b	Regulatory Standard/Benchmark Threshold	Units	Regulatory Standard Type
Quarterly Benchmark (State Requirement)	K	—	Pb (dissolved)	F	17	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Se (total)	UF	3.1	µg/L	2021 MSGP Sector K QBM
Bi-annual Indicator	K	—	PAH	UF	NA ^d	—	2021 MSGP Sector K Bi-annual
Annual State-Specific	K	—	PFAS	UF	0.070 ^e	µg/L	NMED 401 Cert/2021 MSGP Part 9.6.2.1

Note: The regulatory standards for hardness-dependent metals are calculated using a hardness value of 30.2 mg/L.

^a Ag = Silver; Al = aluminum; As = arsenic; Cd = cadmium; CN = cyanide; COD = chemical oxygen demand; Cu = copper; Hg = mercury; NH₃ = ammonia; Pb = lead; Se = selenium; PAH = polycyclic aromatic hydrocarbons; PFAS = per- and polyfluoroalkyl compounds.

^b UF = Unfiltered; F10µ = filtered using a 10-µm filter; F = filtered using a 0.45-µm filter.

^c — = Not applicable.

^d NA = No threshold or regulatory standard applies to this parameter. Monitoring is required for 16 individual PAH compounds identified in 40 CFR Part 243, Appendix A.

^e The combined results of PFOA + PFOS analytes will be compared to the New Mexico screening level of 0.070 µg/L.

Table 5.3-5
TA-54 Area G Outfall 053: Monitoring Requirements – 2021 MSGP
Receiving Water: Pajarito Canyon (Lower LANL Boundary to Twomile Canyon)

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard/ Benchmark Threshold	Units	Regulatory Standard Type
Impaired Water	— ^c	NM-128.A_08	PCBs Total Aroclors	UF	2.0	µg/L	NM 2018 Aquatic Acute
Impaired Water	—	NM-128.A_08	Al (total recoverable)	F10µ	660	µg/L	NM 2018 Aquatic Acute – Hardness Dependent
Impaired Water	—	NM-128.A_08	Cu (dissolved)	F	4.35	µg/L	NM 2018 Aquatic Acute – Hardness Dependent
Impaired Water	—	NM-128.A_08	Gross Alpha (adjusted)	UF	15	pCi/L	NM 2018 Livestock Watering
Impaired Water	—	NM-128.A_08	CN (total recoverable)	UF	5.2	µg/L	NM 2018 Wildlife Habitat
Quarterly Benchmark	K	—	Ag (total)	UF	0.80	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Ag (dissolved)	F	0.4	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	As (total)	UF	150	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	As (dissolved)	F	9	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Cd (total)	UF	0.73	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Cd (dissolved)	F	0.59	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	CN (total recoverable)	UF	22	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	COD	UF	120,000	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Hg (total)	UF	1.4	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	NH ₃	UF	2140	µg/L	2021 MSGP Sector K QBM

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard/ Benchmark Threshold	Units	Regulatory Standard Type
Quarterly Benchmark	K	—	Pb (total)	UF	24	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Pb (dissolved)	F	17	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Se (total)	UF	3.1	µg/L	2021 MSGP Sector K QBM
Biannual Indicator	K	—	PAH	UF	NA ^d	—	2021 MSGP Sector K Biannual
Annual State-Specific	K	—	PFAS	UF	0.070 ^e	µg/L	NMED 401 Cert/2021 MSGP Part 9.6.2.1

Note: The regulatory standards for hardness-dependent metals are calculated using a hardness value of 30.2 mg/L.

^a Ag = Silver; Al = aluminum; As = arsenic; Cd = cadmium; CN = cyanide; COD = chemical oxygen demand; Cu = copper; Hg = mercury; NH₃ = ammonia; Pb = lead; Se = selenium; PAH = polycyclic aromatic hydrocarbons; PFAS = per- and polyfluoroalkyl compounds.

^b UF = Unfiltered; F10µ = filtered using a 10-µm filter; F = filtered using a 0.45-µm filter.

^c — = Not applicable.

^d NA = No threshold or regulatory standard applies to this parameter. Monitoring is required for 16 individual PAH compounds identified in 40 CFR Part 243, Appendix A.

^e The combined results of PFOA + PFOS analytes will be compared to the New Mexico screening level of 0.070 µg/L.

Table 5.3-6
TA-54 Area G Outfall 069: Monitoring Requirements – 2021 MSGP
Receiving Water: Pajarito Canyon (Lower LANL Boundary to Twomile Canyon)

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard/ Benchmark Threshold	Units	Regulatory Standard Type
Impaired Water	— ^c	NM-128.A_08	PCBs Total Aroclors	UF	2.0	µg/L	NM 2018 Aquatic Acute
Impaired Water	—	NM-128.A_08	Al (total recoverable)	F10µ	660	µg/L	NM 2018 Aquatic Acute – Hardness Dependent
Impaired Water	—	NM-128.A_08	Cu (dissolved)	F	4.35	µg/L	NM 2018 Aquatic Acute – Hardness Dependent
Impaired Water	—	NM-128.A_08	Gross Alpha (adjusted)	UF	15	pCi/L	NM 2018 Livestock Watering
Impaired Water	—	NM-128.A_08	CN (total recoverable)	UF	5.2	µg/L	NM 2018 Wildlife Habitat
Quarterly Benchmark	K	—	Ag (total)	UF	0.80	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Ag (dissolved)	F	0.4	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	As (total)	UF	150	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark (State Requirement)	K	—	As (dissolved)	F	9	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Cd (total)	UF	0.73	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Cd (dissolved)	F	0.59	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	CN (total recoverable)	UF	5.2	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	COD	UF	120,000	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Hg (total)	UF	0.77	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	NH-3	UF	2140	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Pb (total)	UF	24	µg/L	2021 MSGP Sector K QBM Hardness Dependent

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard/ Benchmark Threshold	Units	Regulatory Standard Type
Quarterly Benchmark (State Requirement)	K	—	Pb (dissolved)	F	17	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Se (total)	UF	3.1	µg/L	2021 MSGP Sector K QBM
Biannual Indicator	K	—	PAH	UF	NA ^d	—	2021 MSGP Sector K Bi-annual
Annual State-Specific	K	—	PFAS	UF	0.070 ^e	µg/L	NMED 401 Cert/2021 MSGP Part 9.6.2.1

Note: The regulatory standards for hardness-dependent metals are calculated using a hardness value of 30.2 mg/L.

^a Ag = Silver; Al = aluminum; As = arsenic; Cd = cadmium; CN = cyanide; COD = chemical oxygen demand; Cu = copper; Hg = mercury; NH₃ = ammonia; Pb = lead; Se = selenium; PAH = polycyclic aromatic hydrocarbons; PFAS = per- and polyfluoroalkyl compounds.

^b UF = Unfiltered; F10µ = filtered using a 10-µm filter; F = filtered using a 0.45-µm filter.

^c — = Not applicable.

^d NA = No threshold or regulatory standard applies to this parameter. Monitoring is required for 16 individual PAH compounds identified in 40 CFR Part 243, Appendix A.

^e The combined results of PFOA + PFOS analytes will be compared to the New Mexico screening level of 0.070 µg/L.

Table 5.3-7
TA-54 Area G Outfall 072: Monitoring Requirements – 2021 MSGP
Receiving Water: Cañada del Buey (within LANL)

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard/ Benchmark Threshold	Units	Regulatory Standard Type
Impaired Water	— ^c	NM-128.A_00	PCBs Total Aroclors	UF	2.0	µg/L	NM 2018 Aquatic Acute
Impaired Water	—	NM-128.A_00	Gross Alpha (adjusted)	UF	15	pCi/L	NM 2018 Livestock Watering
Quarterly Benchmark	K	—	Ag (total)	UF	0.80	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Ag (dissolved)	F	0.4	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	As (total)	UF	150	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	---	As (dissolved)	F	9	µg/L	2021 MSGP Part 9.6.2.2

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard/ Benchmark Threshold	Units	Regulatory Standard Type
Quarterly Benchmark	K	—	Cd (total)	UF	0.73	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Cd (dissolved)	F	0.59	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	CN (total recoverable)	UF	5.2	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	COD	UF	120,000	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Hg (total)	UF	1.4	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	NH ₃	UF	2140	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Pb (total)	UF	24	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Pb (dissolved)	F	17	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Se (total)	UF	3.1	µg/L	2021 MSGP Sector K QBM
Bi-annual Indicator	K	—	PAH	UF	NA ^d	—	2021 MSGP Sector K Bi-annual
Annual State-Specific	K	—	PFAS	UF	0.070 ^e	µg/L	NMED 401 Cert/2021 MSGP Part 9.6.2.1

Note: The regulatory standards for hardness-dependent metals are calculated using a hardness value of 30.2 mg/L.

^a Ag = Silver; As = arsenic; Cd = cadmium; CN = cyanide; COD = chemical oxygen demand; Hg = mercury; NH₃ = ammonia; Pb = lead; Se = selenium;
PAH = polycyclic aromatic hydrocarbons; PFAS = per- and polyfluoroalkyl compounds.

^b UF = Unfiltered; F = filtered using a 0.45-µm filter.

^c — = Not applicable.

^d NA = No threshold or regulatory standard applies to this parameter. Monitoring is required for 16 individual PAH compounds identified in 40 CFR Part 243, Appendix A.

^e The combined results of PFOA + PFOS analytes will be compared to the New Mexico screening level of 0.070 µg/L.

Table 5.3-8
TA-54 Area L Outfall 050: Monitoring Requirements – 2021 MSGP
Receiving Water: Cañada del Buey (within LANL)

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard	Units	Regulatory Standard Type
Impaired Water	— ^c	NM-128.A_00	PCBs Total Aroclors	UF	2.0	µg/L	NM 2018 Aquatic Acute
Impaired Water	—	NM-128.A_00	Gross Alpha (adjusted)	UF	15	pCi/L	NM 2018 Livestock Watering
Quarterly Benchmark	K	—	Ag (total)	UF	0.80	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Ag (dissolved)	F	0.4	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	As (total)	UF	150	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	As (dissolved)	F	9	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Cd (total)	UF	0.73	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Cd (dissolved)	F	0.59	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	CN (total recoverable)	UF	5.2	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	COD	UF	120,000	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Hg (total)	UF	1.4	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	NH ₃	UF	2140	µg/L	2021 MSGP Sector K QBM
Quarterly Benchmark	K	—	Pb (total)	UF	24	µg/L	2021 MSGP Sector K QBM Hardness Dependent
Quarterly Benchmark (State Requirement)	K	—	Pb (dissolved)	F	17	µg/L	2021 MSGP Part 9.6.2.2
Quarterly Benchmark	K	—	Se (total)	UF	3.1	µg/L	2021 MSGP Sector K QBM

Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte ^a	Filtered/ Unfiltered ^b	Regulatory Standard	Units	Regulatory Standard Type
Bi-annual Indicator	K	—	PAH	UF	NA ^d	—	2021 MSGP Sector K Bi-annual
Annual State-Specific	K	—	PFAS	UF	0.070 ^e	µg/L	NMED 401 Cert/2021 MSGP Part 9.6.2.1

Note: The regulatory standards for hardness-dependent metals are calculated using a hardness value of 30.2 mg/L.

^a Ag = Silver; As = arsenic; Cd = cadmium; CN = cyanide; COD = chemical oxygen demand; Hg = mercury; NH₃ = ammonia; Pb = lead; Se = selenium; PAH = polycyclic aromatic hydrocarbons; PFAS = per- and polyfluoroalkyl compounds.

^b UF = Unfiltered; F = filtered using a 0.45-µm filter.

^c = Not applicable.

^d NA = No threshold or regulatory standard applies to this parameter. Monitoring is required for 16 individual PAH compounds identified in 40 CFR Part 243, Appendix A.

^e The combined results of PFOA + PFOS analytes will be compared to the New Mexico screening level of 0.070 µg/L.

5.3.4 Monitoring Results

5.3.4.1 Benchmark Monitoring

Quarterly benchmark monitoring will begin at each monitored outfall for the parameters specified in Tables 5.3-4 through 5.3-8 upon receipt of authorization to discharge under the 2021 MSGP. If the average of four monitoring values for any benchmark parameter exceeds the applicable benchmark threshold, or if the calculated average result of less than four benchmark samples is mathematically certain to exceed the benchmark threshold, corrective action in the form of tiered additional implementation measures (AIM) will be implemented. There are three AIM levels (Level 1, Level 2, Level 3) that are sequentially applied with increasingly robust requirements as benchmark exceedances occur. Each AIM level and corresponding response is described below. Benchmark monitoring is considered in baseline status until an AIM-triggering event occurs (i.e., exceedance of a benchmark threshold as described), after which, once the appropriate AIM criteria are met, a return to baseline status will occur. Benchmark monitoring status is determined on a parameter basis for each monitored outfall.

AIM Level 1 – If during baseline status, quarterly benchmark monitoring indicates that either an annual average of four quarterly samples exceeds an applicable benchmark threshold or the average of fewer than four quarterly samples is mathematically certain to exceed an applicable benchmark threshold, the following measures will be implemented:

- An immediate review of the SWPPP and storm water control measures will be conducted to ensure the effectiveness of existing measures and determine if modifications are necessary to meet applicable benchmark thresholds.
- If additional measures are deemed appropriate, they will be implemented within 14 days of receipt of laboratory results if feasible. If doing so within 14 days is not feasible, the reason(s) will be documented and the additional measures will be implemented within 45 days.
- If no additional measures are deemed appropriate, documentation will be prepared to demonstrate why existing control measures will be expected to lower exceedances below the corresponding benchmark threshold for the following 12-month period.

Depending on subsequent quarterly benchmark monitoring results, the compliance status will either return to baseline status (i.e., if an additional AIM-triggering event does not occur) or if an AIM-triggering event occurs, will elevate to AIM Level 2.

AIM Level 2 – If during AIM Level 1, continued monitoring yields results that indicate an AIM-triggering event occurs, the following measures will be implemented:

- The SWPPP will be reviewed and additional pollution prevention/good housekeeping control measures beyond what was implemented in response to AIM level 1 will be implemented.
- Additional measures will be implemented within 14 days of receipt of laboratory results if feasible. If doing so within 14 days is not feasible, the reason(s) will be documented and the additional measures will be implemented within 45 days. If additional time is necessary, EPA must grant an extension based on appropriate demonstration.
- After compliance with AIM Level 2, quarterly benchmark monitoring will continue for the next four quarters for the parameter(s) that caused the AIM-triggering event, beginning no later than the next full quarter after compliance.

Based on continued quarterly benchmark monitoring results, the compliance status will either return to baseline status or elevate to AIM Level 3 status.

AIM Level 3 – If during continued quarterly benchmark monitoring following an AIM Level 2 event an additional AIM triggering event occurs (i.e., the benchmark threshold continues to be exceeded for the parameter[s] of concern), the following measures will be implemented:

- Structural source controls such as permanent controls and/or treatment controls as determined appropriate to bring exceedances below the benchmark threshold will be installed.
- The appropriate structural source and/or treatment controls will be identified within 14 days and installed within 60 days if feasible, in which case the conditions preventing the installation within this time frame will be documented. If not installed within 90 days, and additional time is necessary, EPA must grant an extension based on appropriate documentation.

If during baseline status, the average of 4 quarterly benchmark monitoring values for any parameter does not exceed the corresponding benchmark threshold, monitoring for that parameter will be discontinued until year 4 of the permit term. During permit year 4, quarterly benchmark monitoring will resume with all parameters.

5.3.4.2 Impaired Waters Monitoring

As required by Part 4.2.5 of the 2021 MSGP, monitoring will be conducted for any parameter identified as causing an impairment in the receiving water for that discharge. Impairments are based on the current State of New Mexico 303(d) list and updated each monitoring year in the MSGP sampling and analysis plan. Monitoring for impaired water parameters will be conducted annually in the first and fourth years of permit coverage unless an impairment parameter is detected, in which case monitoring will be conducted each year. Any impairment parameter that is not detected will be excluded from annual monitoring until permit year 4. If it is determined that the presence of an impairment pollutant is caused solely by natural background sources, monitoring for that parameter will be discontinued, provided documentation specified by Part 4.2.5.1 of the 2021 MSGP is developed and maintained within the on-site SWPPP document.

5.3.4.3 Indicator Monitoring

Indicator monitoring for PAH compounds will be conducted biannually (twice each monitoring year) in the first and fourth years of permit coverage in accordance with Part 4.2.1.1.b of the 2021 MSGP.

5.3.4.4 State-Specific Monitoring

Monitoring for PFAS analytes is required by Part 9.6.2.1 of the 2021 MSGP. This monitoring will be conducted once during the first year of permit coverage. If monitoring indicates the presence of the PFOA and PFOS compounds in a single combined value above the New Mexico PFAS screening level of 0.070 µg/L, sampling will be repeated annually.

Prior to the beginning of each monitoring year (April 1), an MSGP SAP will be developed to define the benchmark, impairment, indicator, and state-specific monitoring for each facility. This information will be updated on an annual basis in this SWPPP.

5.3.4.5 Data Validation

Analytical results meet the N3B minimum data quality objectives (DQOs) as outlined in N3B-PLN-SDM-1000: "Sample and Data Management Plan." N3B-PLN-SDM-1000 sets the validation frequency criteria at 100% Level 1 examination and Level 2 verification of data, and at 10% minimum Level 3 validation of data. A Level 1 examination assesses the completeness of the data as delivered from the analytical laboratory, identifies any reporting errors, and checks the usability of the data based on the

analytical laboratory's evaluation of the data. A Level 2 verification evaluates the data to determine the extent to which the laboratory met the analytical method and the contract-specific quality control and reporting requirements. A Level 3 validation includes Levels 1 and 2 criteria and determines the effect of potential anomalies encountered during analysis and possible effects on data quality and usability. A Level 3 validation is performed manually with method-specific data validation procedures. Laboratory analytical data are validated by N3B personnel as outlined in N3B-PLN-SDM-1000; N3B-AP-SDM-3000: "General Guidelines for Data Validation"; N3B-AP-SDM-3014: "Examination and Verification of Analytical Data"; and additional method-specific analytical data validation procedures. All associated validation procedures have been developed, where applicable, from the EPA QA/G-8 Guidance on Environmental Data Verification and Data Validation, the Department of Defense/Department of Energy Consolidated Quality Systems Manual for Environmental Laboratories, the EPA National Functional Guidelines for Data Validation, and the American National Standards Institute/American Nuclear Society 41.5: Verification and Validation of Radiological Data.

5.3.5 Recordkeeping

For each monitoring event except snowmelt monitoring, the following information will be recorded and maintained through documentation provided on work orders, chain-of-custody forms, discharge monitoring records, and off-site analytical laboratory reports:

- Date, exact place, and time of sampling or measurements;
- Date and duration (in hours) of the rainfall event;
- Rainfall total (in inches) for that rainfall event;
- Time (in days) since the previous measurable storm event;
- Individual(s) who performed the sampling or measurements;
- Date(s) analyses were performed;
- Individual(s) who performed the analyses;
- Analytical techniques or methods used; and
- Results of such analyses.

For snowmelt monitoring, all information except rainfall event durations, totals, and time since previous event will be included.

All analytical data from storm water monitoring will be maintained in Intellus (<https://www.intellusnm.com/>).

6.0 Documentation to Support Eligibility Considerations under Other Federal Laws

6.1 Documentation Regarding Endangered Species

The LANL Threatened and Endangered Species Habitat Management Plan for Los Alamos National Laboratory (HMP) (<https://permalink.lanl.gov/object/tr?what=info:lanl-repo/lareport/LA-UR-15-28610>) was prepared to provide for the protection of federally listed threatened and endangered species and their habitats at LANL. The HMP was designed to be a comprehensive landscape-scale management plan that balances the current operations and future development needs of LANL with the habitat requirements of threatened and endangered species. It also facilitates DOE compliance with the Endangered Species Act (ESA) and related federal regulations. The HMP received concurrence from the U.S. Fish and Wildlife Service (USFWS) and was first implemented in 1999. All changes to the HMP, such as adding new species or changing requirements, are assessed in a new consultation with the USFWS before being implemented. The HMP provides guidance by species for different types of activities allowed without further review by the USFWS.

Currently, the only federally listed species that inhabit or occur at LANL are the Southwestern Willow Flycatcher (*Empidonax trailii extimus*), Jemez Mountains Salamander (*Plethodon neomexicanus*), and Mexican Spotted Owl (*Strix occidentalis lucida*). Suitable habitats for these species, along with a protective buffer area surrounding the habitats, have been designated as areas of environmental interest (AEIs). An AEI consists of a core area that contains important breeding or wintering habitat for a specific species and a buffer area around the core area. The buffer protects the core area from disturbances that would degrade the value of the core area to the species.

The HMP includes ecorisk analyses, which account for any industrial facility's storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities. In addition, the LANL site-wide environmental-impact-statement biological assessment covered the continuation of LANL operations and included outfalls (<https://www.energy.gov/nepa/downloads/eis-0380-final-site-wide-environmental-impact-statement>).

As determined by earlier evaluations, storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities from LANL MSGP locations, including TA-54 Areas G and L, are not likely to adversely affect any species that is federally listed as endangered or threatened under Criterion D, Section iii of the ESA. These activities will also not result in the adverse modification or destruction of a habitat that is federally designated as a "critical habitat" under the ESA. New activities are evaluated to determine if they will have an impact on any species. If an activity can be completed within the guidelines of the HMP, it can go forward as scheduled. However, if the activity cannot comply with the guidelines, the HMP requires that a project-specific biological assessment be prepared for the action and go through the consultation process with the USFWS. Figure 6.1-1 illustrates the endangered species habitat within LANL.

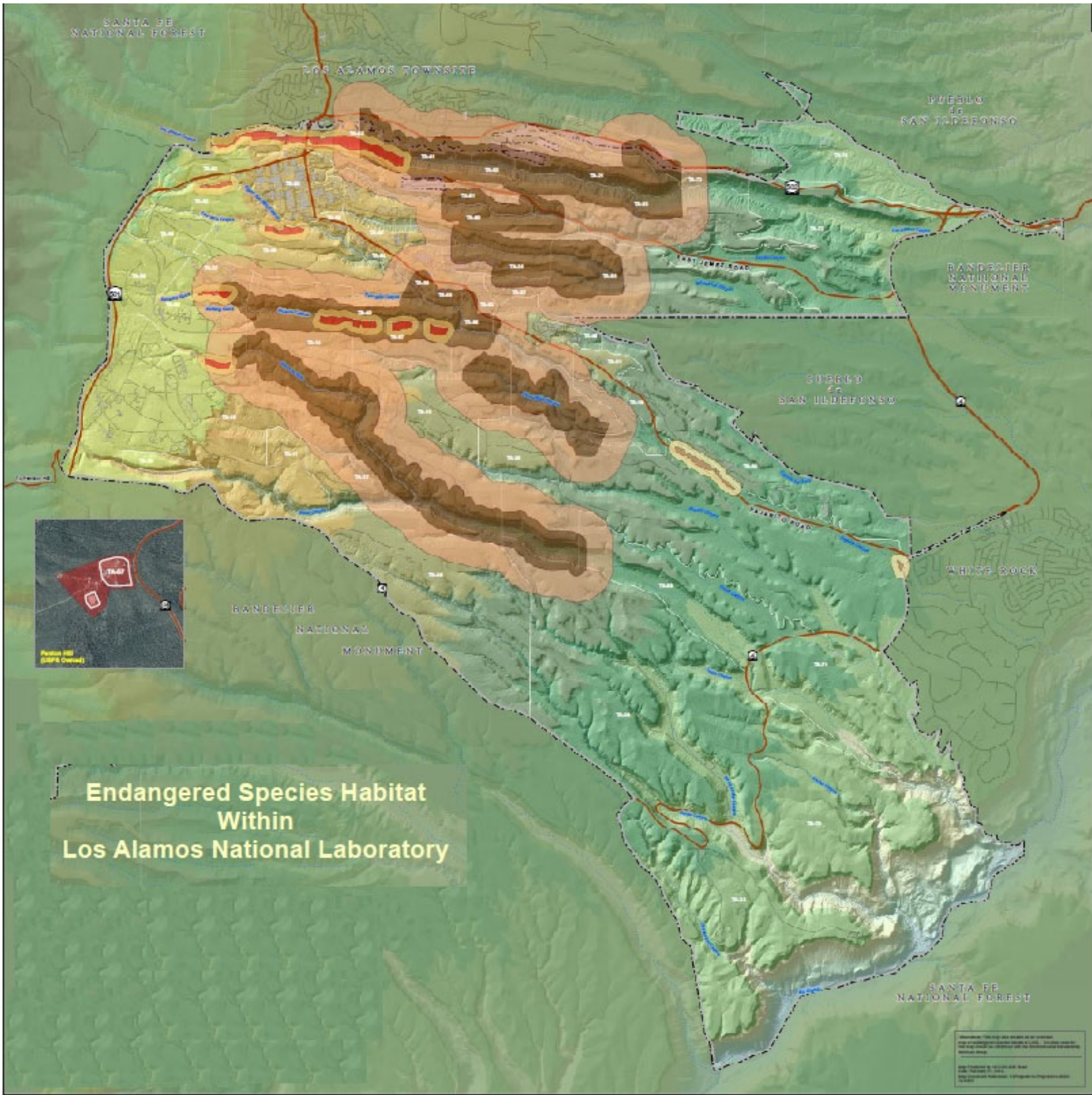
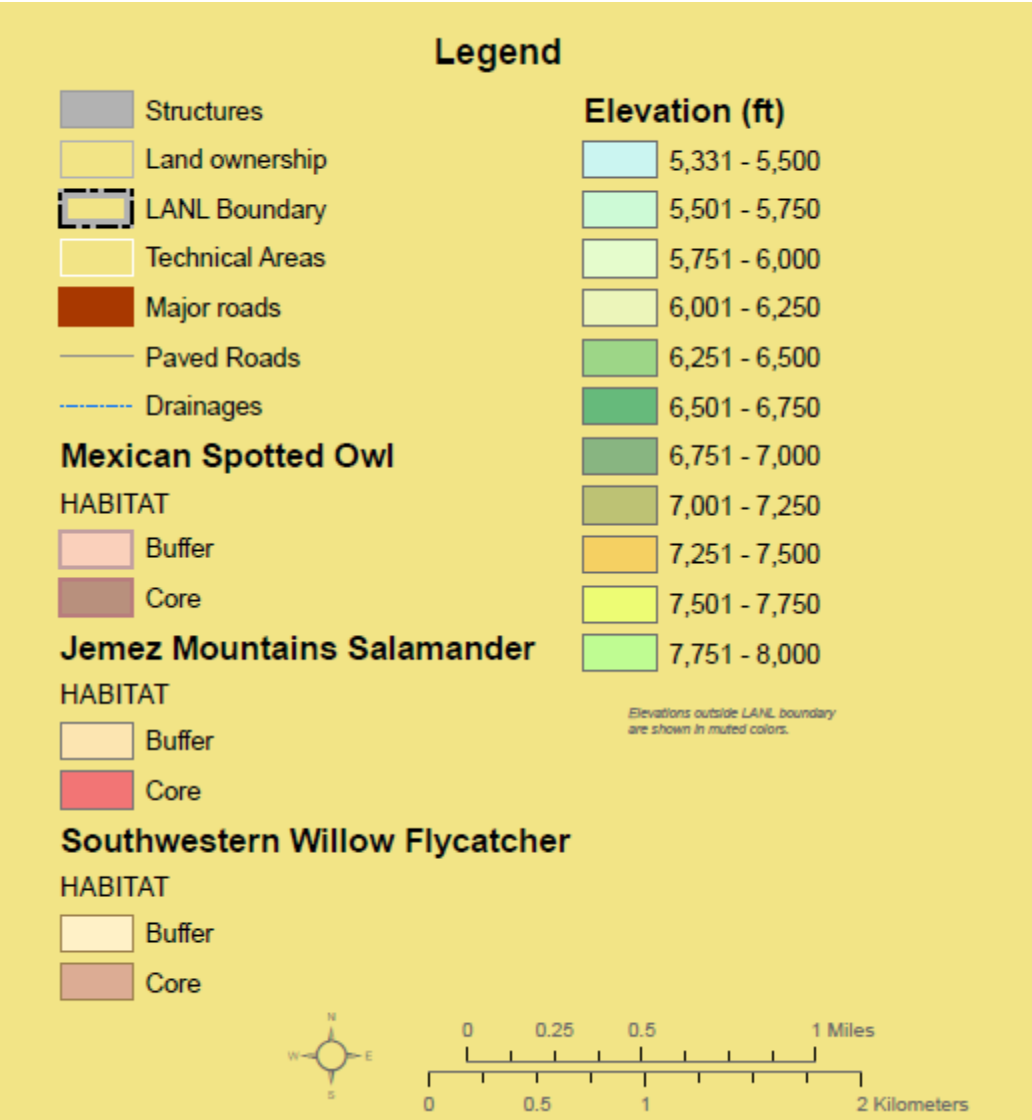


Figure 6.1-1 Endangered species habitat within LANL



6.2 Documentation Regarding Historic Properties

In December 2008 and August 2015, the LANS Cultural Resources Team (using GPS spatial data as well as conducting visual inspections), reviewed the LANL industrial sites and their associated outfalls and monitoring stations subject to the 2021 for their effects on historic properties.

TA-54 Areas G and L operations were found to pose no effect to historic properties and to be in compliance with, Section 106 of the National Historic Preservation Act.

7.0 Corrective Actions and Deadlines

7.1 SWPPP Review and Revision to Ensure Effluent Limits are Met

Discovery of any of the conditions described below will trigger a corrective action to review and revise this document as deemed necessary:

- An unauthorized release or discharge (e.g., a non-incident spill, leak, or discharge of non-storm water not authorized by this or any other NPDES permit to waters of the United States) that occurs at the facility.
- A discharge that violates a numeric effluent and/or a sector-specific requirement identified in Part 8 of the 2021 MSGP.
- Storm water control measures are found not stringent enough to control storm water discharge from the facility such that the receiving water will not meet applicable water quality standards.
- A required control measure was never installed, was installed incorrectly, or is found not in accordance with the requirements of Parts 2 and/or 8 of the 2021 MSGP, or is not properly operated or maintained.
- A visual assessment shows evidence of storm water pollution (e.g. color, odor, floating solids, settled solids, suspended solids, foam).
- An AIM-triggering event occurs.

7.2 Conditions Requiring SWPPP Review to Determine if Modifications Are Necessary

The following conditions require a review of the SWPPP and the adequacy of the control measures in place to reduce pollutants:

- Construction, or a change in design, operation, or maintenance occurs that significantly changes the nature of pollutants discharged via storm water or significantly increases the quantity of pollutants discharged.
- An AIM-triggering event occurs.

7.3 Corrective Action Deadlines

All conditions subject to corrective action will be documented in the N3B MSGP storm water database (MainConn) within 24 hours of discovery/occurrence. Where feasible, corrective actions will be implemented immediately (i.e., the day of discovery, or if identified late in the day, the day following discovery). If completion of corrective action is not feasible immediately, reasonable steps will be taken to prevent the discharge of pollutants until the needed correction is complete. In any case, the situation will be documented along with details describing how the potential impacts from the condition will be minimized (e.g., with the installation of temporary controls). This documentation will include a signed and certified statement that complies with Appendix B, Subsection 11 of the 2021 MSGP. Within 14 days of initiation of the corrective action, documentation of how the condition was resolved will be prepared. If it is not feasible to complete the necessary corrective action or AIM response within 14 days (or as otherwise specified in the 2021 MSGP), the rationale and schedule for completion of the corrective action will be included in this documentation. If an extension from EPA is necessary to complete a corrective action, documentation including justification for that extension will be prepared and maintained in MainConn.

All modifications to the facility and/or referenced procedures, including the installation or use of temporary measures, will be incorporated into this SWPPP.

8.0 SWPPP Certification

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 gathered and evaluated the information submitted.

Based on my inquiry of the person(s) who manage the system or person(s) directly responsible for information gathering, the information received is to the best of my knowledge true, accurate, and complete.

I understand and acknowledge the implications and penalties for submitting false information, including the possibility of a fine and/or imprisonment.

SIGNATURE OF CERTIFICATION:

Printed Name: Emily Day

Title: N3B Regulatory Compliance Director

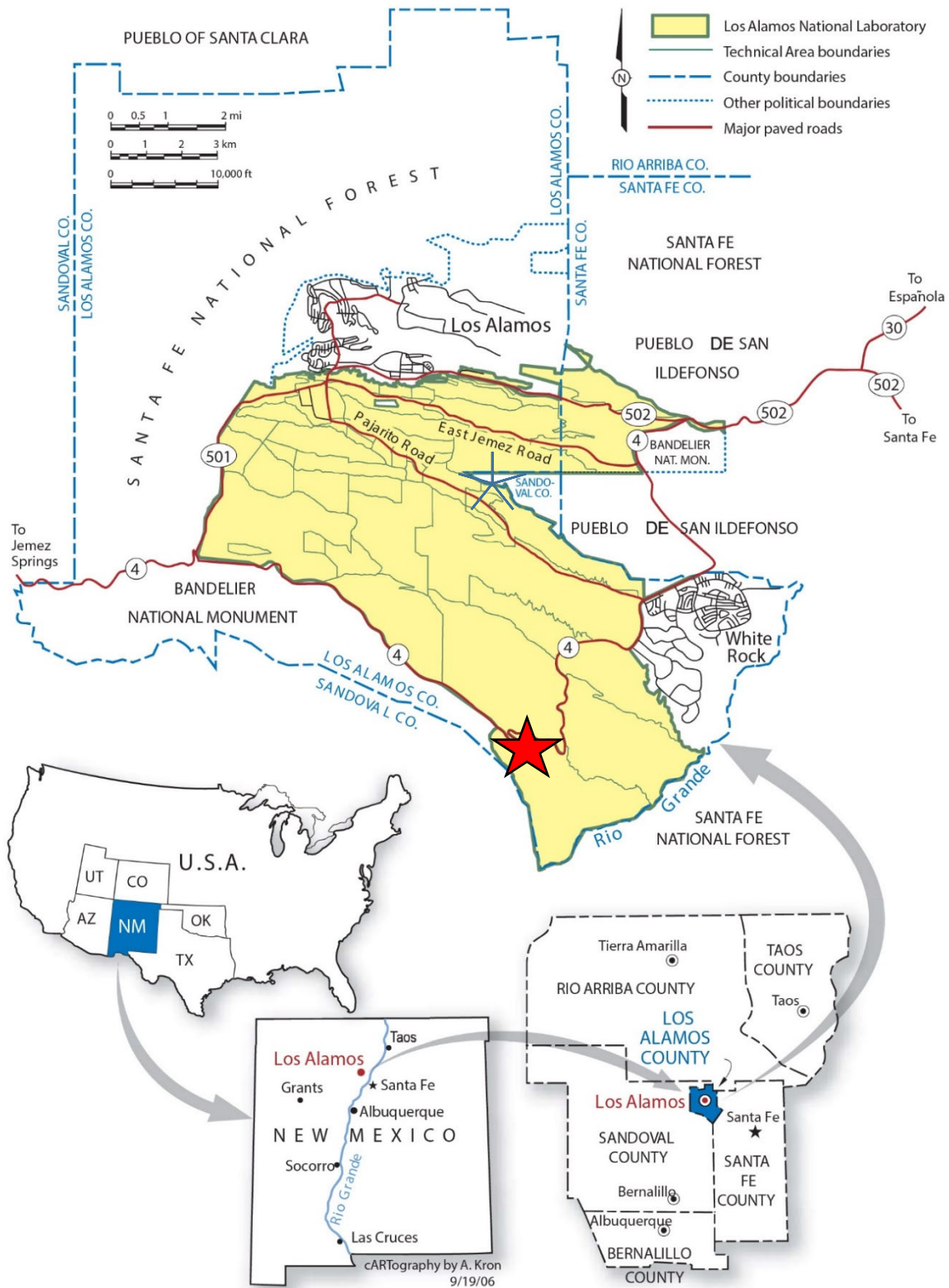
Signature: Emily Day
Digitally signed by Emily Day
Date: 2021.05.19 08:54:55
-06'00'

Date: _____

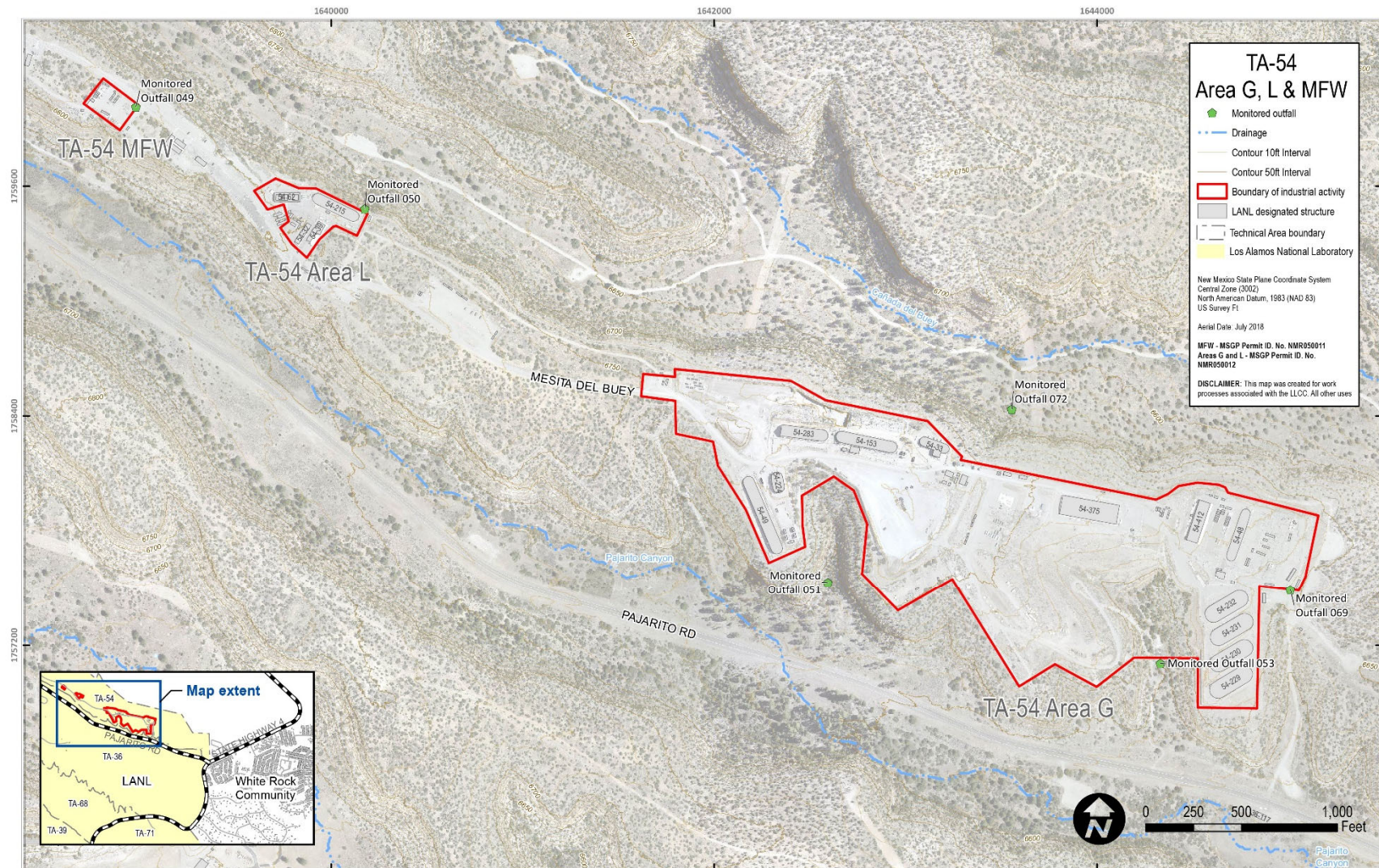
9.0 SWPPP Modifications

Modifications to this SWPPP will be made as necessary to reflect corrective actions or facility changes. Modifications to this document can be initiated by any storm water PPT member, with review provided by Regulatory Compliance and approval provided in accordance with the signatory requirements specified in the 2021 MSGP. A record of all document modifications will be tracked using the form provided in Attachment F.

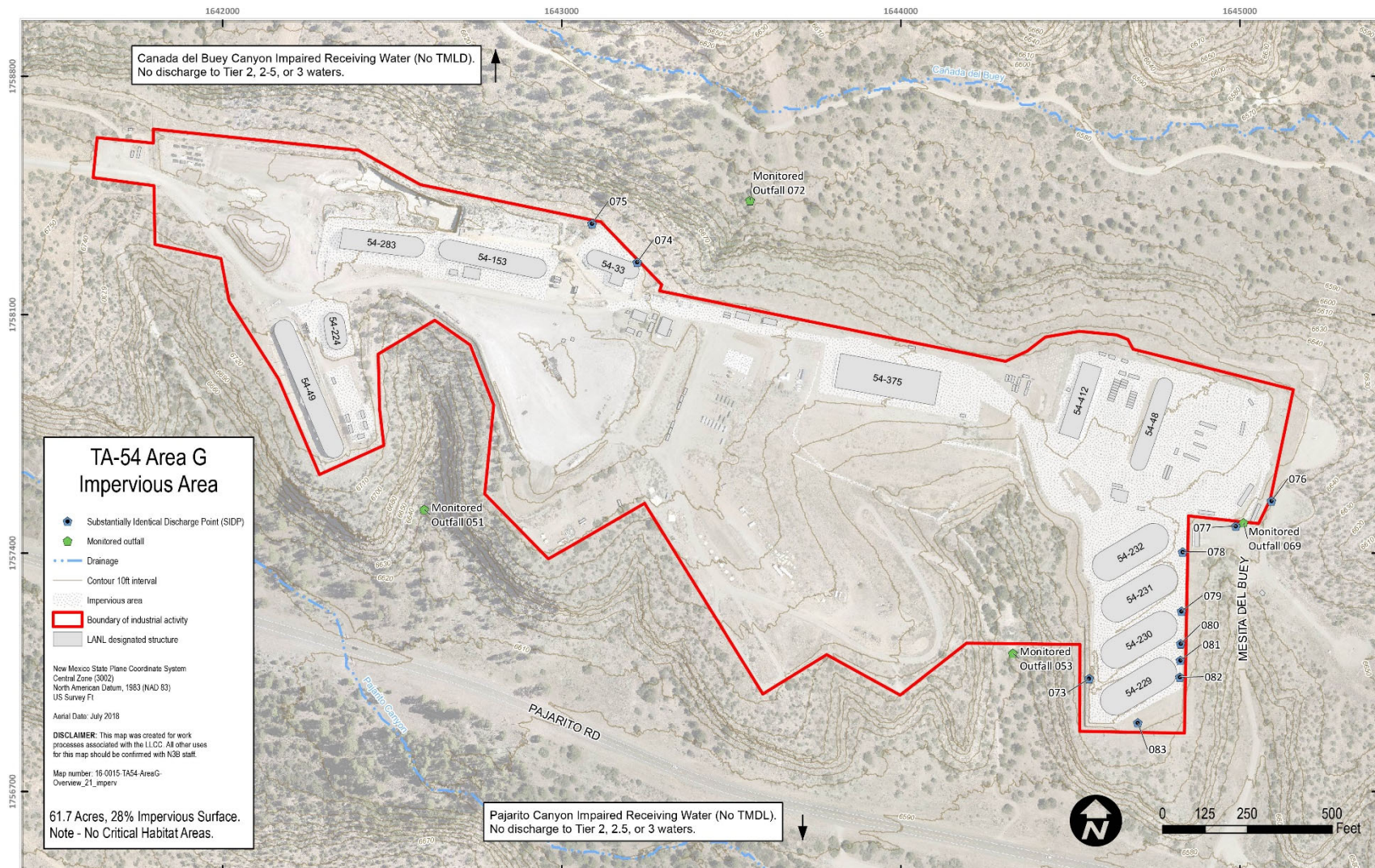
Attachment A. General Location Map



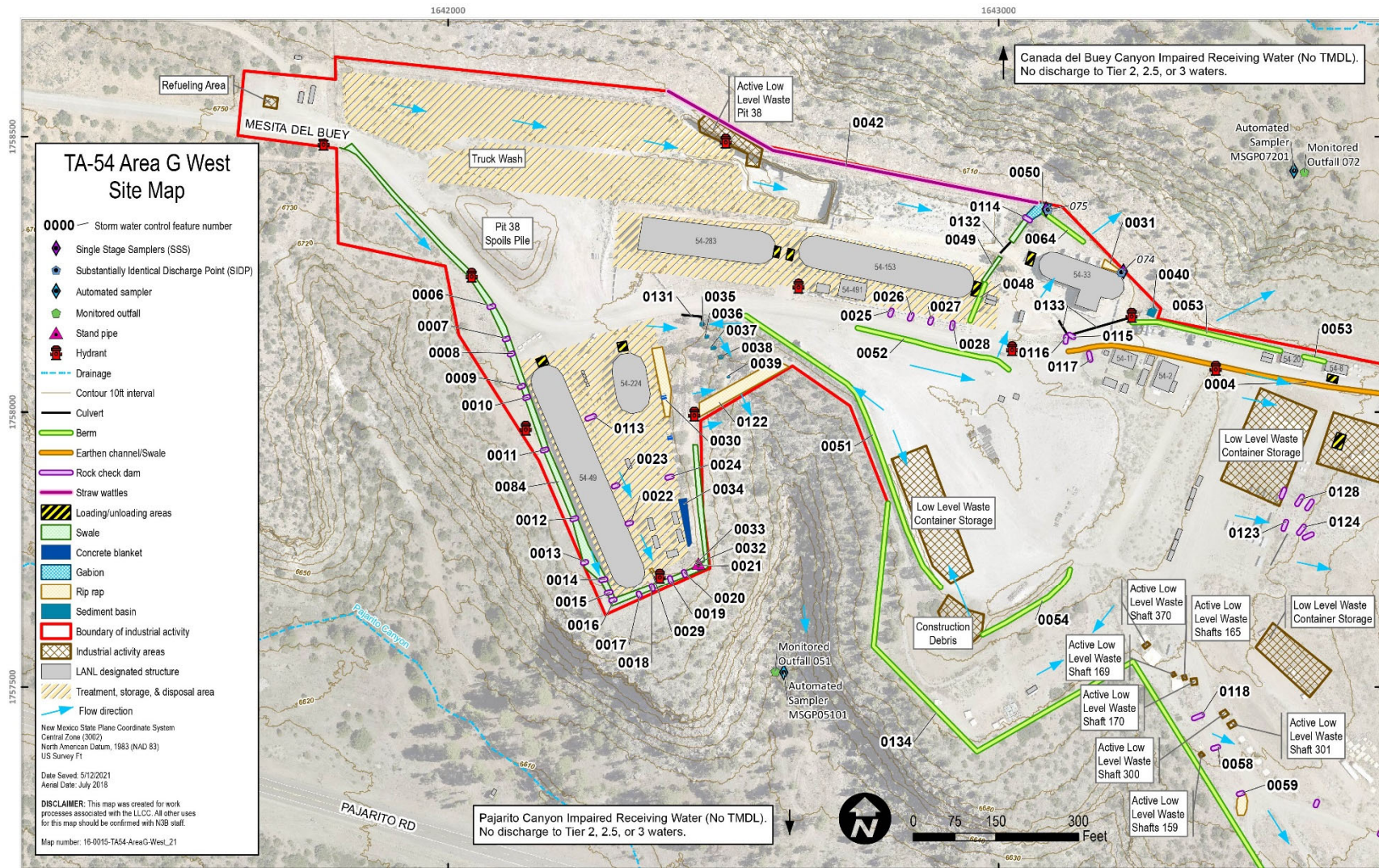
Attachment B. Site Maps



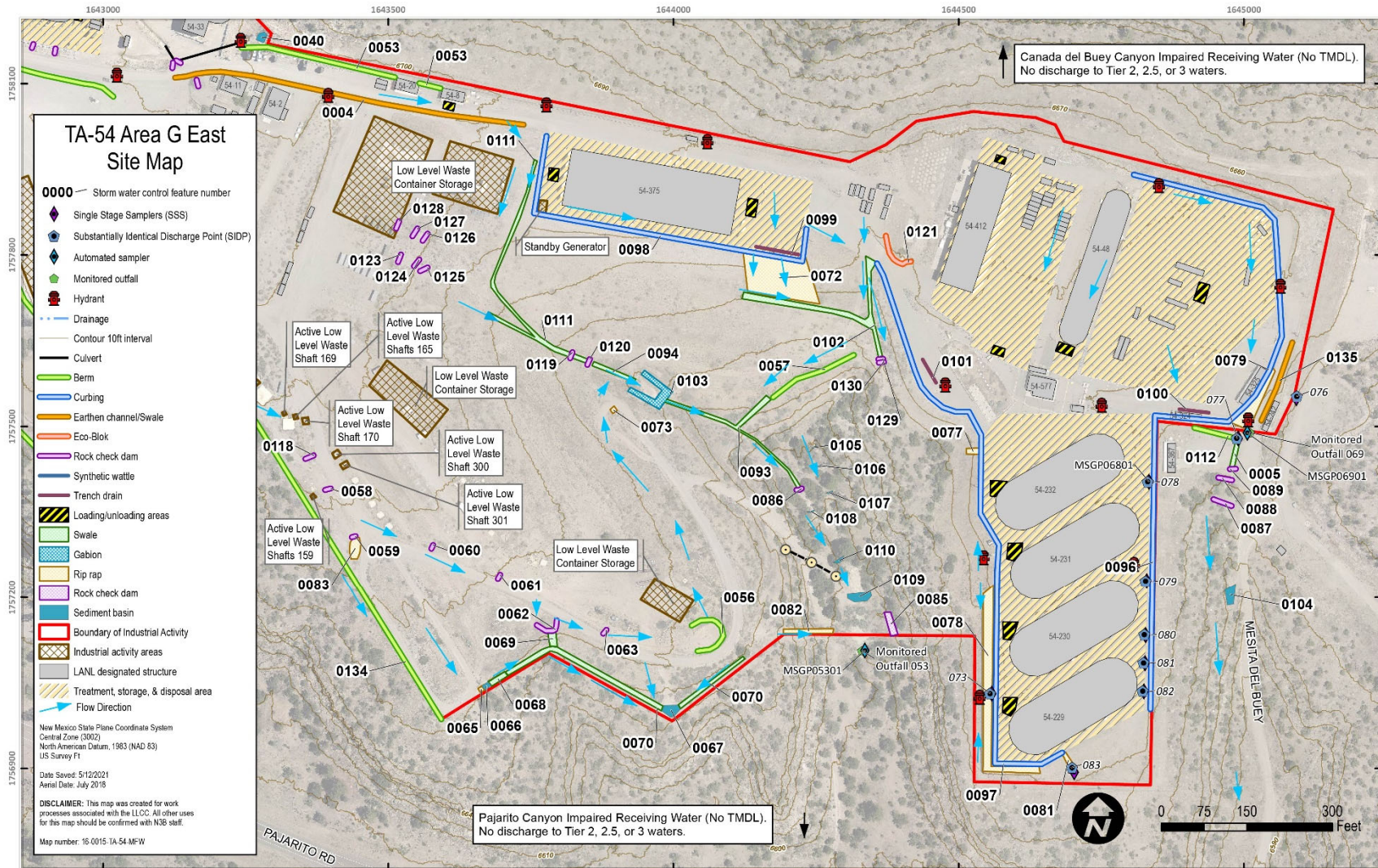
TA-54 Areas G and L
Storm Water Pollution Prevention Plan



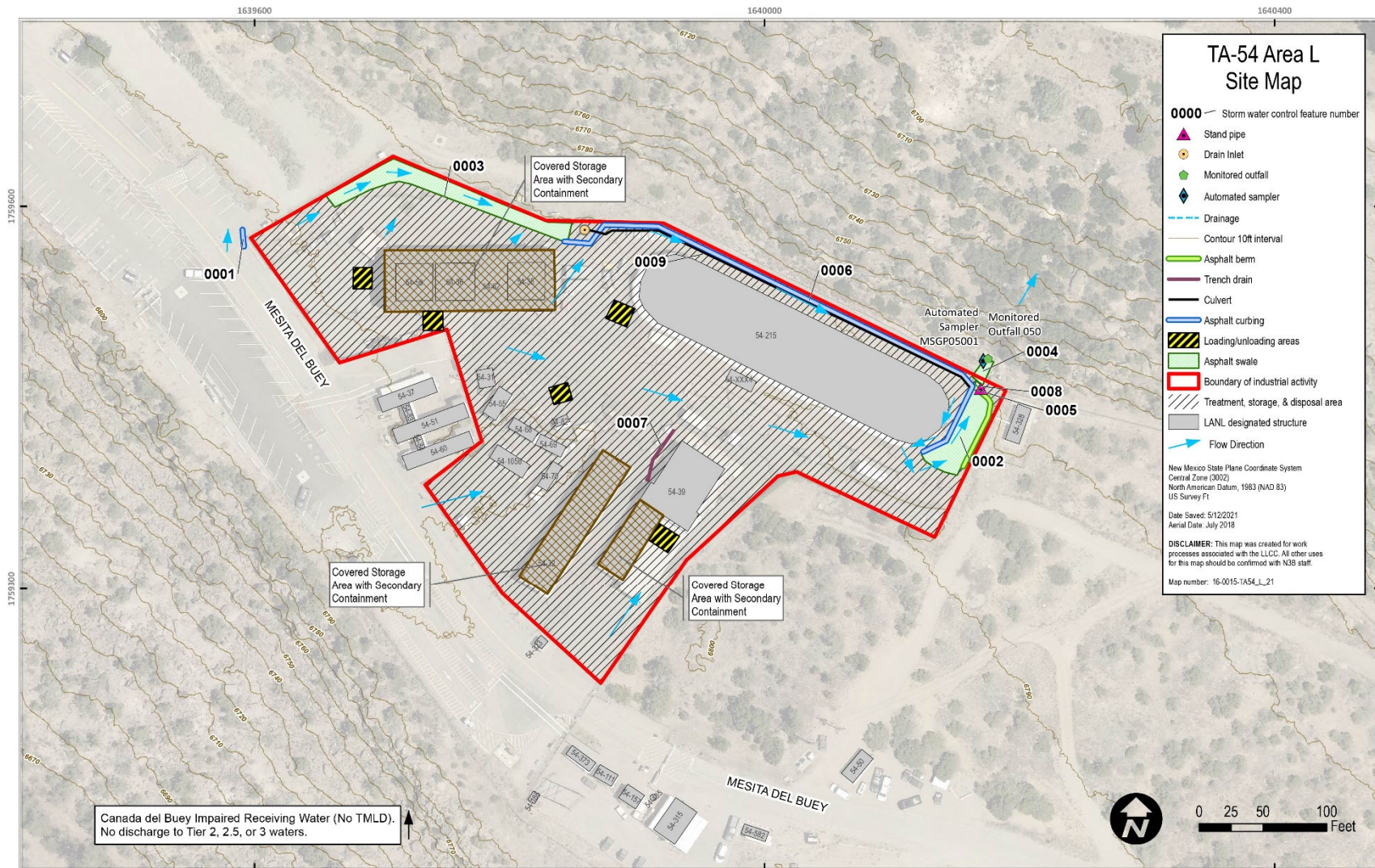
TA-54 Areas G and L Storm Water Pollution Prevention Plan



TA-54 Areas G and L Storm Water Pollution Prevention Plan



TA-54 Areas G and L Storm Water Pollution Prevention Plan



TA-54 Areas G and L Storm Water Pollution Prevention Plan



Attachment C. Relevant Procedures

Number	Title
N3B-QP-RGC-0004, R0	MSGP Storm Water Visual Inspections
N3B-AOP-TRU-3003	Material Release or Spill
N3B-SOP-RP-0005	Radiological Emergency Response
N3B-SOP-ER-5016	Multi-Sector General Permit Storm Water Corrective Actions
N3B-DOP-TRU-1304, R1	Industrial Truck and Equipment Refueling and Recharging
N3B-SOP-ER-4001, Rev 0	Processing Surface Water Samples
N3B-SOP-ER-4004, Rev 0	Installing, Setting Up and Operating Automated Storm Water Samplers
N3B-SOP-ER-5004, Rev 0	Inspecting Automated Storm Water Samplers and Retrieving Samples
N3B-AP-ER-1002, Rev 0	Environmental Remediation (ER) Field Work Requirements

**Attachment D. Routine Facility Inspection Work Statement (Blank Example)
and Reports**

Maintenance Details

Requested By: Smith, Shannon on
2/8/2021 3:33:00 PM

Target: 6/30/2021
Priority/Type: / Preventive

 **MSGP TA 54**
 **RG249.5**
 **TA-54 Area G**

Procedure: MSGP Stormwater
Industrial Routine Facility
Inspection (N3B-SOP-
ER-5016-1)

Contact: Smith, Shannon
Phone:

Last PM: 9/21/2020

Reason: Routine Facility Inspection - Draft for review of 2021 MSGP changes to
SIO/SIDP

Tasks

#	Description	Meas.	No	Yes
Inspection Preparation				
20	Perform preparatory review of previous calendar years Routine Facility Inspections and/or analytical data as available, and previous 3 calendar years' spill reports associated with facility.		<input type="checkbox"/>	<input type="checkbox"/>
30	Describe the weather at time of inspection in the task comment. Document the temperature (F°) in the "Reading" field of this line.		<input type="checkbox"/>	<input type="checkbox"/>
Within the Facility Boundary				
50	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "No", describe:		<input type="checkbox"/>	<input type="checkbox"/>
60	If "No" has a CA been previously initiated for this new discharge? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
70	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe:		<input type="checkbox"/>	<input type="checkbox"/>
80	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe:		<input type="checkbox"/>	<input type="checkbox"/>
Outfall Inspection needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)				
100	Monitored Outfall [051] Free of evidence of erosion? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
110	Monitored Outfall [051] Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
120	Monitored Outfall [051] Free of evidence of pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
130	Monitored Outfall [053] Free of evidence of erosion? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
140	Monitored Outfall [053] Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
150	Monitored Outfall [053] Free of evidence of pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
160	Monitored Outfall [069] Free of evidence of erosion? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
170	Monitored Outfall [069] Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
180	Monitored Outfall [069] Free of evidence of pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
190	Monitored Outfall [072] Free of evidence of erosion? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
200	Monitored Outfall [072] Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
210	Monitored Outfall [072] Free of evidence of pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
220	Substantially Identical Discharge Point [073] Free of evidence of erosion?		<input type="checkbox"/>	<input type="checkbox"/>
230	Substantially Identical Discharge Point [073] Flow Dissipation Devices Operating Effectively?		<input type="checkbox"/>	<input type="checkbox"/>
240	Substantially Identical Discharge Point [073] Free of evidence of pollutants in Discharges and/or Receiving Water?		<input type="checkbox"/>	<input type="checkbox"/>
250	Substantially Identical Discharge Point [074] Free of evidence of erosion?		<input type="checkbox"/>	<input type="checkbox"/>
260	Substantially Identical Discharge Point [074] Flow Dissipation Devices Operating Effectively?		<input type="checkbox"/>	<input type="checkbox"/>

270	Substantially Identical Discharge Point [074] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
280	Substantially Identical Discharge Point [075] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
290	Substantially Identical Discharge Point [075] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
300	Substantially Identical Discharge Point [075] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
310	Substantially Identical Discharge Point [076] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
320	Substantially Identical Discharge Point [076] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
330	Substantially Identical Discharge Point [076] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
340	Substantially Identical Discharge Point [077] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
350	Substantially Identical Discharge Point [077] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
360	Substantially Identical Discharge Point [077] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
370	Substantially Identical Discharge Point [078] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
380	Substantially Identical Discharge Point [078] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
390	Substantially Identical Discharge Point [078] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
400	Substantially Identical Discharge Point [079] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
410	Substantially Identical Discharge Point [079] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
420	Substantially Identical Discharge Point [079] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
430	Substantially Identical Discharge Point [080] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
440	Substantially Identical Discharge Point [080] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
450	Substantially Identical Discharge Point [080] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
460	Substantially Identical Discharge Point [081] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
470	Substantially Identical Discharge Point [081] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
480	Substantially Identical Discharge Point [081] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
490	Substantially Identical Discharge Point [082] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
500	Substantially Identical Discharge Point [082] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
510	Substantially Identical Discharge Point [082] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>
520	Substantially Identical Discharge Point [083] Free of evidence of erosion?	<input type="checkbox"/>	<input type="checkbox"/>
530	Substantially Identical Discharge Point [083] Flow Dissipation Devices Operating Effectively?	<input type="checkbox"/>	<input type="checkbox"/>
540	Substantially Identical Discharge Point [083] Free of evidence of pollutants in Discharges and/or Receiving Water?	<input type="checkbox"/>	<input type="checkbox"/>

Control Measures (identify needed maintenance and repairs, failed control measures that need replacement, recommended preventive maintenance, or a description of corrective actions in relevant task comments).

560	90 Degree Standpipe [5400110010032] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
570	90 Degree Standpipe [5400110010033] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
580	Asphalt Berm [5400103040048] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
590	Concrete Blanket [5400101080034] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
600	Concrete/Asphalt Channel/Swale [5400104020049] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>

[illegible]

and need for maintenance, repair, or replacement.

[illegible]

[illegible]

	condition and need for maintenance, repair, or replacement.		
1530	Sediment Basin [5400105020039] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1540	Sediment Basin [5400105020040] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1550	Sediment Basin [5400105020066] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1560	Sediment Basin [5400105020067] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1570	Sediment Basin [5400105020104] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1580	Sediment Basin [5400105020105] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1590	Sediment Basin [5400105020106] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1600	Sediment Basin [5400105020107] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1610	Sediment Basin [5400105020108] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1620	Sediment Basin [5400105020109] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1630	Sediment Basin [5400105020110] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1640	Straw Wattle [5400103060042] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1650	Trench Drain [5400109040099] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1660	Trench Drain [5400109040100] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1670	Trench Drain [5400109040101] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1680	Culvert [5400104040131] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1690	Culvert [5400104040132] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>
1700	Culvert [5400104040133] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.	<input type="checkbox"/>	<input type="checkbox"/>

Addressing Maintenance Items

1720	If any maintenance need was identified in this section, will the existing condition likely result in a discharge?	<input type="checkbox"/>	<input type="checkbox"/>
1730	Document reasonable steps taken to reduce the potential of a discharge (checked weather report, placed temporary bmps etc.)	<input type="checkbox"/>	<input type="checkbox"/>

Area/Activity exposed to stormwater (identify needed maintenance or a description of corrective actions in relevant task comment).

1750	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1760	Produce/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1770	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1780	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1790	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1800	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1810	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1820	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1830	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>

1840	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1850	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1860	Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1870	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1880	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
1890	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
Non-Compliance			
1910	Free of incidents of observed non-compliance not associated with any of the above? If "No" describe. (Range: 0 - 0)	<input type="checkbox"/>	<input type="checkbox"/>
Additional Controls			
1930	Are permit requirements satisfied with existing control measure(s)? If "No: describe additional control measure(s) needed. (Range: 0 - 0)	<input type="checkbox"/>	<input type="checkbox"/>

Labor Report

Completed: _____

Report: _____

Certification Statement of Authorization

"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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed 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 or imprisonment for knowing violations."

Name of Delegated Official of Permittees: _____ Z#: _____

Date: Date on file Delegated Official Signature: Signature on File

Maintenance Details

Requested By: Smith, Shannon on
2/8/2021 3:24:00 PM

Target: 7/28/2021
Priority/Type: / Preventive

 **MSGP TA 54**
 **RG249.5**
 **TA-54 Area L**

Procedure: MSGP Stormwater
Industrial Routine Facility
Inspection (N3B-SOP-
ER-5016-1)

Contact: Smith, Shannon
Phone:

Last PM: 5/11/2021

Reason: Routine Facility Inspection - Draft for review of 2021 MSGP changes to
SIO/SIDP

Tasks

#	Description	Meas.	No	Yes
Inspection Preparation				
20	Perform preparatory review of previous calendar years Routine Facility Inspections and/or analytical data as available, and previous 3 calendar years' spill reports associated with facility.		<input type="checkbox"/>	<input type="checkbox"/>
30	Describe the weather at time of inspection in the task comment. Document the temperature (F°) in the "Reading" field of this line.		<input type="checkbox"/>	<input type="checkbox"/>
Within the Facility Boundary				
50	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "No", describe:		<input type="checkbox"/>	<input type="checkbox"/>
60	If "No" has a CA been previously initiated for this new discharge? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
70	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe:		<input type="checkbox"/>	<input type="checkbox"/>
80	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe:		<input type="checkbox"/>	<input type="checkbox"/>
Outfall Inspection needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)				
100	Monitored Outfall [050] Free of evidence of erosion? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
110	Monitored Outfall [050] Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
120	Monitored Outfall [050] Free of evidence of pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		<input type="checkbox"/>	<input type="checkbox"/>
Control Measures (identify needed maintenance and repairs, failed control measures that need replacement, recommended preventive maintenance, or a description of corrective actions in relevant task comments).				
140	90 Degree Standpipe [5400210010008] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>
150	Asphalt Berm [5400203040005] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>
160	Concrete/Asphalt Channel/Swale [5400204020002] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>
170	Concrete/Asphalt Channel/Swale [5400204020003] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>
180	Concrete/Asphalt Channel/Swale [5400204020004] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>
190	Curbing [5400203090001] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>
200	Curbing [5400203090006] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>
210	Trench Drain [5400209040007] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>
220	Culvert [5400204040009] Is control measure operating effectively? If "No" describe condition and need for maintenance, repair, or replacement.		<input type="checkbox"/>	<input type="checkbox"/>

Addressing Maintenance Items

240	If any maintenance need was identified in this section, will the existing condition likely result in a discharge?	<input type="checkbox"/>	<input type="checkbox"/>
250	Document reasonable steps taken to reduce the potential of a discharge (checked weather report, placed temporary bmps etc.)	<input type="checkbox"/>	<input type="checkbox"/>

Area/Activity exposed to stormwater (identify needed maintenance or a description of corrective actions in relevant task comment).

270	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
280	Produce/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
290	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
300	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
310	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
320	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
330	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
340	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
350	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
360	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
370	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
380	Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
390	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
400	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>
410	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.	<input type="checkbox"/>	<input type="checkbox"/>

Non-Compliance

430	Free of incidents of observed non-compliance not associated with any of the above? If "No" describe. (Range: 0 - 0)	<input type="checkbox"/>	<input type="checkbox"/>
-----	---	--------------------------	--------------------------

Additional Controls

450	Are permit requirements satisfied with existing control measure(s)? If "No: describe additional control measure(s) needed. (Range: 0 - 0)	<input type="checkbox"/>	<input type="checkbox"/>
-----	---	--------------------------	--------------------------

Labor Report**Completed:** _____**Report:** _____

Certification Statement of Authorization

"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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed 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 or imprisonment for knowing violations."

Name of Delegated Official of Permittees: _____ Z#: _____

Date: Date on file Delegated Official Signature: Signature on File

Attachment E. Quarterly Visual Assessments Work Statement (Blank) and Reports

MSGP Storm Water Visual Assessment Form

INSTRUCTIONS: This form is to be used to document visual assessments of storm water for compliance with the Multi-Sector General Permit		
Location ID:	Facility ID:	Assessment Date:
Weather:	Monitored Outfall or SIO?	Active Discharge?
Was sample collected within 30 minutes of first discharge? If NO, document why:		
SAMPLE ASSESSMENT: Describe the sample characteristics in each of the following categories		
Color: Describe if necessary:	Odor: Describe if necessary:	Floating Solids: Describe if present:
Clarity:	Oil Sheen:	Suspended Solids:
ALLOW SAMPLE TO SETTLE +/- 30 MINUTES		
Settled Solids: Describe if necessary:		
GENTLY SHAKE		
Foam:	Other Notable Characteristics:	
Based on observed characteristics, indications of pollutants <input type="checkbox"/> were / <input type="checkbox"/> were not observed.		
If indications of pollutants were observed in the assessed sample, notify N3B Regulatory Compliance and evaluate the surrounding area for possible contributing factors such as staining, poor housekeeping, compromised storm water controls etc. Note any relevant observations or information here:		
CERTIFICATION: As required by Section 3.2.2 and Appendix B, Subsection 11 of the MSGP, this form must be signed and certified by a responsible corporate officer or a duly authorized representative of that person.		
“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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained 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.”		
Employee Name:		Z#:
Signature:		Date:

Attachment F. SWPPP MODIFICATIONS

Name and Number	Date of Revision	History of Revision

Attachment G. Reference Documents



Date: July 2, 2020

N3B-2020-0232

Charles Maguire
U.S. Environmental Protection Agency
Region 6 Water Division Director
1201 Elm Street, Suite 500
Dallas, TX 75270-2102

Subject: Delegation of Authorized Representatives for the Clean Water Act and National Pollutant Discharge Elimination System Individual Permit

Dear Mr. Maguire:

The purpose of this letter is to inform the U.S. Environmental Protection Agency (EPA) Region 6 of the signatory authority for operations performed at Los Alamos National Laboratory (LANL) by Newport News Nuclear BWXT-Los Alamos, LLC (N3B). This letter delegates authority of the N3B authorized representatives for certifying and signing permit applications (e.g., notices of intent and notices of termination), permit modifications, registrations, certifications, reports, and other documents required under the Clean Water Act and the associated LANL National Pollutant Discharge Elimination System (NPDES) Individual Permit (Permit No. NM0030759).

I, Glenn Morgan, the President of N3B, hereby delegate authority to the following authorized representatives to execute on behalf of N3B permit applications, permit modifications, authorizations, certifications, reports, discharge monitoring reports, or other documents required by EPA:

- Jeff Holland, Regulatory and Stakeholder Interface Program Manager (acting)
- Kim Lebak, Environmental Remediation (ER) Program Manager
- Joseph Murdock, Environment, Safety and Health Program Manager
- Michael Erickson, Resource Conservation and Recovery Act Remediation Program Director

The following positions are hereby designated as authorized representatives to sign reports, plans, inspection certifications, and notices of changed conditions as required by EPA:

NPDES Storm Water Construction General Permit

- Regulatory Compliance Director
- Regulatory Compliance Environmental Professional
- Cognizant Project Manager, Project Leader, Project Engineer, or Operations Manager for the regulated construction activity
- ER Environmental Professional

Multi-Sector General Permit (Permit No. NMR050011 and NMR050012)

- ER Individual Permit Storm Water Corrective Actions Manager
- ER Individual Permit Storm Water Field Lead
- Regulatory Compliance Director

- Regulatory Compliance Environmental Professional
- Responsible Facility Operations Director or Operations Manager for the regulated facility or activity

LANL NPDES Individual Permit (Permit No. NM0030759)

- ER Water Program Director
- ER Monitoring and Compliance Program Manager
- ER Individual Permit Storm Water Corrective Actions Manager

If you have any questions or need additional information, please contact Jennifer von Rohr at (505) 695-4365 (jennifer.vonrohr@em-la.doe.gov).

Sincerely,



Glenn Morgan
President

EL:jv

cc: (letter emailed)

Laurie King, EPA Region 6
Chris Catechis, NMED-DOE-OB
Steve Yanicak, NMED-DOE-OB
M. Lee Bishop, EM-LA
Arturo Duran, EM-LA
Stephen Hoffman, EM-LA
Kirk D. Lachman, EM-LA
David Nickless, EM-LA
Cheryl Rodriguez, EM-LA
Ben Underwood, EM-LA
William Alexander, N3B
Donald Carlson, N3B
Emily Day, N3B
Michael Erickson, N3B
Mary Erwin, N3B
Thomas Harrison, N3B
Debby Holgerson, N3B
Jeff Holland, N3B
Kim Lebak, N3B
Joseph Legare, N3B
Dana Lindsay, N3B
Frazer Lockhart, N3B
Elizabeth Lowes, N3B
Pamela Maestas, N3B

Christian Maupin, N3B
Jeremiah McLaughlin, N3B
Jason Moore, N3B
Glenn Morgan, N3B
Joseph Murdock, N3B
Joseph Noll, N3B
Gerald O'Leary III, N3B
William O'Neill, N3B
Bruce Robinson, N3B
Troy Thompson, N3B
Steve Veenis, N3B
Tashia Vigil, N3B
Jennifer von Rohr, N3B
Amanda White, N3B
emla.docs@em.doe.gov
n3brecords@em-la.doe.gov
PRS Website

Pamela T. Maestas

From: Maguire, Charles <maguire.charles@epa.gov>
Sent: Thursday, July 2, 2020 11:53 AM
To: Pamela T. Maestas
Cc: Regulatory Documentation; Jahan, Nasim; Jennifer Von Rohr; Emily M. Day; Larsen, Brent; Martinez, Maria; Hayes, Mark
Subject: RE: Submittal to EPA on 7/2/2020 of CWA and NPDES Delegated Authorities

Receipt acknowledged and I will forward to my division staff.

From: Pamela T. Maestas <pamela.maestas@em-la.doe.gov>
Sent: Thursday, July 2, 2020 11:25 AM
To: Maguire, Charles <maguire.charles@epa.gov>
Cc: Regulatory Documentation <RegDocs@EM-LA.DOE.GOV>; Jahan, Nasim <Jahan.Nasim@epa.gov>; Jennifer Von Rohr <Jennifer.VonRohr@EM-LA.DOE.GOV>; Emily M. Day <Emily.Day@em-la.doe.gov>
Subject: Submittal to EPA on 7/2/2020 of CWA and NPDES Delegated Authorities

Mr. Maguire,

Attached for submittal is a pdf of the following:

- Delegation of Authorized Representatives for the Clean Water Act and National Pollutant Discharge Elimination System Individual Permit (N3B-2020-0232)

Please acknowledge receipt of this submittal by responding to this email.

Let me know if you have any questions.

Thank you.

Pamela T. Maestas

Regulatory Documentation Manager

Newport News Nuclear BWXT-Los Alamos, LLC

c. 505-927-7882

regdocs@em-la.doe.gov



1200 Trinity Drive, Suite 150
Los Alamos, NM 87544