NPDES PERMIT NO. NM0030759
RESPONSE TO COMMENTS

RECEIVED ON THE SUBJECT DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IN ACCORDANCE WITH REGULATIONS LISTED AT 40 CFR 124.17

APPLICANT:	Newport News Nuclear BWXT-Los Alamos, LLC 1200 Trinity Drive, Suite 150 Los Alamos, New Mexico 87544 U.S. Department of Energy Office of Environmental Management Los Alamos Field Office P.O. Box 1663 Los Alamos, New Mexico 87545-1663
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PERMIT ACTION:	Final permit modification decision and response to comments received on the draft NPDES permit modification publicly noticed on November 28, 2019.
DATE PREPARED:	June 24, 2022

Unless otherwise stated, citations to 40CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of June 24, 2022.

SIGNIFICANT CHANGES FROM DRAFT PERMIT

There are significant changes from the draft permit publicly noticed on November 28, 2019, and also clarifications, modification on numberings/headings and correction of typographical errors were made in the Final Permit. All changes and their rationale for changes can be found in the following response to conditions of certification or response to comments.

State Certification

State certification letter from Ms. Shelly Lemon (NMED) to Mr. Charles Maguire (EPA), dated November 30, 2020, conditionally certified that the discharge will comply with the applicable provisions of the Clean Water Act and with appropriate requirements of State law. NMED also included comments in the certification letter. On December 30, 2020, the U.S. Department of Energy National Nuclear Security Administration and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) submitted a petition for review of Conditions #1 thru #10 of the original State Certification to Secretary of the Environment Department. NMED issued this modified certification on February 22, 2022, as a result of the petition for review and resulting Settlement Agreement between NMED and DOE/N3B.

The conditions of certification are necessary to ensure that discharges allowed under the NPDES permit will comply with the applicable provisions of the Federal CWA Sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law, including the New Mexico Water Quality Act, the State's water quality standards codified in 20.6.4 NMAC Standards for Interstate and Intrastate Surface Waters and 20.6.2 NMAC Ground and Surface Water Protection, the State's antidegradation policy and implementation plan, and the statewide water quality management plan.

The conditions include appendices to assist in organizing information related to the conditions included below. The appendices are as follows:

- Appendix 1: Soil Screening Flow Chart
- Appendix 2: Proposed Site deletions to the draft permit
- Appendix 3: Sites conditioned for addition to the draft permit
- Appendix 4: Target Action Levels (TALs) conditioned for addition to the draft permit
- Appendix 5: Sediment Decision Tree

ACRONYMS AND ABBREVIATIONS

AGA	adjusted gross alpha
AOC	area of concern
ATAL	average target action level
AWQC	ambient water quality criteria
BLM	biotic ligand model
BMP	best management practice
BTV	background threshold value
BV	background value
COC	certificate of completion
IP	Individual Permit (NM0030759)
LANL	Los Alamos National Laboratory *Note: LANL may also be used to collectively refer to Newport News Nuclear BWXT-Los Alamos, LLC and U.S. Department of Energy as Permittees
MSGP	Multi-Sector General Permit
MTAL	maximum target action level
NFA	no further action
NM	New Mexico
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NPDES	National Pollutant Discharge Elimination System
NMWQS	New Mexico Water Quality Standard
POC	pollutants of concern
RCRA	Resource Conservation and Recovery Act
SAP	sampling and analysis plan
SDPPP	Site Discharge Pollution Prevention Plan
SEP	supplemental environmental project
SIP	sampling implementation plan
SMA	site monitoring area
SSC	suspended sediment concentration
SSD	Site-Specific Demonstration
SSL	soil screening level
SSWQC	site-specific water quality criteria
SVOC	semivolatile organic compound
SWMU	solid waste management unit
SWPPP	Storm Water Pollution Prevention Plan
TAL	target action level
UTL	upper tolerance limit
WAD	weak acid dissociable
WET	whole effluent toxicity
WQC	water-quality criteria
WQS	water quality standard(s)

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Conditions of Certification from New Mexico Environment Department

Condition #1 – Annual Sampling Implementation Plan (SIP): The Permittees shall consult with the New Mexico Environment Department (NMED) prior to sending the Sampling Implementation Plan (SIP) updates to EPA for review. If a CWA §303(d)/§305(b) Integrated List of Assessed Surface Waters listed impairment is identified as being a Site related pollutant, then Permittees shall add it to the SIP. The initial SIP shall be publicly noticed for 30 days. EPA should add an approval process for proposed SIP changes after initial SIP implementation.

Background for Condition #1: The Statewide WQMPCPP states:
NMED will assure through appropriate review and communication with the permitting authority that permit requirements and effluent limitations are compatible with appropriate state law, protect water quality standards, and implement the WQMP-CPP.

In order to be appropriately protective of state Water Quality Standards, and due to the scope and complexity of sites and site information related to this permit, a static list of monitoring locations and parameters should not be used. The SIP must reflect a dynamic, adaptive process to update sampling suites based on new information with the approval of EPA and NMED. The Permittees have also requested a mechanism for feedback on determinations where Pollutants of Concern are no longer an issue at a site.

The current draft permit seems to allow for the Permittees to modify Target Action Levels (TALs) and Background Threshold Values (BTVs) values during the term of the permit (through the SIP process) without approval from EPA or NMED. TALs should be and are based (as a conservative measure) on water quality standards, and BTVs should be set to a static number and updated with each permit term as appropriate. The only number that could potentially change is the composite BTV that is derived for each site during the annual SIP process. That is based on the ratio of pervious to impervious area.

EPA Response: EPA added the SIP process to the final permit in order to comply with conditions of certification as required by 40 CFR § 124.55(a)(2).

Initial SIP Process

a. The Permittees shall prepare a draft SIP and provide it to NMED for review no later than October 15, 2022. The Permittees shall allow NMED a period of at least 30-days to review the draft SIP and provide comment.

b. Permittees shall provide a written response to any comments from NMED on the draft SIP within 30-days of receipt of the comments.

c. The Permittees shall provide public notice of the opportunity for public review and comment on the draft SIP, including any comments received on the SIP from NMED and the Permittees response to those comments. The public comment period shall be for at least 30-days, with consideration of a longer timeframe as needed. The public can also review and comment on the SIP through the procedures established for Public Meetings under in Part II.3.(c).

d. The Permittees shall modify the draft SIP as appropriate in response to public comments.

e. Within 45-days after the close of the comment period, but no later than March 31, 2023, the Permittees shall submit the draft SIP (along with the Permittees' responses to any public comments received) to EPA for approval with a copy provided to NMED.

f. EPA will review the proposed SIP, require revisions as necessary, and approve via a minor permit modification (40CFR 122.63(b) and/or (e)(2)) to incorporate the first annual SIP requirements applicable for a specified monitoring period. Unless disapproved, permittee may begin implementation of proposed SIP on a provisional basis 30-days after submittal to EPA and update as necessary once the final SIP is approved.

Annual Updates to the SIP

a. No later than January 15th of subsequent years, the Permittees shall send draft SIP updates for the prior year to NMED for 30-day review and comment.

b. Permittee shall revise proposed SIP updates based on NMED's input and submit to EPA for review and approval no later than March 31st. If no comments received from NMED by the end of the specified review period, the Permittees may submit the SIP to EPA for approval without NMED input.

c. EPA will review the proposed SIP, require revisions as necessary, and approve the annual SIP requirements resulting from any modifications to the initial SIP for a specified monitoring period via a minor permit modification. Unless disapproved, permittee may begin implementation of proposed SIP on a provisional basis 30-days after submittal to EPA and update as necessary once the final SIP is approved.

Note: Each annual SIP will cover the period from January 1st – December 31st, except the last year covering the expiration date of the permit which will not have an end date to accommodate any period of administratively continuance, should the permit have not been reissued prior to expiration date. Updates to the SIP may be discussed during the annual permittee public meetings required by Part II.3.c.

Condition #2 – Monitoring Requirements: TALs shall be added to the permit based on additional or new information. For example, if the receiving waterbody is impaired for a specific constituent, and that constituent was a material historically managed at the Site, the constituent shall be monitored in stormwater. In addition, consistent with Part I.C.2 of the permit (Site Specific Demonstration), if a constituent is present in soils above screening levels, it shall be monitored in stormwater. Specific updates on various TALs are required, as detailed below.

1. Consistent with the updated hardness data submitted with the Permittees' comments, the TAL table in Appendix C of the draft permit must be adjusted slightly to the following:

Major Canyon	Dissolved Hardness (mg/L)	Total Recoverable Aluminum (ug/L)	Dissolved Cadmium (ug/L)	Dissolved Chromium III (ug/L)	Dissolved Copper (ug/L)	Dissolved Lead (ug/L)	Dissolved Nickel (ug/L)	Dissolved Silver (ug/L)	Dissolved Zinc (ug/L)
Ancho	37.2	883	0.711	253	5.29	21.7	203	0.587	65.1
Chaquehui	26.9	566	0.539	194	3.90	15.1	154	0.336	48.5
Los Alamos/ Pueblo	33.5	765	0.650	233	4.80	19.3	186	0.490	59.2
Mortandad	29.5	643	0.583	210	4.25	16.7	167	0.394	52.7
Pajarito	30.2	664	0.595	214	4.35	17.2	170	0.410	53.9
Sandia	43.0	1077	0.804	285	6.07	25.5	229	0.753	74.3
Water/ Cañon de Valle	47.7	1241	0.879	311	6.69	28.6	250	0.900	81.6

2. In the proposed permit, in Part I.B (Applicable Target Action Levels), the following footnote shall be added to the TAL table for monitoring requirements to specify sample collection procedures for total recoverable aluminum:

The acute and chronic aquatic life criteria for aluminum are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department. If stream turbidity is greater than 30 NTUs, the sample must be filtered using a 10-µm filter prior to acidification. If there are equipment problems prohibiting the measurement of turbidity in the field and the water has any cloudiness as determined by visual inspection, then the total recoverable aluminum sample should be filtered using a 10-µm filter.

Background for Condition #2: In the permitting regulations at 40 C.F.R. 122.41(h) it states:

Duty to provide information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

An objective of New Mexico's water quality standards:

…is to establish water quality standards that consist of the designated use or uses of surface waters of the state, the water quality criteria necessary to protect the use or uses and an antidegradation policy. 20.6.4.6(A) NMAC.

New Mexico's Antidegradation Policy and Implementation Procedure for Regulated Activities is Appendix A of the Statewide WQMPCPP, which was approved most recently by EPA on 10-23-2020. The Antidegradation Policy applies Tier 1 protections to all waters. Tier 1 defines the minimum level of protection for all waters and prohibits further degradation of existing water quality where a pollutant of concern does not meet or meets but water quality is not better than applicable water quality criteria.

20.6.4.900(I) NMAC states:

…Hardness-dependent acute and chronic aquatic life criteria for metals… are expressed as a function of dissolved hardness (as mg CaCO3/L).

20.6.4.900(J) NMAC states:

For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department.

The permittees commented that the draft permit should include a process for utilization of soil data, which is included in Appendix 1 to this certification. The draft permit indicates that sampler locations should be updated based on the annual SIP process but is silent on adding TALs where appropriate based on that same soil information. This is an observation also noted by the Buckman Direct Diversion in their comments to NMED.

As clean up campaigns continue to progress and more characterization soil data is available, the data and information must be used to update sampling requirements and locational information for stormwater samplers using an adaptive management approach rather than waiting another five years or more for the permit to be renewed.

EPA Response: EPA updated the TAL table in Appendix B and added the Total Recoverable Aluminum footnote in order to comply with conditions of certification as required by 40 CFR § 124.55(a)(2).

Condition #3 – Site-Related Impairments: Under Part I.B.1.c (Collection of Partial Samples) of the permit, NMED requires that the priority list for each Site include pollutants identified on the CWA §303(d)/§305(b) Integrated List of Assessed Surface Waters that are determined to be Site-related. The table below details the 2020-2022 Integrated List findings for each waterbody located within LANL.

The Permittees are required to monitor for applicable pollutants at Sites discharging to impaired and water quality-limited waters (see table below) if the pollutants are determined to be Site-related, as demonstrated under Part I.C.2 of the permit (Site Specific Demonstration). The Permittees shall document the impaired pollutants listed below on the priority list for each Site in the SIP and shall prioritize these pollutants for analysis in the event a partial sample is collected. Additionally, if there are insufficient data to determine if a pollutant causing an impairment is Site-related or if there are pollutants of concern (POCs) added during the SIP process that were not collected during the previous permit term, the Permittees shall prioritize analysis of the pollutants causing impairments and the added POCs in the event a partial sample is collected.

Canyon Name	**Waterbody Segment**	**2020-2022 Impairments (CWA §303d)**
Acid	20.6.4.98	Pueblo to headwaters: adjusted gross alpha, polychlorinated biphenyls (PCBs), dissolved copper, total recoverable aluminum
Ancho	20.6.4.128	• North Fork to headwaters: PCBs • Rio Grande to Ancho Springs: PCBs, total mercury • Above Ancho Springs to North Fork Ancho: PCBs, total mercury

Arroyo de la Delfe	20.6.4.128	Above Kieling Spring to headwaters: dissolved copper, PCBs, total recoverable aluminum, adjusted gross alpha Pajarito Canyon to Kieling Spring: dissolved copper, PCBs, total recoverable aluminum, adjusted gross alpha
Bayo	20.6.4.98	San Ildefonso boundary to headwaters: Not assessed.
Canada del Buey	20.6.4.128	within LANL: PCBs, adjusted gross alpha
Canon de Valle	20.6.4.126 (perennial), 20.6.4.128, 20.6.4.98	• LANL gage E256 to Burning Ground Spring: PCBs • below LANL gage E256: adjusted gross alpha • upper LANL boundary to headwaters: PCBs, adjusted gross alpha
Chaquehui	20.6.4.128	Within LANL: PCBs
DP	20.6.4.128	• 100m dwnstm grade ctrl to 400m upstm grade ctrl: total recoverable aluminum, dissolved copper, adjusted gross alpha, PCBs • 400m upstream of grade control to upper LANL bnd: total recoverable aluminum, dissolved copper, adjusted gross alpha, PCBs • Los Alamos Canyon to 100m dwnstm of grade ctrl: total recoverable aluminum, adjusted gross alpha, PCBs
Fence	20.6.4.128	Not assessed.
Graduation	20.6.4.98	Pueblo Canyon to headwaters: PCBs, dissolved copper
Los Alamos	20.6.4.128	• DP to Upper LANL boundary: PCBs, total recoverable cyanide, total recoverable selenium, adjusted gross alpha, total mercury • NM-4 to DP Canyon: adjusted gross alpha, PCBs, total recoverable aluminum, total recoverable cyanide, radium 226+228, total recoverable selenium
Mortandad	20.6.4.128	within LANL: adjusted gross alpha, PCBs, dissolved copper
North Fork Ancho	20.6.4.128	Ancho Canyon to headwaters: adjusted gross alpha, PCBs
Pajarito	20.6.4.128, 20.6.4.98 (upper LANL bnd to headwaters)	• 500m ds of and to Arroyo de la Delfe: dissolved copper, adjusted gross alpha, PCBs, dissolved silver • Above Homestead Spring to LANL boundary: total recoverable aluminum, adjusted gross alpha • Lower LANL bnd to Twomile Canyon: total recoverable aluminum, dissolved copper, total recoverable cyanide, adjusted gross alpha, PCBs • Starmers Gulch to Homestead Spring: total recoverable aluminum, adjusted gross alpha • Twomile Cyn to 500m ds of A. de La Delfe: dissolved copper, adjusted gross alpha, PCBs, dissolved silver • Upper LANL bnd to headwaters: total recoverable aluminum, total recoverable cyanide, adjusted gross alpha, total mercury, PCBs
Potrillo	20.6.4.128	above Water Canyon: adjusted gross alpha
Pratt	20.6.4.128	Not assessed.
Pueblo	20.6.4.98	• Acid Canyon to headwaters: PCBs, total recoverable aluminum, adjusted gross alpha, dissolved copper

		• Los Alamos Canyon to Los Alamos WWTP: adjusted gross alpha, PCBs, total recoverable aluminum, total recoverable selenium • Los Alamos WWTP to Acid Canyon: PCBs, adjusted gross alpha
Rendija	20.6.4.98	Guaje Canyon to headwaters: Not assessed
Sandia	20.6.4.126 (Sigma to Outfall 001), 20.6.4.128	• Sigma Canyon to NPDES Outfall 001: total recoverable aluminum, PCBs, dissolved copper, temperature • within LANL below Sigma: PCBs, total recoverable aluminum, adjusted gross alpha, total mercury, dissolved copper
South Fork Acid	20.6.4.98	Acid Canyon to headwaters: adjusted gross alpha, PCBs, dissolved copper
Ten-Site	20.6.4.128	Mortandad to headwaters: adjusted gross alpha, PCBs.
Three Mile	20.6.4.128	Pajarito to headwaters: adjusted gross alpha
Two Mile	20.6.4.128	Pajarito to headwaters: adjusted gross alpha, PCBs, total recoverable aluminum, dissolved copper
Walnut	20.6.4.98	Pueblo Canyon to headwaters: PCBs, dissolved copper
Water	20.6.4.126 (Area-A Canyon to SR 501), 20.6.4.128, 20.6.4.98 (Upper LANL bnd to headwaters)	• Area-A Canyon to NM 501: fully supporting • Within LANL below Area-A Canyon: total recoverable aluminum, PCBs, adjusted gross alpha, total mercury • Within LANL above NM 501: not assessed • Upper LANL bnd to headwaters: total recoverable aluminum, total mercury

Background for Condition #3: NPDES regulations at 40 C.F.R. 124.53(e) require that state certification shall include conditions which are necessary to assure compliance with the applicable provisions of CWA and appropriate requirements of state law.

An objective of New Mexico's water quality standards:
…is to establish water quality standards that consist of the designated use or uses of surface waters of the state, the water quality criteria necessary to protect the use or uses and an antidegradation policy. 20.6.4.6(A) NMAC.

New Mexico's Antidegradation Policy and Implementation Procedure for Regulated Activities is Appendix A of the Statewide WQMPCPP. The Antidegradation Policy applies Tier 1 protections to all waters. Tier 1 protections include policies and procedures that prohibit degradation that results in the loss of an existing use, or violation of water quality criteria, and prohibit degradation of existing water quality where pollutants of concern do not meet applicable water quality standards (i.e., 303(d) listed pollutants). Tier 1 defines the minimum level of protection for all waters and prohibits further degradation of existing water quality where a pollutant of concern does not meet or meets but water quality is not better than applicable water quality criteria.

The Antidegradation Policy also states that regulated entities may be required to collect data pertaining to impairments (i.e., pollutants of concern). Pollutants of concern are those pollutants reasonably expected to be present in a discharge and may adversely affect the water quality of a receiving water body.

Section V (Effluent Limitations) of the Statewide WQMPCPP states that Water Quality Based Effluent Limitations (WQBELs) may be developed on a case-by-case basis to protect water quality and may be expressed as chemical-specific, narrative, or whole effluent toxicity requirements. Monitoring the receiving waterbody for a pollutant that may contribute to an existing impairment leads to better stormwater management and cleanup decisions, which will protect water quality.

EPA Response: EPA added the priority for samples in Part I.B.1.c, Collection of partial samples for each Canyon in order to comply with conditions of certification as required by 40 CFR § 124.55(a)(2). On May 11, 2022, NMED sent EPA an updated impaired table to reflect the 2022-2024 EPA Approved 2022-2024 Integrated Report (April 26, 2022).

Condition #4 – Additional Target Action Levels (TALs): Due to observed levels of constituents in soil data and their potential use during historical industrial activities and associated exposure to precipitation, NMED recommends EPA evaluate additional monitoring requirements in the final permit if the constituents are determined to be Site-related pollutants of concern according to the forthcoming Site Specific Demonstration, as demonstrated under Part I.C.2 of the permit and noted in the Soil Screening Flow Chart (Appendix 1).

NMED requires additional TALs for Site-related constituents be added to the permit (see Appendix 4). EPA may set additional TALs or add constituents for evaluation through the SIP process described in Condition #1.

Background for Condition #4: The Statewide WQMPCPP states:

NMED will assure through appropriate review and communication with the permitting authority that permit requirements and effluent limitations are compatible with appropriate state law, protect water quality standards, and implement the WQMP-CPP.

NPDES regulations at 40 C.F.R. 122.44(d)(1)(i) require that permit "limitations must control all pollutants or pollutant parameters...which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

According to 40 C.F.R. 122.44(d)(1)(vi), if there are known constituents being discharged from a facility that have the reasonable potential to cause or contribute to a narrative water quality standard violation where a State has not developed accompanying numeric water quality criteria, EPA must develop effluent limits for those pollutants.

NPDES regulations at 40 C.F.R. 122.44(d)(1)(vii) require the permitting authority to ensure that the level of water quality to be achieved by water quality-based effluent limits is derived from and complies with all applicable water quality standards.
NPDES regulations at 40 C.F.R. 124.53(e) require that the state certification include conditions that are necessary to assure compliance with the applicable provisions of CWA and appropriate requirements of state law.

TALs should be and are based, as a conservative measure, on New Mexico water quality standards.

EPA Response: EPA added additional Target Action Levels in Appendix B in order to comply with conditions of certification as required by 40 CFR § 124.55(a)(2).

Condition #5 – Site Deletions: Sites shall not be deleted from the permit unless the Permittees demonstrate that they can be deleted in accordance with the permit requirements: (a) no industrial activities took place at the Site, (b) Site-related pollutants of concern have never been or will not be exposed to stormwater, (c) installation of permanent control measures results in no exposure, (d) removal of soil containing Site-related pollutants of concern, (e) data evaluated through the Site Specific Demonstration process shows that stormwater and surface soil do not exceed levels of concern, or (f) where the Site meets the no discharge requirements specified in the permit.

Please refer to Appendix 2 for a comprehensive summary of Sites and deletion decisions as compared to deletion requests by both EPA and the Permittees.

Background for Condition #5: NPDES regulations at 40 C.F.R. 122.44(d)(1)(i) require that permit "limitations must control all pollutants or pollutant parameters...which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

NMED deleted "no discharge" sites from the draft permit if the three "no discharge" criteria were met: (1) active samplers are in representative locations, (2) no confirmation sample has been collected after a 25year, 24-hour return period storm, and (3) inspection records validate full operability of sampler, consistent with site deletion in the draft permit per Part I.C.4.(f). "No discharge" sites do not have the potential to cause or contribute to an excursion above any State water quality standard.

EPA Response: EPA deleted Sites as per Appendix 2 to comply with conditions of certification as required by 40 CFR § 124.55(a)(2).

Condition #6 – Additions of Sites to the Permit: Sites noted in Appendix 3 to this certification must be added to the permit based on NMED observations of industrial materials exposed to stormwater through the Sampling Implementation Plan (SIP) investigations in 2016-2018.

Background for Condition #6: EPA administered National Pollutant Discharge Elimination System (NPDES) permit programs under 40 C.F.R. 122.26(a)(ii),122.26(b)(12) and (14) require the following:
40 C.F.R. 122.26(a)(ii) requires that discharges associated with industrial activity must obtain a NPDES permit.

40 C.F.R. 122.26(b)(12) identifies significant materials as the following: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

40 C.F.R. 122.26(b)(14) describes "storm water discharge associated with industrial activity" to mean the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant… For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or byproducts used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

When the 2016 Consent Order was initially developed, there was a list of 2093 total Solid Waste Management Units (SWMUs) that were added to the Consent Order. The number of SWMUs that were subsequently included on this permit (405 SWMUs) were a subset of that initial list chosen based on the Permittees' assessment of whether the site would actually discharge stormwater. During the SIP process, NMED reviewed stormwater monitoring data and site histories, and observed that the predictions used to first select sites for inclusion on the permit was not accurate in predicting which sites would produce runoff. NMED noted additional SWMUs or AOCs that may need to be added to the permit to adequately protect surface waters from legacy activities that have yet to be mitigated, reclaimed, or remediated. These sites are noted in Appendix 3, along with a description of the legacy activity and the constituents that would be of concern in stormwater runoff from the site.

EPA Response: EPA added sites as per Appendix 3 to comply with conditions of certification as required by 40 CFR § 124.55(a)(2).

The Condition also requested that EPA re-evaluate Sites 01-001(a), 01-001(o), 21-013(a), 21-024(b), 21-024(g), and 21-026(d) from the list submitted. Currently on these Sites there are no structures or natural drainages creating run-on and current operations are not creating run-on at

the site. These Sites do not discharge to Waters of the United States and therefore are not covered by the Clean Water Act.

Condition #7 – No Exposure Qualifications: 40 CFR 122.26 (g) requires that Permittees claiming "no exposure" of industrial materials to stormwater must complete and sign a certification that there are no discharges of contaminated stormwater. The signed certification must be re-submitted to the NPDES permitting authority every five years. The regulation also requires notification to any subsequent MS4 operator, so there must be a requirement in this permit to submit the same certification to the MS4 partners in the upcoming MS4 permit. Sites which are certified in this manner qualify for long-term stewardship.

Background for Condition #7: 40 C.F.R. 122.26(g) Conditional exclusion for "no exposure" of industrial activities and materials to storm water. Discharges composed entirely of storm water are not storm water discharges associated with industrial activity if there is "no exposure" of industrial materials and activities to rain, snow, snowmelt and/or runoff, and the discharger satisfies the conditions in paragraphs (g)(1) through (g)(4) of this section. "No exposure" means that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, byproducts, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

EPA Response: 40 C.F.R. 122.26 (g) excludes stormwater discharges (other than discharges from construction activities) from the definition of "stormwater associated with industrial activity" where there is "no exposure" of industrial materials and activities to stormwater. To qualify for the exclusion, certain conditions must be met, including the certification requirement referenced in Condition #7. However, 40 C.F.R. 122.26 (g)(3)(ii) provides that this conditional exclusion from NPDES permitting requirements is available on a facility-wide basis only, not for individual outfalls, and the certification of "no exposure" required by 40 C.F.R. 122.26 (g)(1)(ii) must state that there are no discharges of storm water contaminated by exposure to industrial facilities and activities from the entire facility. This Permit allows the Permittees to complete corrective action and/or delete specific Sites from coverage under the Permit by demonstrating that there are no significant industrial materials exposed to stormwater at that those particular Site(s), not on a facility-wide basis. Therefore, the certification requirements of 40 C.F.R. 12226 (g) do not apply in this instance.

In addition, the definition of stormwater discharges associated with industrial activity at 40 C.F.R. 122.26 (b)(14) includes "areas where industrial activity has taken place in the past" only to the extent "significant materials remain and are exposed to stormwater." If there are no significant materials remaining that are exposed to stormwater at the Sites covered under this Permit (which are all areas where industrial activity has taken place in the past), discharges from those Sites are not stormwater discharges associated with industrial activity subject to NPDES permitting requirements.

To comply with the intent of Condition #7, EPA has added a requirement at Part I.C.4.c of the Permit that any request for deletion under that section must include a certification signed in accordance with Part III.D.11 of the Permit that the Site no longer has significant industrial materials remaining that are exposed to stormwater. Language has also been added to Part I.C.4. to require that a copy of all requests for Site deletion, including certifications of "no exposure" under 4.c., shall be provided to NMED at the time submitted to EPA for review and approval. Language has also been added to require that a copy of certifications of "no exposure" under 4.c. must also be provided to the operator of any Municipal Separate Storm Sewer System (MS4) receiving runoffs from the Site, if applicable.

Comments Received at Public Hearing on October 26, 2020

Comment from Governor Ortiz from San Felipe Pueblo PH #1: The Tribe understands LANL to renew draft permit Stormwater from this facility. Additionally, LANL plans to increase pollutant production. The Pueblo of San Felipe is located downstream and it's important when renewing this permit that pollutants are controlled and kept out of SW within guidance of CWA, NMED Surface Water Quality Standards that poses adverse threats to the environment and health of our people. The Pueblo wants to be engaged to understand the discharge from water, air, legacy waste and cumulative impact. SW permits NM0030759 presents opportunities to be consulted with and proper consultation is a condition on the permit and be enforceable or pose a threat. It is in the best interest of the Pueblo of San Felipe that LANL and EPA will treat us like equally in this permit renewal weather corrective actions or low risk. We must stress that management practices will minimize discharge. Whether it be filtration, corrective actions, controls, or any other technology to ensure confidence for the permit because there is area of concerns in SW. LANL, New Mexico and EPA must consider the health of Pueblo San Felipe. They must ensure timely consultation is conducted for our health is considered in decision making. There are many opportunities for potentially harmful out of LANL and San Felipe may be considered as stakeholder on the operation of permitting process. The Pueblo wants to be engaged to understand the discharges from water, air, legacy waste and impacts for the health of our People. We are concern with the changes on the definition on the Water of the US and how they will be used for the discharge of LANL. We ask that the Pueblo be given Consultation to consider the burden. If the permit is modified, if there are enforcement actions or conditions are a threat to our environment. The people and New Mexico have contributed a good deal to the USA and we ask LANL and EPA and other agencies to ensure that we are protected as well. It concerns me greatly. As tribal leader of Pueblo of San Felipe, that I'm trying to protect my people from LANL. Water that comes from the Rio Grande have been impacted negatively from radioactive waste discharge from LANL, I can say this because I've lost my sister from cancer. Which contributes from the radioactive waste from our people that have consumed in the past and I'm concern about the future of my people. I would appreciate if we could come together and work these things out in a professional way on how we can protect other people. Thank you very much (Note: summary of comment based on the recording from the Virtual Public Hearing.)

EPA Response: The Pueblo of San Felipe's concerns regarding the discharges potential impacts of downstream water quality are noted for the record. The monitoring and corrective action requirements set in the proposed permit are based on the applicable State Water Quality

Standards (WQS), in most of situations, as a threshold for corrective actions. Please see responses to Comments received from San Felipe Pueblo letter below.

EPA conducted a Government-to-Government Tribal Consultation on October 26, 2020 to discuss the permit and answer questions from San Felipe Pueblo. EPA notes that San Felipe Pueblo doesn't have EPA approved WQS at this time. Protection of the New Mexico WQS is expected to also be protective of downstream waters.

Comment from Sister Marlene Perrote, Partership for Earth Spirituality, PH #2: Major issues with LANL is the contamination and waste. Water flows Pajarito Plateau, and what happens because of the desecration that we have done as a Nation and destruction because of LANL. We now have a real problem with water (stormwater, surface water and groundwater). There is no end to the continuous proliferation of that waste. Wondering whether or not this permit could address the ending of the constantly producing contamination that really affects our holy water (the source of life). Believes that LANL has real responsibility to stop the production and the producing of nuclear and radioactive waste. Try to help us, to stop to find ways to protect water ways. This is holy land and retribution to the indigenous people contaminating of the land needs to be addressed. (Note: summary of comment based on the recording from the Virtual Public Hearing.)

EPA Response: This permit is designed to reduce pollutants from currently inactive Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) exposed to storm water runoffs. EPA has no authorization under the Clean Water Act to stop operations of this facility which conducts national defense research and development, scientific research, space research and technology development, and energy development, although it may produce nuclear and radioactive wastes. Discharges from current operations of the facility are regulated under a separate NPDES permit (NM0028355) and are outside the scope of this NPDES action.

Comment from Rachell Conn, Amigos Bravos PH #3: Will submit the comments in written form.

EPA Response: Comment noted.

Comment from Joan Brown, Partnership for Earth Spirituality PH #4: Water is very precious and just continue to be disturbing that land and water in communities downstream are just not really taken into consideration or reparation for past damages. LANL and government entities need to change the culture detrimental to the environment. LANL has the responsibility and stewardship to address all the pollution of the waters. The highest standard should be to eliminate the requirement for monitoring or corrective actions and identify sites that can contribute to polluting the waters on our land and affecting health in communities downstream. The site should not be deleted, there has to be real demonstration over long period of time that there is no danger on the watershed. None of this should be taken lightly, change world view and throw away culture. Maybe vision of LANL has to be shifted with real problems that are happening right now like climate change and Covid. (Note: summary of comment based on the recording from the Virtual Public Hearing.)

EPA Response: Comment noted for the record. This permit addresses only stormwater discharges associated with industrial activity. If a site no longer discharges stormwater associated with industrial activity as defined at 40 CFR 122.26(b), that site is no longer under the requirement of this permit. Monitoring requirements and Target Action Levels set in the permit, are used to determine discharges from a Site no longer meet that definition and would no longer require authorization under this permit. The proposed permit doesn't address discharges outside the scope of the definition at 40 CFR 122.26(b) that are not required to have authorization under an NPDES permit. Restoration of contamination at LANL is an ongoing effort that doesn't always fall within the scope of the NPDES permitting program.

Comment from Joni Arends, Concerned Citizens for Nuclear Safety PH #5: CCNS is a NGO 32 year old based in Santa Fe, NM and have been working with LANL issues for 3 decades. International stage big change has been Honduras joined other nations to declare prohibition for Nuclear weapons. CCNS wants to support the other speakers for the need to protect the sacred land, clean up the mess from last 77 years and part of that is that the SWIP could be as strong as possible. We need to look at the treaties and weapon productions with new eyes. Make sure that the workers and communities that have supported LANL are treated adequately and fairly. That there an ability to remediate and clean the areas and restore areas that were used and the IP is a way to do that.

The hundreds of sites to the potential to discharge that were identified 2005 Federal Facilities Compliance Agreement, precursor to the first individual SWIP. Accounting for all of those sites (1,000-1,200 approximately), individual sites that had the potential to discharge. Categorized high, moderate and low priority sites. The 405 sites on the SWIP that we are discussing are all high priority. We need to find ways to account for those remaining 800 sites. To see where they are, to see if they have been discharging. There needs to be provisions in this permit to come to term with the sites identify that are not accounted. CCNS will submit written comments to say that we need full accounting in a transparent manner. (Note: summary of comment based on the recording from the Virtual Public Hearing.)

EPA Response: Comment noted for the record. Note that not all Sites identified in the 2005 Federal Facilities Compliance Agreement would have discharges of stormwater associated with industrial activity requiring authorization under an NPDES permit. Issues raised in this comment regarding International Nuclear Weapon Treaty are outside of the scope of this NPDES action.

In terms of the remaining 800 sites which were listed in the FFCA, LANL used criteria to determine whether they meet No Further Action (NFA) Criteria as shown below. Sites that meet these criteria were not proposed for inclusion in the Individual Permit per the 2007 Annual Update to the Storm Water Pollution Prevention Plan (SWPPP) for SWMUs and AOCs and Storm Water Monitoring Plan (LA-UR-07-1789). A summary of NFA criteria include the following:

- NFA Criterion 1 - The site does not exist; is a duplicate of another site; cannot be located, or is located within another site, and has been or will be investigated as part of that site.
- NFA Criterion 2 - The site was never used for the management (that is, generation, treatment, storage or disposal) of RCRA solid or hazardous wastes and/or constituents.

- NFA Criterion 3 - The site is not known or suspected of releasing RCRA solid or hazardous wastes and /or constituents to the environment. The term "release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment.
- NFA Criterion 4 - The site is regulated under another state and/or federal authority. If the site is known or suspected of releasing RCRA solid or hazardous wastes and/or constituents investigated and/or remediated in accordance with the applicable state and/or federal regulations.
- NFA Criterion 5 - The site was characterized or remediated in accordance with applicable state and / or federal regulations, and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use."

EPA had no object to Permittee's decision to exclude Sites which met NFA Criteria's from their NPDES permit application package. All information submitted with the application are parts of the Administrative Records. When a Site was not included in the permit application package, that Site would not be covered by the IP. If CCNS or any individual person or entity has evidence or information that some of those sites should be regulated by this permit, they could provide EPA with site-specific supporting information during the next permit renewal process.

Comments from New Mexico Environment Department:

Comment #1: Footnote *7 of the TAL table in Appendix C of the draft permit indicates that for PCBs, the wildlife habitat value for PCBs will apply to ephemeral waterbodies as defined in the 303(d)/305(b) Integrated Report, and the human health-organism only aquatic life criterion will apply to intermittent and perennial waters. **All inquiries as to whether a waterbody is perennial, intermittent or ephemeral should be answered by the State standards, not the 303(d)/305(b) list**. NMED, DOE and their contractor Triad National Security, LLC, and Amigos Bravos have been working to properly identify waterbodies by hydrological type on the Pajarito Plateau, and this information is being incorporated into New Mexico's 2020 Triennial Review of water quality standards. Once approved by New Mexico's Water Quality Control Commission and EPA Region 6, these changes will be effective and memorialized in the *Standards for Interstate and Intrastate Waters, 20.6.4 NMAC*. The table below is included to illustrate that considerable differences in hydrology have been observed as a result of the Hydrology Protocol surveys conducted over the past couple of years.

Waterbody	# of Surveys	Perennial (0.00064 ug/L)	Intermittent (0.00064 ug/L)	Ephemeral (0.014 ug/L)
Ancho Canyon	3	X		X
Ancho Canyon Above N. Fork Ancho Canyon	3			X
Arroyo de la Delfe	2	X		X

Waterbody	# of Surveys	Perennial (0.00064 ug/L)	Intermittent (0.00064 ug/L)	Ephemeral (0.014 ug/L)
Canon de Valle	2		X	X
DP Canyon	3	X	X	
Effluent Canyon	1		X	
Fence Canyon	3		X	X
Fish Ladder Canyon	1		X	
Los Alamos Canyon	6	X	X	X
Martin Spring	2		X	X
Mortandad Canyon	3			X
Pajarito Canyon	5	X	X	X
Portrillo Canyon	4			X
Ten Site Canyon	2			X
Two Mile Canyon	4	X	X	
Unnamed Tributary to Water Canyon	1		X	
Water Canyon	6	X	X	X

EPA Response: EPA agrees that all inquiries as to whether a waterbody is perennial, intermittent or ephemeral for the purpose of determining which state water quality standards apply should be answered by the State Water Quality Standards, not the 303(d)/305(b) list. Updates of monitoring requirements and applicable TALs through the annual SIP process shall be consistent with EPA approved State Water Quality Standards. Footnote #7 has been modified to refer to the NMWQS instead of the 303(d)/305(b) list.

Comment #2: NMED believes that with the flexibility afforded to the Permittee in the proposed Site-Specific Demonstration (SSD) that there is no need for the alternative compliance request provision in the proposed permit. NMED suggests that it be removed to provide clarity on the Permittees' path to compliance, especially considering EPA's resources and ability to respond to alternative compliance requests (EPA did not approve a single alternative compliance request during the previous permit term). The language included in the draft permit providing automatic approval of alternative compliance requests is not appropriate and should be removed.

EPA Response: EPA determines that retaining the Alternative Compliance option is necessary because the IP may not address all unexpecting issues under the ownership and/or access control of N3B/DOE. Removal of the alternative compliance pathway may leave N3B/DOE with no feasible pathway to remain in compliance with the permit for these Sites. EPA agrees that

corrective action through Part I.D.5 - Completion of Corrective Action is the preferred pathway for all Sites and Alternative Compliance should be used as last result, nevertheless the final IP requires Alternative Compliance to be approved by EPA on a case-by-case basis.

Comment #3: The Permittees submitted Alternative Compliance Requests for 81 sites to EPA under the administratively continued permit that were not approved or dealt with otherwise. These sites should all be addressed via the SSD process before any determinations are made to delete the sites from the permit.

EPA Response: EPA agrees but notes that resolution for many sites has been provided by New Mexico's Condition of Certification #5. Information and supporting documents for Alternative Compliance submitted under the administratively continued permit should be considered during the SSD review process once the final permits is issued.

Comment #4: NMED Surface Water Quality Bureau and NMED Hazardous Waste Bureau worked with the Permittees to develop a sediment removal decision tree that accounted for both hazardous waste and surface water regulatory requirements for removal of sediments accumulated in stormwater retention facilities. NMED includes this decision tree as supplemental information to this certification to assist in decision making regarding maintenance of BMPs required under this permit. The decision tree is attached as Appendix 6.

EPA Response: Comment noted for the record. Part I.A.1.b has been modified to recognize the availability of the decision tree to assist in decision making regarding maintenance of BMPs required under this permit.

Comment #5: New Mexico Water Law codified at 19.16.2.15(B) NMAC requires that for water retained for longer than 96 hours, there must be a water right associated with that water. If the water infiltrates or is otherwise discharged, no water right is required. NMED is unclear that the permit requirements as written adequately convey that additional requirement with respect to BMPs such as retention berms and sediment ponds.

EPA Response: EPA agrees, Part I.A has been modified to include: "*Nothing in this permit relieves the permittees of the obligation to comply with New Mexico Water Law including 19.16.2.15(B) NMAC requirement regarding water retention for longer than 96 hours.*" It is the permittees responsibility to comply with more stringent state laws or local ordinances.

Comment #6: NMED received comments indicating that a mass balance approach should be taken regarding calculation of pollutant contributions from a site by requiring that flow measurements are taken in addition to water quality data. This would require the Permittees to install additional water quality equipment at every single SMA and would be burdensome. Additionally, no other stormwater permit issued in New Mexico requires mass loading calculations. The approach laid out by EPA to calculate the pollutant contribution by calculating the pollutant concentration upstream and subtracting it from the pollutant concentration downstream, and setting that value less than the TAL is appropriate, considering that the TALs are already conservatively set at the water quality standard.

EPA Response: Comment noted for the record.

Comment #7: Permittees requested in their comments to amend the formula for the SSD process to the following:
"Composite BTV = [(% impervious SMA area * 90th percentile developed landscape BTV) + (% pervious SMA area * 95-95 UTL 90th percentile undeveloped landscape BTV)]/ 100%"

And they provide the following rationale:
"The Permittees have worked diligently with EPA, NMED, and CCW regarding the development of storm water BTVs, particularly with respect to investigating data stability, data quality, and selecting sampling locations for background that are upwind of the Laboratory yet have similar elevation gradients, soil types, geologic formations, and vegetative cover (Windward, SEP DQO/DQA Document, 2017). During a series of webinars and meetings between September 2018 and January 2019, the Permittees and stakeholders discussed various statistical approaches to use for BTVs, with the Permittees proposing the 95-95 upper tolerance limit (UTL) as the most appropriate statistic for the intended use and population parameters of the background dataset. Indeed, soil/sediment and groundwater BTVs for environmental cleanup and risk assessments are commonly computed based on the 95-95 UTL which "is designed to contain, but not exceed, a large fraction (95%) of the possible background concentrations within a sampled population, thus providing a reasonable upper limit on what is likely to be observed in background with a 95% degree of confidence" (page 14 of 2019 draft IP). The 95% degree of confidence is considered a good compromise between false positives and false negatives and the UTL provides a predictive setup for future sampling results, unlike upper percentiles which "potentially may lead to a higher number of false positives resulting in unnecessary cleanup (i.e., determining a clean on-site location comparable to background as dirty)" (U.S. EPA Region 9, 2011). CCW is a proponent of a more conservative upper percentile that would lead to approximately 25% false positives (i.e., unnecessary cleanup at 25% of Sites); however, there is no statistical, environmental, or budgetary foundation for this statistic. The Permittees suggest a compromise: the 95-95 UTL BTV for undeveloped landscapes which tend to be associated with naturally occurring constituents, and the 90th percentile BTV for developed landscapes which tend to be associated with anthropogenic-related constituents. U.S. EPA Region 9 (2011), "Statistical Methods used to Establish Background Datasets using Sampled Data Collected from DTLs, and Surface and Subsurface Soils of Three RBRAs of the Two Formations and Compute Estimates of Background Threshold Values Based Upon Established Background Datasets (with and Without Observations) For the Santa Susana Field Laboratory Investigation."

As part of the above-mentioned webinars, NMED was very clear that the state's preference is to use the 90th percentile BTVs. Using the 95-95 UTL is akin to using RCRA soil screening levels, which are not adequately protective of surface water quality standards. NMED urges EPA Region 6 to use the 90th percentile BTVs across the board, and advocates that those BTVs are updated in Appendix C to the permit. NMED has not seen Woodward Environmental's (DOE/N3B's contractor) final BTV report in 2020 and is unable to comment on how much those BTVs may have changed since the information included in the 2019 reapplication materials. All references to 95-95 UTL should **not** be continued forward into the final permit.

EPA Response: EPA will maintain the use of the 90th percentile composite BTV formula as

presented in the draft permit and BTVs have been updated in Appendix C of the final permit. See EPA Response to LANL Comment #32.

Comment #8: NMED strongly recommends that additional water quality information for Dissolved Organic Carbon (DOC) and Suspended Sediment Concentration (SSC) are added to the monitoring suite.

EPA Response: NMED's request is granted. The permittee will monitor and report only SSC and DOC because it is required for particular BTV applications and water effects ratio applications as per NMWQS.

Comment #9: Appendix C of the permit is incorrectly titled as "Background Threshold Values". NMED believes this should be titled Target Action Levels or TALs.

EPA Response: EPA agrees, typographical error is corrected in final permit.

Comment #10: NMED supports changes for inspection triggers from a 0.25-inch storm event to a 0.5-inch storm event. This allows the Permittees to shift resources to actively remediate and focus on sites that are issues instead of spending time and effort to inspect sites that do not experience major runoff damage as a result of a smaller storm.

EPA Response: Comment noted for the record.

Comment #11: In Part 1.C.1, EPA should delete the following language: Corrective actions will occur if any validated analytical result for a particular POC from a confirmation sample at an individual SMA is greater than the Maximum Target Action Level (MTAL) or if the geomean of all applicable sampling results is greater than the Average Target Action Level (ATAL) or Background Threshold Value (BTV). Target Action Levels and Background Threshold Values are listed in Appendix C and Appendix B to this permit, respectively."

This is an incorrect description of the process proposed to be utilized. The Permittees proposed language that NMED also agrees with: "Target Action Levels (TALs) are based on and equivalent to New Mexico State water quality criteria for the subject pollutants. The applicable TALs are not themselves effluent limitations but are benchmarks to determine the effectiveness of control measures implemented to meet the non-numeric technology-based effluent limitations. TALs and Background Threshold Values are listed in Appendix B and Appendix C to this permit, respectively."

EPA Response: EPA agrees and replaced the paragraph with some of the suggested language.

Comment #12: Part 1.C.3(c) of the permit states that a site may be requested to be placed in the long term stewardship category if "storm water sample results are greater than HH-OO based TALs, but below Wildlife Habitat TALs for discharges to non-perennial streams." The Permittees have requested the ability to delete sites that fall into this category. NMED believes these sites should be kept on the permit in the long term stewardship category because we are concerned that the discharge of stormwater containing pollutants that may meet criteria for

Wildlife Habitat immediately at the location of the site, may accumulate in sediments and be carried further downstream in subsequent storm events and deposited into the Rio Grande (especially in the case of Los Alamos Canyon) where there is a drinking water use and the aquatic life uses that trigger the lower HH-OO criteria.

EPA Response: See EPA Response to LANL Comment #40. These sites are kept in the final permit in Part I.C.3.(b).

Comment #13: The Permittees request in Part 1.C.3 to add language allowing them to place RCRA deferred sites into long term stewardship. Generally, their suggestion is acceptable to NMED, but should be clarified that BMPs should still be installed and maintained at these sites to prevent any pollutants of concern from migrating from the site. Some RCRA deferred sites are still active (i.e. firing sites that may have residual contamination from historic activities) and could alternatively be covered under Sector AD of the MSGP, so NMED asks EPA Region 6 to consider that approach for these sites as well.

EPA Response: RCRA deferred sites with BMPs required under Part I.A have been added to the Part I.C.3. Maintenance of these controls is required under Part I.A.1.b. EPA declines to cover such sites under the Multi Sector General Permit (MSGP) since Sites that do not already fall under the definition of stormwater associated with industrial activity (40 CFR 122.26), cannot be covered under the permit without a formal designation by EPA.

Comment #14: The Permittees request that EPA delete the first sentence of the last paragraph of Part 1.C.4 because they state that there will no longer be stormwater discharges associated with industrial activity. NMED respectfully disagrees and asserts that if the installed permanent control measures are the reason that site-associated pollutants are no longer being discharged in stormwater, then maintenance requirements should exist. EPA should not delete this requirement for certification of maintenance of those permanent control measures from this permit.

EPA Response: EPA has modified the first sentence to read: "*Only where the request for deletion is made under b, c or e above and eligibility is based on installation of a BMP that must be maintained to continue providing eligibility for deletion, the request must include a certification that the BMP(s) will be maintained as necessary to continue meeting eligibility for deletion."* Not all of the reasons for Site Deletions at Part I.C.4 are based on a BMP that must be maintained. The revised language limits the maintenance certification to situations where eligibility will be based on a BMP requiring maintenance to remain effective and continue meeting the eligibility claimed for deletion. Eligibility under Part I.C.4.(a, d or f) are not based on BMPs requiring continued maintenance.

Comment #15: In Part I.C.6(a), the draft permit states that if soil disturbance occurs within the Site-affected media, storm water samples collected following these activities shall be monitored for the entire suite of pollutants listed in Appendix B for that site. However, soil disturbance is not defined in this permit. NMED offers the following for clarification. Referencing other CWA stormwater permits, the Construction General Permit defines earth moving as clearing, grading and excavating activities. If any of these activities occur but are not part of BMP installation or are outside of the catchment area of a BMP within site-related media, the

Permittees shall reinitiate sampling using the entire suite of pollutants listed in Appendix B for that site.

EPA Response: It appears that NMED was referring to Part I.B.1.d(i). EPA concurs and has modified the paragraph to read: "*If soil disturbance within the Site-affected media occurs (e.g., clearing, grading and excavating activities), storm water samples collected by the Permittees following these activities shall be analyzed for all POCs listed in the SIP for that SMA. Installation of controls and routine maintenance of controls or monitoring devices are not subject to the requirements of this Part."*

Comment #16: The permit currently states in Part I.D.1(a) that the Permittees may collect run-on and run-off data for comparison at a site to determine what the site's contribution is to pollutant loading in runoff. However, the permit does not specifically require the Permittees to do so in a paired sampling setup. Due to the major variabilities between storm events and the differing abilities for a storm to transport sediment and associated pollutants, NMED strongly recommends that EPA modify the language to require that run-on/run-off monitoring is matched from the same storm event. It would not be appropriate to compare monitoring data from a 3-year event to a 100-year event.

EPA Response: It appears that NMED was referring to Part I.C.2.a. EPA concurs and has added the following sentence to Part I.C.2.a.: "*Paired samples shall be taken from the same storm event. Where insufficient volume from a storm is collected to analyze all parameters, paired samples from future storms may be used for the remaining parameters."*

Comment #17: Part I.D.1(b)(ii) has a note, which states that if surface runoff from a site will penetrate deeper than three feet, the Permittees may not use this approach; this section talks about removal and replacement of three feet of surface soil with clean fill. The Permittees have requested to delete this note from the permit, but in light of the Permittees' request to use green infrastructure methods to mitigate runoff, there could be situations where green infrastructure allows the penetration of stormwater to deeper than a depth of three feet. NMED urges caution to EPA in the evaluation of Permittees' request in this instance.

EPA Response: See EPA Response to LANL Comment #54.

Comment #18: Part I.E.2.b contains a statement about how the Permittees are to evaluate pollutants of concern that do not have a numeric TAL associated with it, and the Permittees have requested to remove this sentence from the permit. NMED, in Condition #6 above, has done some research to assist EPA with matching up numeric values to new proposed TALs required to be added to the final permit to protect narrative water quality standards related to toxic pollutants. There should not be a TAL added to the permit without a numeric value associated with it to avoid any confusion about compliance. A TAL can be derived based on Best Professional Judgment or other research and does not have to be associated with a water quality standard, and cannot be if there is no existing numeric criterion in the *Standards for Interstate and Intrastate Waters* at 20.6.4 NMAC.

EPA Response: EPA believes NMED was referring to Condition #4 in this comment. EPA has

added and updated TAL's in Appendix B in accordance to Conditions of Certification #2 & #4. EPA concurs that TAL's should have numeric values.

Comment #19: On page 20 of the draft permit, Part I.H.3: EPA discussed the voluntary watershed protection approach and encourages the Permittees to install watershed controls where appropriate. EPA also solicited comment on whether sediment removal in the watershed-based approach should be considered.

If pollutants have migrated offsite and have deposited in a waterbody that is still subject to state water quality standards, the Permittees should be responsible for removal of those pollutants, but in a manner in which the ecology of the waterbody is protected.
NMED generally supports a watershed-based approach, but the Permit language should include specific criteria for acceptability to demonstrate that a significant reduction in pollutants will occur. Additionally, NMED would like to ensure that appropriate site-specific BMPs are not overlooked in the attempt to comply on a watershed scale.

There are several aspects of this approach that require consideration if this idea is to be included as a compliance path in the reissuance of this Permit. While retention and immobilization of existing pollutants in drainages is desirable and would have positive impacts on downstream water quality, it should not be used as a means to circumvent addressing sites under the Permit in an individual fashion. For example, installation of large capacity detention or retention structures in the lower reaches of the canyons may help to attenuate storm flows and reduce sediment transport, but does not prevent pollutants at individual sites in the upstream watershed to continue to be mobilized off of those sites. Applicable New Mexico water quality standards still apply in these upstream drainages, and discharges that contribute to exceedances of those standards must be mitigated. An example is the recently enlarged and enhanced sediment traps in Mortandad Canyon. These sediment traps will no doubt retain sediment and reduce downstream transport but addressing potential pollutant contributions from individual, upstream Sites should not be overlooked.

In addition to this, consideration of the control and disposition of potentially contaminated sediments which could accumulate in structures designed for watershed-based controls would need to be addressed and a process for characterizing and handling such sediments defined. A current example of this situation is the weir structure and detention ponds located in Los Alamos Canyon immediately upstream of NM State Route 4. This structure has been dredged and accumulated sediments have been removed several times, with the contaminant load and final disposition of this sediment remaining uncertain and in contention.

"*While a watershed approach may be appropriate, Permittees must institute control measures with the understanding that upstream waters, higher in the canyons, may have more stringent water quality standards which must still be protected."*

EPA Response: Comment noted for the record. Suggested language has been added as a Note in Part II.A. In addition, a paragraph numbering typographical error has been corrected and Part II.1, 2, 3, 4 & 5 now are Part II.A, B, C, D & E.

Comment #20: NMED agrees with deletion of the following sites:

a. 00-011(c) [R-SMA-2.05]: This was an alleged former mortar impact site, but evidence of the use of the site for its alleged purpose was never found (evidence of UXO, ordnance, MD, MEC or impact scars).
b. C-00-020 [R-SMA-0.5]: This was an alleged former mortar impact site, but evidence of the use of the site for its alleged purpose was never found (evidence of UXO, ordnance, MD, MEC or impact scars).
c. 16-030(c) [CDV-SMA-1.4]: This site was former roof drains from a rest house building at TA-16 that has now been removed. It was never used for the management of hazardous constituents and was never comingled with another process. One stormwater sample has been collected at this SMA and showed a TAL exceedance for silver. This TAL exceedance is clearly associated with another SWMU in this SMA.
d. 35-016(m) [PRATT-SMA-1.05]: This was a formerly NPDES permitted outfall that never discharged. It was meant to discharge noncontact cooling water from a sodium reactor in support of a cooling system. The sodium reactors were never installed and the cooling tower never operated and there was no discharge.
e. C-46-001 [CDB-SMA-1]: This was a one-time mercury spill outside of building 46-75. According to the Permittees, the spill was cleaned up immediately and soil samples taken at the site do not show elevated levels of mercury (above background levels). A stormwater sample taken at the SMA sampler did not show TAL exceedances for mercury.
f. 35-004(h) [PRATT-SMA-1.05]: This was a former hazardous waste satellite accumulation area. Soil was removed in this area to 15 feet and backfilled with clean soil.

EPA Response: Comment noted for the record. See response to Condition of Certification #5.

Comments Received from San Felipe Pueblo, Letter from Governor October 26, 2020

Comment #1: Hon. Anthony Ortiz, Governor and Hon. Delbert Sanchez, Lt. Governor Pueblo of San Felipe. The Pueblo understands LANL plans to renew their Individual Permit. LANL plans to increase plutonium pit production which raises concerns with the overall activities, regulated authority and transparency at LANL. The Pueblo wants to be engaged to understand the discharges from water, air, legacy waste and the cumulative impacts it may pose to the health of the people. The Pueblo is located downstream from LANL and it is important that pollutants are controlled and kept out of the storm water generated from LANL, and within the guidelines of the CWA and NMED surface water quality standards.

EPA Response: Comment noted for the record. The Pueblo may contact the Permittees directly to be included in their e-mail Notification list and to participate in the Permittees' Public Meetings as stated in the permit Part II.3. Public Involvement.

Comment #2: The Pueblo is concerned with the de-regulation of the new WOTUS definition

and the potential for pollutants from tributaries that may not fall under the new definition that make its way to the Rio Grande River, upstream of San Felipe. LANL, NNSA, New Mexico and US EPA must consider the health and wellbeing of the Pueblo of San Felipe and must ensure timely consultation is conducted and that the health be considered in the decision making.

EPA Response: Comment noted for the record. The statutory and regulatory definition of WOTUS is beyond the scope of this permitting action. EPA conducted a Government-to-Government Tribal Consultation on October 26, 2020 with San Felipe Pueblo.

Comment #3: The Pueblo emphasize BMP's in this permit renewal will minimize the discharge and runoff from the lab from the beginning, whether it be filtration, correction action controls, or any other technological measures to ensure our confidence with the permit activities since there are areas of concern that may still pose a threat to exposed storm water.

EPA Response: Comment noted for the record.

Comment #4: SWIP present opportunities to be consulted with the Pueblo if the conditions in the Permit are non-compliant, modified, found enforceable, or pose a threat. It is in the best interest of the Pueblo of San Felipe that LANL and EPA will treat all sites equally ranked in this permit renewal, whether they are high priority, corrective action or low risk. The Pueblo asks to be given meaningful and timely consultation if the conditions in the Permit are not met, if permit is modified, there are enforcement actions or if conditions pose a threat to our health and environment.

EPA Response: The proposed permit treats all Sites equally as far as requiring compliance with final permit conditions. Any major modification of the permit will require a formal public notice and comment period that San Felipe Pueblo will be invited to participate in and offered an opportunity for a Tribal Consultation. Request for Tribal Consultation on enforcement actions is outside the scope of the permitting action, but the Region 6 Enforcement and Compliance Assurance Division (ECAD) has been notified of this request. EPA will keep San Felipe Pueblo in our mailing notification list.

Comments Received from Communities for Clean Water (CCW)

Comment #1: Renewal Process. CCW would also like to acknowledge and thank the New Mexico Environment Department (NMED) and Permittees for the extensive amount of time they spent reviewing and revising monitoring locations to better capture drainage areas of interest and/or improve Permittees' ability to obtain a sample. CCW continue to have concerns about the high number of sites that have not shown a discharge. To better understand and appreciate the conditions impacting the ability to collect samples, CCW respectfully requests to visit a select number of sites where samples cannot be obtained. We request that EPA work CCW, NMED, and the Permittees to set up a joint field visit to view sites.

In addition, CCW also thanks EPA for scheduling a public meeting and hearing on the draft permit. It is important for communities in Northern New Mexico to have multiple avenues, including in person verbal opportunities, for engaging in regulatory issues that impact clean

water.

EPA Response: Comment noted for the record. Please be advised that EPA does not have authority under the CWA to require the facility to permit a third-party visit, any request for a site visit will have to be requested through the Permittees.

Comment #2: Unfinalized draft 2015 Permit Being Used as a Baseline. CCW has a general concern that the draft 2015 permit, which was never approved, is being used as a baseline during this 2019/2020 permit renewal process. CCW has numerous concerns with the 2015 draft permit which we outlined in our June 25, 2015 comments to EPA, which we incorporate by reference to these comments. We would remind EPA that we still have many of the same concerns about deletion of sites, deadlines for corrective action, maintenance of control measures, and changes to the alternative compliance requirements. Proposed changes should be compared against the 2010 IP not the unfinalized draft 2015 IP.

EPA Response: In Fact Sheet dated November 19, 2019, Section VIII Draft Permit Rationale, EPA did compare the proposed conditions with the 2010 IP and provided rationale for changes. Because the 2010 IP was administratively continued, EPA noted it as the "AC" permit in the fact sheet. Because EPA proposed the 2015 proposed IP based on the 2010 IP and new information available prior to the time EPA published the proposed permit in 2015, and EPA received many valuable comments from both the public, the permittee and NMED on the 2015 proposal, it is reasonable to use that updated information as part of the rationale for proposed changes included in the 2019 proposal. Comparison to the 2015 proposal also allows those commenters to see what changes to the 2019 proposal were influenced by their comments. The 2019 Fact Sheet included an explanation of the rationale for withdrawing the 2015 proposal and stated in part: *"Following discussions with the permittees regarding the nature of the new information, EPA decided that it made sense, both in terms of the efficient use of agency resources and in the interest of providing all interested parties with a clear record of the information underlying the permit, to withdraw the 2015 draft permit and propose a new draft permit."*

Comment #3: Cultural Importance of Tewa Lands and Waters. CCW is a group of people and organizations rooted in a variety of traditions who share an awareness that caring for clean water on the Pajarito Plateau is a moral and ethical responsibility. We hold that all people have a right to clean water for drinking, sacred ceremony, reproduction, growing food, raising animals, recreation, and overall well-being now and into the future. The land and water of the Pajarito Plateau sustains many lives and are Tewa ancestral homelands and those of land-based Peoples. Regulatory actions and compliance must be grounded in this awareness. We assert that the practices of the Department of Energy (DOE), N3B-Los Alamos, the New Mexico Environment Department (NMED), and the Environmental Protection Agency (EPA) must always include an awareness that the activities regulated under this permit are occurring on the sacred lands of Tewa Peoples. Moreover, all Pueblos downstream, or those with cultural lands that might be affected by the discharge off the Site Monitoring Areas (SMAs), must be consulted on the renewal of this permit and its impacts.

EPA Response: Pursuant to EPA's Tribal Consultation Policy, EPA offered San Ildefonso, Cochiti Pueblos, Pueblo of Santa Clara, and Pueblo of Jemez the opportunity to engage in government-to-government consultation because they are part of Los Alamos Pueblos Project.

San Felipe Pueblo requested Tribal Consultation on the permit via an email dated January 17, 2020, and a virtual consultation with San Felipe took place on October 26, 2020. All affected Pueblos also had the opportunity to provide public comments and participate in the Public Meeting and Public Hearing on October 26, 2020.

Comment #4: Run on. CCW believes it doesn't matter what is "running on" to each of the SMAs, the quality of the discharge from each SMA is the responsibility of LANL and must be fully addressed in the IP such that it doesn't cause or contribute to any exceedances of TALs or water quality standards in the receiving water bodies. Once contamination flows over SWMUs and AOCs permittees are responsible for the pollution. We are curious as to EPA's opinion on this matter.

EPA Response: This Permit addresses discharges of stormwater from specified Sites where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. See definition of stormwater discharges associated with industrial activity at 40 C.F.R. 122.26 (b)(14). Because the purpose of the Permit is to address discharges of stormwater contaminated by exposure to the significant materials remaining at the Site(s), EPA believes it is reasonable to consider whether the pollutants in the stormwater discharges are Site-related. If the Permittees can demonstrate that the pollutants in the discharge are not Site-related, e.g. they're contained in urban stormwater run-off that is running onto the Site, EPA does not believe they should be addressed under this Permit.

Comment #5: I.C.2.a. Run-on/Runoff Evaluation. CCW appreciates the improvement in the equation over prior iterations of this draft Permit renewal. However, CCW still believes that the equation (Geomean (run-off) – Geomean (run-on) <= 0) is flawed because it ignores a mass balance approach. Using this equation could result in a situation where the runoff concentration from the site itself could be quite high, but become diluted by the flow of the run-on, which results in a lower measured runoff concentration. A mass balance approach provides the concentration and flow running on and concentration and flow running off, allowing Permittees to determine the site concentration itself. As such, CCW recommends that the use of both equations (1 and 2) be required to demonstrate that a site is not the sole source of a Pollutant of Concern (POC). Additionally, CCW continues to advocate for the implementation of the Municipal Separate Storm Sewer System (MS4) Permit as it will help to address watershed wide contamination and provide another mechanism for addressing high run-on values.

EPA Response: EPA has re-evaluated this proposed formula. While it would guarantee that run-off is no worse than run-on (i.e., the concentration leaving the site is less than the concentration entering the site), it is possible for the result to be less or equal to zero (0) even when the contribution solely from the site itself would exceed the TAL if the concentration in the off-site run-on is sufficiently elevated. EPA has determined to limit the use of formula (1) to situations when run-on is from undeveloped land and would contain natural background concentrations, so the Site run-off would not contain POCs levels that would exceed those to be expected from natural background run-off from this area. Note that Part I.C.2.b allows for consideration of elevated background concentrations.
Also note that EPA is currently reconsidering its December 16, 2019, decision designating small MS4s located in the portion of Los Alamos County, New Mexico within the Los Alamos Urban

Cluster as defined by the latest Decennial Census, and small MS4s located on LANL property located within Los Alamos County and Santa Fe County, New Mexico as small MS4s requiring NPDES permit coverage (the "Designation Decision"). The 10th Circuit Court of Appeals granted EPA's motion for voluntary remand of its Designation Decision on January 21, 2022, for EPA to "conduct any and all proceedings it deems necessary and appropriate to reconsider the" Designation Decision, including reconsidering the potential impact of the Supreme Court's decision in *County of Maui v. Hawaii Wildlife Fund,* 140 S. Ct. 1462 (2020). EPA has committed to propose the new designation decision for public review and comment after reconsideration is completed.

Comment #6: I.C.2.b. Site Specific Information. (1) Under this provision, Permittees can use Site Specific Information, including Background Threshold Values (BTVs), to determine if a site is the source of Pollutant of Concern (POC) Target Action Level (TAL) exceedance. EPA proposes the use of the 90th percentile composite BTV. In general, we find that the shift to using BTVs is problematic for many reasons, many of which are expanded on below, but of particular concern is that, as opposed to water quality standards (which TALS are based upon), BTVs are not subject to public oversight or regulatory agency approval. Establishment and application of BTVs for compliance is equivalent to changing water quality standards and it therefore should require a public process.

(2) If BTVs are used, they should be used not just to eliminate requirements for monitoring and corrective action, but also to identify sites that are contributing POCs. For example, there are some instances where BTVs are less than TALs. If a SMA were to exceed a BTV for a POC, this would demonstrate that the site is contributing pollutants to stormwater runoff, even if the results were less than the TAL. These sites should be entered into corrective action to address the contribution of pollutants. EPA should include a provision within the Permit that outlines the process to enter a site into corrective action when it has been identified through a comparison of the monitoring data against BTVs (i.e., when results are less than TAL, but more than BTV). At the very least a requirement for performing a reasonable potential analysis should be required at sites where sample results are higher than the BTV but lower
than the TAL.

(3) Due to uncertainty and variability of stormwater data, a 90th percentile is likely to result in the elimination of sites that are still contributing pollutants of concern to receiving waters (false positives). The 75th percentile is a more appropriate parameter that better reflects the uncertainty associated with stormwater data while ensuring that sites with significant background contributions are identified. Also, under this Provision, SW Tier 1 and SD Tier 1 allow Permittees to cease monitoring for a POC when the result is less than the TAL and in the case of SD Tier 1, Permittees may request the Site be deleted from the Permit if all POCs are Tier 1. This provision does not acknowledge that onsite control measures may be the reason a confirmation sample result is less than the TAL.

(4) In the event that all POCs are Tier 1, sites should not be allowed to be deleted from the Permit. Permittees must continue to have responsibility for sites where control measures are in place to ensure their long-term functionality. Control measures such as basins and berms require ongoing maintenance. Without a requirement for long-term maintenance, these practices will fail

over time and will result in POC re-exposure to stormwater. If Permittees are not required to monitor or inspect these sites, then there is no mechanism to determine re-exposure to stormwater and no guarantee that these sites will be resubmitted for permit coverage. As EPA has indicated in the Fact Sheet, once a site is removed from the Permit, it is no longer legally bound by the Permit. This reinforces CCW's comments and concerns that these sites should not be allowed to be deleted and should instead be entered into Long-Term Stewardship or coverage should be obtained under another permit such as the MS4 Permit or the Multi-Sector General Permit (MSGP).

(5) Similarly, under SW and SD Tiers 2 and 3, POCs associated with a site, can be to be classified as Tier 1, if the BTV and monitoring results are less than the TAL. As indicated above, these sites should not be deleted from the Permit if there are control measures in place. These sites should be entered into Long-Term Stewardship or coverage obtained under another permit in order to ensure long-term maintenance of these practices.

EPA Response: (1) It was not EPA's intent to require the quality of runoff meet water quality standards (WQS), although TALs were equivalent to WQS in most of the cases. When EPA proposed and established TALs based on WQS, both EPA, the permittees and citizens group representatives were not aware of background contribution issues. The goal of this IP is to mitigate exposure of POCs to the environment, not to treat constituents in the natural background soil. If background contribution is the source of the issue, to consider BTV effect is reasonable.

(2) If runoff quality is better than TALs, the runoff itself is not considered to have demonstrated a "reasonable potential (RP)" to cause an exceedance of the WQS. If site run-off exceeds a BTV but does not exceed the TAL the site controls are considered to be effective at managing the treat to water quality. Note that the final permit requires maintenance of controls of site place on LTS and certification of continued maintenance of controls on in which site is eligible for removal from the permit. Please see EPA response to NMED's Comment #14.

(3) EPA will keep the 90^{th} percentile as the threshold for this provision as drafted in the permit. The Permittees have worked diligently with all parties regarding the development of storm water BTVs, particularly with respect to investigating data stability, data quality, and selecting sampling locations for background that are upwind of the Laboratory yet have similar elevation gradients, soil types, geologic formations, and vegetative cover (Windward, SEP DQO/DQA Document, 2017). During a series of webinars and meetings between September 2018 and January 2019, the Permittees and stakeholders discussed various statistical approaches to use for BTVs, with the Permittees proposing the 95-95 upper tolerance limit (UTL). Using the 95-95 UTL is akin to using RCRA soil screening levels, which are not adequately protective of surface water quality standards. CCW is a proponent of a more conservative upper percentile that would lead to approximately 25% false positives (i.e., unnecessary cleanup at 25% of Sites); however, there is no statistical, environmental, or budgetary foundation for this statistic.

(4) The definition of stormwater discharges associated with industrial activity at 40 C.F.R. 122.26 (b)(14) includes "areas where industrial activity has taken place in the past" only to the extent "significant materials remain and are exposed to stormwater." If there are no significant materials remaining that are exposed to stormwater at the Sites covered under this Permit (which

are all areas where industrial activity has taken place in the past), discharges from those Sites are not stormwater discharges associated with industrial activity subject to NPDES permitting requirements.

(5) Please see Response above.

Comment #7: Soil Data and Soil Screening Levels. During the October public meeting presentation, EPA reiterated that soil data can be used to determine whether POCs are site related. This permit is an authorization to discharge stormwater, therefore, sediment samples alone are not sufficient to characterize runoff from a SMA. Sediment samples may or may not be representative of stormwater runoff depending on site conditions, activities, impervious area, and soil compaction. Due to this uncertainty, sediment samples should be allowed to supplement limited stormwater data but should not be used to be the sole sources of data that eliminates a site and/or POCs from permit compliance.

EPA Response: The definition of stormwater associated with industrial activity at 40 CFR 122.26(b)(14) for sites that industrial activity took place in the past, which is the case for discharges regulated under this permit, is qualified by "… areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water." Part I.C of the final permit allows the use of soil screening data to determine if significant materials remain and are exposed to stormwater at levels that would exceed what would be expected to naturally be occurring in the area. This option is used when it is difficult to obtain stormwater runoff monitoring data and allows concentration of resources on sites that had not yet been cleaned up. See also EPA Response to LANL Comment #34.

Comment #8: Antidegradation. For each receiving water body and pollutant combination in this permit, except for copper discharging into the Sandia Canyon, LANL must perform an antidegradation analysis to prevent degradation of existing water quality as called for in 40CFR131.12 and 20.6.4.8 NMAC. This is especially the case since the move to BTVs in many cases involves increasing pollutant loading in the watersheds. Therefore, a Tier II analysis must be performed.

EPA Response: The final permit does not authorize an increase in pollutants discharged to Waters of the U.S., but rather reduce the existing discharge of pollutants from historic sites of industrial activity. In New Mexico, Tier II Antidegradation review is only required for new discharges or increases in authorized discharge loadings. TALs and BTVs are not effluent limitations, but rather they are used as benchmarks for evaluation of BMP effectiveness and whether site cleanups have reached the point at which the site no longer meets the definition of stormwater associated with industrial activity and no longer requires an NPDES permit. In summary, compliance with the IP will result in improvement rather than degradation of receiving water quality. See State of New Mexico Antidegradation Policy Implementation Procedure approved October 23, 2020, Section 1.2 Coverage and General Applicability.

Comment #9: I.C.3.c, FS VI.H, and Appendix B. HH-00 Criteria. CCW believes that it is inappropriate to have a blanket provision that indicates use of wildlife criteria over HH-OO criteria. This is based on a limited UAA study – the results from one segment should not be

extrapolated and applied to the entire Permit area. There is a process underway to reclassify stream uses and the perennial nature of streams. EPA should utilize the reopener clause to update criteria accordingly, once this study is complete.

EPA Response: The final permit sets an alternative condition to replace HH-OO criteria with wildlife habitat criteria only when a site-specific or watershed-specific UAA studies are completed and changes to the applicable WQS of the receiving waters are approved. See also Response to Comment on NMED Comment #12.

Comment #10: I.C.3.e. No Discharge. This condition indicates that sites can be entered into Long-Term Stewardship if there is no evidence of stormwater discharges for the past five years. This appears to contradict site deletion criteria which allows Permittees to request a site deletion if a sample cannot be collected due to no discharge. CCW believes that Long-Terms Stewardship is the more appropriate option and therefore, the option to request a site deletion for no discharge should be removed.

EPA Response: There is no conflict between these two categories. One of the requirements for Sites eligible for deletion is "no confirmation sample has been collected after a 25-year, 24-hour return period storm." Therefore, the requirements for site deletion are more stringent than conditions for Long-term Stewardship. Note also that NPDES permit authorization is only required for discharges of pollutants to Waters of the U.S.

Comment #11: I.C.4 and FS Section I and J. Deletion of Sites. These sections outline the conditions under which a site may be deleted from the Permit. CCW believes that the only acceptable criteria for site deletion is for sites that have certified corrective action and can demonstrate that no significant materials from previous industrial activity remain (as indicated under I.C.4.d.). All other sites should be entered into Long-Term Stewardship or obtain coverage under another permit (MS4 or MSGP). CCW offers the following specific comments on Section I.C.4:

- No industrial activities: EPA should provide adequate documentation regarding how it arrived at this decision on a site by site basis. These sites should receive coverage under the MS4 Permit.

- POCs will No Longer be Exposed to Stormwater: This provision should explicitly exclude sites with control measures that require maintenance in order to retain functionality such as basins and berms. Sites with such controls measures should be entered into Long-Term Stewardship.

- SW Tier 1 and SD Tier 1 Eligible Sites: as indicated in prior comments, allowing these sites to be deleted does not take into account the possibility that control measures are likely to be the reason that POCs do not exceed TALs. These sites should be entered into Long-Term Stewardship or folded into another permit to ensure the longevity of onsite control measures.

- Sample Not Collected: EPA should establish a process to ensure that the monitoring location and procedures for these sites have been adequately evaluated before they are

eliminated from the Permit. Monitoring locations may need to be periodically adjusted due to changes brought on by large storm events. Additionally, these sites may have control measures that reduce the volume of runoff, making sample collection difficult, but if these control measures are not inspected and maintained discharges could commence. These sites would be best suited for Long-Term Stewardship. CCW has similar comments on Sections VII.I and J of the Fact Sheet:

• Active Sites: EPA should identify the process for incorporating active sites under the MSGP. This process should be documented within the Fact Sheet and include an opportunity for public comment.

• Non-DOE Owned Property: DOE should not be allowed to abdicate its responsibility for sites where their former activities may be causing or contribution to stormwater pollution. Permittees should be held accountable for the quality of the stormwater discharges from these sites. EPA should work with Permittees to identify mechanisms for ongoing responsibility such as an MOU with the property owner that would allow for ongoing monitoring, implementation and maintenance of BMPs.

• Sites with No Significant Industrial Materials: EPA should provide adequate documentation regarding how it arrived at this decision on a site-by-site basis such as site documentation based on site visits conducted by EPA staff.

EPA Response: (1) No Industrial Activities: The IP requires the Permittees to demonstrate how they reach the conclusion of No Industrial Activities. All supporting documents and EPA's final decision will be public records. Once it is determined a Site is not an Industrial Activity, it will be beyond the scope of NPDES authority.

(2) POCs will No Longer be Exposed to Stormwater: This concern has been addressed in the IP in case POCs are re-exposed to the environment. See also Response to Comment on NMED #14.

(3) SW Tier 1 and SD Tier 1 Eligible Sites: As stated above, if POCs re-exposed to the environment due to malfunction of control measures, the Permittees will need to apply for permit coverages for those sites. In addition, where eligibility is based on installation of a BMP that must be maintained to continue providing eligibility for deletion, the request must include a certification that the BMP(s) will be maintained as necessary to continue meeting eligibility for deletion.

(4) Sample Not Collected: The annual Sampling Implementation Plan (SIP) in IP Part I.E.2 has addressed sampling location issues. Concern regarding maintenance of control measures has been addressed above.

(5) Active Sites: This IP is not designed to regulate active sites where active operations will continue to contribute POCs and therefore POCs cannot be mitigated or eliminated by meaningful control measures. Where sites require coverage under a separate NPDES permit, including the MSGP (e.g. LANL has coverage under, NMR050013, NMR050012 & NMR050011), those decisions and authorization of permit coverage are outside the scope of this

permit.

(6) Non-DOE Owned Property: Who is responsible to apply for a permit is addressed by 40 CFR 122.2(b), "Who applies? - When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit." Where LANL is no longer the owner or operator of a discharge and is not obligated to have NPDES permit coverage, discussions on any LANL responsibilities related to historic activities would need to be between the owner/operator and LANL.

(7) Sites with No Significant Industrial Materials: EPA will review supporting documents submitted by the Permittees and any input from NMED and could decide a Site visit is necessary in some cases. LANL's requests and EPA's decisions will be part of public records on the permit files.

Comment #12: I.D. Corrective Action. This section indicates that installation of control measures should be completed within 24 months. CCW believes that 24 months to complete corrective action it too generous. Permittees should be required to submit a corrective action plan within one month of knowledge of TAL or BTV exceedance. The corrective action plan should identify how compliance will be achieved and the timeline for completion. The timeline for completion should not exceed 18 months.

EPA Response: It may not be achievable to develop a corrective action plan within a month upon knowledge of TAL or BTV exceedance, particularly if certain degree of advanced control measures were already implemented. The intent was to require corrective actions as soon as practicable after becoming aware of the BTV or TAL. To clarify that "as soon as practicable" is the primary deadline, the final permit has been modified as follows: *"…the Permittees shall complete it as soon as practicable. If such control measures have not been started prior to the effective date of the permit, and more than 24-months will be required to complete corrective action at a particular Site, the permittee shall submit a compliance schedule to complete installation as soon as practicable but no later than the expiration date of this permit. Unless disapproved by EPA within 60-days, the permittees proposed schedule is provisionally approved."*

Comment #13: I.D.1.C 3-Year, 24-Hour Storm Event. Given the increased intensity in rain events due to climate change, defining the 3-year, 24-hour storm event should be defined with more specificity than "historic records". This standard should be better defined so that these control measures are designed for resiliency and are not washed out with the next major storm event. Instead, CCW recommends that "historic records" should be replaced with "NOAA Atlas 14 methodology".

Additionally, during the October public presentation, EPA indicated that corrective actions may include implementing retention technology/capacity greater than 3-year,24-hour storm event and that after completion of corrective action, sites may be eligible to be removed from IP coverage. Sites with 3-year, 24-hour retention controls should not be allowed to be removed from IP coverage as there would be no mechanism to ensure maintenance of these facilities. These sites

should be entered into Long-Term Stewardship or coverage obtained under another permit in order to ensure long-term maintenance of these practices.

EPA Response: "NOAA Atlas 14 methodology" is used to determine the 3-year, 24-hour storm event in the permit. Retention technology is an option to achieve completion of corrective actions and is listed in the provision under Deletion of Site. See also EPA Response to NMED's Comment #14, regarding certification of continued maintenance of BMP's that are used as a basis for Site Deletions eligibility.

Comment #14: Section I.D.2 – Alternative Compliance. CCW believes that given all the flexibility and options included in this proposed permit (SIP, SSD, BTVs) an alternative compliance section is no longer necessary. CCW suggests removing the alternative compliance section in its entirety. In addition, if the alternative compliance section is to remain in the permit CCW disagrees with the proposed language that would allow alternative compliance requests to be approved without EPA input.

EPA Response: See EPA response to NMED's Comment #2. EPA determined that Alternative Compliance is necessary because the permit may not address all unexpecting issues. Alternative Compliance requests are subject to EPA's approval and may be used by the permittees as a last resort when other viable options do not apply.

Comment #15: Section I.E.2 – Annual Sampling Implementation Plant (SIP). CCW is supportive of all the work that NMED and LANL engaged in to evaluate the representativeness of each monitoring location. This work has resulted in a permit with more representative monitoring, and we appreciate the time and resources that went into doing that work. This work was appropriate in the context of making sure the requirements and sampling locations in the new permit were accurate and representative. CCW is however concerned with carrying forward the level of flexibility, in terms of changing monitoring locations and monitoring requirements without public oversight, that is included in Section I.E.2 (SIP) of the draft permit. Typically, many of the changes that are allowed to be made under the SIP process would require a permit modification. CCW wants to ensure that NMED and EPA has the flexibility to ensure that appropriate and representative monitoring is occurring, but we want to make sure that there is adequate transparency and oversight by the public of this process. CCW requests that similar to the process that has accompanied the alternative compliance process in the past that LANL release the annual SIP update for a 30-day comment prior to submitting the update to EPA. In addition, one of the two yearly public meetings could occur during this comment period and LANL could present and take comments on their proposed changes during the meeting.

EPA Response: See response to NMED's Condition of Certification #1. The Permittees shall consult with the New Mexico Environment Department (NMED) prior to sending the Sampling Implementation Plan (SIP) updates to EPA for review. If a CWA §303(d)/§305(b) Integrated List of Assessed Surface Waters listed impairment is identified as being a Site-related pollutant, then Permittees shall add it to the SIP. The initial SIP shall be publicly noticed for 30-days. Public Notice is not required for subsequent annual updates but could be discussed during the annual meetings.

As for the yearly public meetings, EPA has accepted the change of public meeting frequency from every six (6) months to annually, as agreed upon in the meetings held between EPA, NMED, and CCW prior to the submission of the July 15, 2019, draft application by the Permittees. EPA suggests that yearly public meeting be held during the annual SIP revision process.

Comment #16: FS VII.J. Site ID Changes. Section J indicates that sites under administrative changes were reassigned to different numbers for monitoring purposes, and therefore EPA intents to delete the original Site numbers through this permit renewal process. CCW requests that EPA provide a table that shows the original Site IDs and the updated Site ID for the purposes of continuity and tracking.

EPA Response: Comment noted for the record. SMA numbers and Site IDs were not changed. Site IDs were either added or deleted, please see NMED's Conditions of Certification #5 and #6.

Comment #17: FS VIII.Part II.1. Watershed Protection Approach. The Fact Sheet states that the EPA "solicits comments whether to give credit…for in-stream sediment removal as part of watershed protection approach." CCW believes that this approach may be beneficial under certain circumstances, but it should be well defined within the Permit. If Permittees are to receive credit for in-stream sediment removal, they should be required to conduct an analysis to determine if it is more beneficial to remove or stabilize in-stream sediment. There is limited benefit in disturbing sediments that had little to no chance of mobilization. Permittees should sample sediments to understand what it contains and how much might potentially be removed from the system.

EPA Response: Comment noted for the record. If in-stream sediments have had little or no chance of mobilization as CCW suspects, then discharges from LANL should not have significant adverse impact on the downstream Rio Grande. The idea of Watershed Protection Approach was to reduce migration of in-stream sediments to Rio Grande. Part II.A of the final permit allows proposal of a Watershed Protection Plan for EPA review and approval as Alternative Compliance.

Comment #18: Appendix B. Site Applicability. CCW appreciates the additional level of detail that has been provided to indicate what BTVs apply under what circumstances. However, it is still not clear what sites fall under what header. For example, what sites should be compared to the Western Reference? What sites are characterized as Undeveloped? Adding a column that indicates the sites that fall within each category would be useful in the interpretation and use of this table.

EPA Response: Comment noted for the record. Final permit Appendix C, Stormwater Background Threshold Values (BTVs), contains columns for landscape and data subset description which provides information on where particular BTVs would apply. When LANL submits SIP updates or site deletions approval requests, EPA will review applicable BTVs where the request include consideration of BTVs.

Comment #19: Appendix B. Thallium ATAL. The ATAL for Thallium has changed. Please document why this change was made.

EPA Response: The ATAL on Thallium was based on New Mexico's Water Quality Standards which were updated and approved by EPA for CWA purposes on July 24, 2020. 0.47 ug/L is the current HH-OO criteria for Thallium.

Comments Received from N3B (also referred to as LANL Comments)

Comment #1: Permit, all. The Permittees have provided a redline/strikeout of the draft Permit as well as a "clean" version of the draft Permit with all changes accepted as Attachment 1.

EPA Response: Comment noted for the record. Specific changes to the final permit are discussed in EPA responses below.

Comment #2: Permit, 2nd paragraph. Change the street address for Newport News Nuclear BWXT-Los Alamos, LLC, as follows: "**1200 Trinity Dr. Suite 150**"

EPA Response: Change made accordingly.

Comment #3: Permit, 5th paragraph. Add Segment No. 20.6.4.114 to the list of Water Body Segments, as there are site monitoring areas (SMAs) that drain to this Segment.

EPA Response: Change made accordingly, Segment 20.6.4.114 has been added to the final permit.

Comment #4: Permit, appendixes. Redline/strikeouts of Appendices A, B, and C are provided as Attachment 2.
The Permittees are presenting the Sites proposed for deletion in Appendix A of the draft Permit as a color- coded redline/strikeout. Attachments 3 through 8 include additional information pertaining to these Sites. Additionally, the permittees are proposing the addition of some Sites not on DOE Property, which were proposed for deletion in the Permit application. Upon further consideration and the conditions laid out in the Fact Sheet, the Permittees now believe these Sites need to stay on the Permit.
The Permittees are requesting to add one SMA to Appendix A, PJ-SMA-9.2, which monitors SWMU 40-001(c). This SMA was identified during the initial sampling implementation plan (SIP) exercise from 2016 to 2018.
SWMU 40-001(c) was identified to discharge to both sides of the canyon and will now be monitored by 2M-SMA-2.5 and PJ-SMA-9.2
In Appendix B (reordered as Appendix C in Attachment 2), the updated background threshold values (BTVs) based on the final Windward BTV document (February 2020) are presented; Attachment 9 includes a link to the final 2019 report.
In Appendix C (reordered as Appendix B in Attachment 2), revisions to the footnotes are presented and Table C-1 has been updated (i.e., 2018 and 2019 data were incorporated into the

canyon-based geomean hardness, and the hardness-based maximum target action levels (MTALs) were recalculated based on these new hardness values).
The Permittees are also requesting to edit six target action levels (TALs) in Appendix B because the TALs as written in the draft permit do not match the New Mexico Environment Department (NMED) Water Quality Standard (WQS), the WQS for each of the edited TALs has an additional significant figure.

EPA Response: Comment noted for the record. EPA has reviewed all Appendices Tables and incorporated information which EPA agrees with into the final permit. Please see also NMED's Condition of Certification #2, #5 and #6.

Comment #5: Part I.1. Edit the sentence as follows: "…POCs that may be released by natural **(undeveloped)** or urban **(developed)** environments and…" to be consistent with the BTV language used throughout the Permit.

EPA Response: Changes made accordingly to be consistent with the BTV language.

Comment #6: Part I.3. Per Part I.C.2, change text as follows: "…an exceedance of applicable TALs or BTVs **composite BTVs and/or TALs (per Part I.C.2)**…" as this language describes the conditions that prompt Corrective Action.

EPA Response: Change made accordingly to be consistent with the BTV language.

Comment #7: Part I.A.1. What does the reference to 'Limits Required' in the title "'Limits Required' Structural Control Measures" mean? The Permittees recommend deleting "Limits Required" from this heading.

EPA Response: The BMPs, not the control measures to meet the BMPs, are the effluent limits. The heading has been changed to "Effluent Limits Requiring Structural Control Measures".

Comment #8: Part I.A.1.b.i. Edit this section as follows: "A Site has been removed from the Permit ~~so that discharges from that Site are~~ **storm water discharges associated with industrial activity under 40 CFR 122.26(b)(14)** are no longer authorized ~~under this permit~~, or...".

EPA Response: EPA has changed the sentence to read: "A Site that has been removed from the Permit so that storm water discharges associated with industrial activity under 40 CFR 122.26(b)(14) are no longer authorized under this permit, or..." because some Sites may be subject to MSGP or other NPDES permit.

Comment #9: Part I.A.1.f. Edit as follows: "Corrective actions shall be taken immediately **as soon as practicable** if deficiencies…" because immediately is not feasible.

EPA Response: EPA agrees that immediately will not always be possible, since this section deals with sediment controls, language similar to the Construction General Permit requirements and deadlines for corrective actions, summarized below, have been included in the final permit.

"If deficiencies in sediment and runoff control measures are noted, remedial action shall be taken as soon as possible but no later than the end of the next working day. If correction of the deficiency requires installation of a new or replacement control measure or significant repair to the existing control measure, the Permittees shall install the fully new or modified control measure, or complete the repair, by no later than seven (7) calendar days from the time of discovery. If it is infeasible to complete the installation or repair within seven (7) calendar days, the Permittees must document in the SDPPP why it is infeasible to complete the installation or repair within the 7-day timeframe and document the schedule for installing the operational control(s) or completing the repairs as soon as feasible after the 7-day timeframe."

Comment #10: Part I.A.2. What does the reference to 'Limits Required' in the title "'Limits Required' Nonstructural Control Measures" mean? The Permittees recommend deleting "Limits Required" from this heading.

EPA Response: The BMPs, not the control measures to meet the BMPS, are the effluent limits. The heading has been changed to "Effluent Limits Requiring Non-Structural Control Measures".

Comment #11: Part I.A.2.b. Add sentence to the end of this Section which reads: "**Minor non-storm water discharges such as uncontaminated fire hydrant/sprinkler test water, water line flushing (dechlorinated), fire-fighting, building washing (no cleaning agents), HVAC condensate, irrigation, etc. are allowed.**" This language clarifies discharges, which may occur outside the control of the Permittees.

EPA Response: The request is consistent with the types of non-stormwater discharges allowed under the EPA's 2021 Multi Sector General Permit (MSGP) for discharges of stormwater associated with industrial activity, EPA has modified the final permit as requested.

Comment #12: Part I.B. In the first paragraph of Part I.B, edit the sentence as follows: "The Permittees shall perform confirmation monitoring as detailed below following installation of each site-specific **certified** control measure." to be consistent with language used throughout the Permit.

EPA Response: EPA agrees to add "certified" to the sentence to be consistent throughout the Permit.

Comment #13: Part I.B.1. Edit text as follows: "…unless the sampling location was moved or ~~constituents~~ **POCs** were added to the monitoring suite during the Sampling Implementation Plan **(SIP) evaluation conducted in conjunction with NMED** during 2016–2018." Constituent is changed to pollutant of concern (POC) to be consistent throughout the Permit. Regarding the SIP, the acronym should be included here because it is used later in the Permit, and it is relevant to include that this SIP exercise was conducted in conjunction with the New Mexico Environment Department (NMED).

EPA Response: EPA has modified the final permit as suggested.

Comment #14: Part I.B.1(a) or if Permittees proposed numbering accepted Part I.B.1.i. Add sentence to end of section which reads: "**For samples collected under the previous Permit where the Permittees have been unable to collect a second sample, upon issuance of the final Permit the Permittees may use the results from a single sample**." For samples collected under the previous Permit the Permittees propose that this two year clock would begin when validated data is/was received from the first sample collected. For example, if one of two samples was collected under the previous Permit, the Permittees will proceed with Site-Specific Demonstration once two years have passed since the sample was collected.

EPA Response: EPA agrees with the suggested language and changed it to Part I.B.1.a.

Comment #15: Part I.B.1.(b) or if Permittees proposed numbering accepted Part I.B.1.ii. After construction of a cap or other engineered cover (and opportunity for review by NMED and EPA), one confirmation sample is required if the capped area is smaller than the SMA drainage area. Otherwise, no further confirmation sampling is required, unless required by Part I.B.1.d. The Permittees find this language to be vague with respect to the review requirements. If the language is not deleted, please clarify the time period for review, how comments will be resolved, whether Permittees shall wait to proceed with monitoring prior to finalization, etc. Furthermore, the State does not have primacy in New Mexico regarding U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Permits, thus should be removed from this statement.

EPA Response: EPA revised the condition and deleted "and opportunity for review by NMED and EPA" since this requirement would be burdensome and could delay works to the permittee.

Comment #16: Part I.B.1.a.(ii). Edit the sentence as follows: "...add additional sampling locations during the Permit term in order to collect additional **confirmation** investigation samples." Data collected at any new sampling location will be confirmation data to be used in Permit-related decision-making.

EPA Response: EPA agrees that additional sampling results could be counted as confirmation samples. "Confirmation" is added to the final permit.

Comment #17: Part I.B.1.c. Edit as follows: "the Permittees shall immediately reactivate the sampler **as soon as practicable** to attempt…" because immediately is not feasible.

EPA Response: EPA agrees, sentence is revised accordingly.

Comment #18: Part I.B.1.d.(ii). Delete: "or if monitoring data (from the facility, state, or local agency) show an exceedance of applicable TALs" because the Permittees cannot control facility, state, or local agency's method of collection, sample handling/preservation/filtration, or laboratory method of analysis.
Permittees request 90 days to initiate corrective actions, because 30 days is not a sufficient amount of time.

EPA Response: The proposed permit condition was "or if monitoring data (from the facility, state or local agency) show an exceedance of applicable TALs, the Permittees shall initiate appropriate actions to correct the problems within thirty (30) days of being made aware of such information and shall report the problem and the corrective actions taken to EPA, with a copy to the New Mexico Environment Department (NMED)." EPA agrees that a 30-day period may not be sufficient. EPA is also clarifying data from the facility (which would be LANL and its contractors), state or local agencies must be collected and analyzed in accordance to 40 CFR 136. Final permit condition is read as "or if monitoring data (from the facility, state or local agency collected and analyzed in accordance to 40 CFR 136, except for PCB where EPA Method 1668C or later revisions may also be used) show an exceedance of applicable TALs, the Permittees shall initiate appropriate actions to correct the problems as soon as practicable but no later than ninety (90) days of being made aware of such information and shall report the problem and the corrective actions taken to EPA, with a copy to the New Mexico Environment Department (NMED)."

Comment #19: Part I.B.2.b. Edit the sentence as follows: "The Permittees must inspect control measures ~~and storm water management devices~~ at any Site affected by a "storm rain event" defined below..." as storm water management devices are not defined as being distinct from control measures throughout the permit.

EPA Response: EPA agrees, permit language is revised accordingly.

Comment #20: Part I.C. Edit the preamble text in Part I.C as follows: "~~Results of site confirmation sampling are evaluated against the Target Action Levels (TALs).~~ **Site evaluations shall be performed as described in this section.**"

EPA Response: Part I.C has been modified as suggested.

Comment #21: Part I.C.1. Please correct Part I.C.1 as follows:
"Target Action Levels (TALs) are based on and equivalent to New Mexico State water quality criteria for the subject pollutants. The applicable TALs are not themselves effluent limitations but are benchmarks to determine the effectiveness of control measures implemented to meet the non-numeric technology-based effluent limitations. **TALs and Background Threshold Values are listed in Appendix B and Appendix C to this permit, respectively**.
~~Corrective actions will occur if any validated analytical result for a particular POC from a confirmation sample at an individual SMA is greater than the Maximum Target Action Level (MTAL) or if the geomean of all applicable sampling results is greater than the Average Target Action Level (ATAL) or Background Threshold Value (BTV). Target Action Levels and Background Threshold Values are listed in Appendix C and Appendix B to this permit, respectively.~~"
The suggested deleted text is incorrect and is described in detail in the following sections on Site-Specific Demonstration, Long-Term Stewardship, and Deletion of Site.

EPA Response: Comment noted for the record. See EPA Response to NMED Comment #11.

Comment #22: Part I.C.2. Edit the first sentence in the first paragraph of Part I.C.2 as follows: "The Permittees may use the **Site History with either the run-on and runoff evaluation or the Site-specific information** ~~one or more of the following methods~~ to perform a site-specific demonstration (SSD) showing that the Site or Sites are not reasonably expected to be the source for one or more of the remaining POCs that have exceeded applicable TALs." The Permittees would like to clarify that the Site History will not solely be used to make determinations in the SSD, rather it will be used as supplemental information.

EPA Response: EPA accepts the suggested language.

Comment #23: Part I.C.2. In the first paragraph of this section, please clarify the language regarding when monitoring will begin per the initial SIP. The Permittees propose that the new monitoring requirements be implemented during the first full monitoring season following the initial SIP submittal.
The Permittees have added clarification language to the initial SIP monitoring timeline in Part I.E.2.

EPA Response: The new monitoring requirements shall be implemented according to SIP monitoring timeline as stated in Part I.E.2.

Comment #24: Part I.C.2. Edit this sentence as follows: "For Sites where data has been collected under the 2010 Permit, **or requests have been submitted to EPA (e.g., Alternative Compliance or Force Majeure) that are pending**, this demonstration must be conducted within 1 year of the effective date of this Permit." The Permittees believe it is imperative that the Permit address past unanswered requests to EPA where compliance monitoring data may be rescreened via the SSD and the timeline during which such rescreening will take place.

EPA Response: Comment noted for the record. See EPA response to NMED Comment #3.

Comment #25: Part I.C.2.a. In the second paragraph of this section, delete "sole" from sentence when referring to "sole source" as there may be multiple sources (undeveloped background, developed background, Site run-on, etc.), and it is unreasonable to claim that the Site is the "sole source" of any POC.

EPA Response: EPA believes that the sentence needs to retain the “sole”, however the sentence has been modified to recognize other sources are contributing POCs.

Comment #26: Part I.C.2.a. The Permittees would like to re-propose that equation (1) be edited as follows: “V(runoff) – V(run-on) ≤ ~~0~~ **TAL**”. This is not a zero-discharge Permit and the Permittees use the TALs as the benchmarks with which to determine a path forward for each Site. This also applies to EPA’s response to the Citizens’ for Clean Water (CCW’s) comment on Run-on/Runoff (page 18 of the Fact Sheet).

EPA Response: In response to this comment and CCW’s, EPA has re-evaluated this proposed formula. While it would guarantee that run-off is no worse than run-on (i.e., the concentration leaving the site is less than the concentration entering the site), it is possible for the result to be

less or equal to zero (0) even when the contribution solely from the site itself would exceed the TAL if the concentration in the off-site run-on is sufficiently elevated. EPA has determined to limit the use of formula (1) to situations when run-on is from undeveloped land and would contain natural background concentrations, so the Site run-off would not contain POCs levels that would exceed those to be expected from natural background run-off from this area. Note that Part I.C.2.b allows for consideration of elevated background concentrations.

Comment #27: Part I.C.2.b. Edit the sentence as follows: "…information on land use upstream of and within the SMA, and **relevant** scientific literature". The Permittees would like to specify that the scientific literature needs to be relevant to the Site location, ecology, hydrology, and location.

EPA Response: EPA agrees, the sentence in the final IP is revised accordingly.

Comment #28: Part I.C.2.b.(i). Edit the composite BTV equation as follows: "~~90th percentile~~ **C**omposite BTV = **[**(% impervious SMA area * 90th percentile developed landscape BTV) + (% pervious SMA area * **95-95 UTL** ~~90th percentile~~ undeveloped landscape BTV)**]/ 100%**" such that units will be consistent. Rationale for the request to change the BTV statistic for undeveloped areas from the 90th percentile to the 95-95 UTL is discussed in comment number 32.

EPA Response: The final permit will use the 90th percentile composite BTV. See EPA response to NMED Comment #7.

Comment #29: Part I.C.2.b.(i). Edit SW Tier 1 as follows: "SW Tier 1: When the confirmation sample result ~~is less than~~ **does not exceed** the TAL, the Permittees can cease monitoring for that POC for the remainder of the Permit." to be consistent throughout the Permit.

EPA Response: EPA agrees, change made accordingly.

Comment #30: Part I.C.2.b.(i). Edit the second sentence of SW Tier 2 as follows: "However, if the **composite** BTV and the confirmation sample result ~~are less than~~ **do not exceed** the TAL, SW Tier 1 applies." to be consistent throughout the Permit.

EPA Response: EPA agrees, change made accordingly.

Comment #31: Part I.C.2.b.(i). Edit the second sentence of SW Tier 3 as follows: "However, if the **composite** BTV and the confirmation sample result ~~are less than~~ **do not exceed** the TAL, SW Tier 1 applies." to be consistent throughout the Permit.

EPA Response: EPA agrees, change made accordingly.

Comment #32: Part I.C.2.b.(i), Appendix C, and Pages 13 and 18 of the FS. The Permittees have worked diligently with EPA, NMED, and CCW regarding the development of storm water BTVs, particularly with respect to investigating data stability, data quality, and selecting sampling locations for background that are upwind of the Laboratory yet have similar elevation gradients, soil types, geologic formations, and vegetative cover (Windward, SEP DQO/DQA

Document, 2017). During a series of webinars and meetings between September 2018 and January 2019, the Permittees and stakeholders discussed various statistical approaches to use for BTVs, with the Permittees proposing the 95-95 upper tolerance limit (UTL) as the most appropriate statistic for the intended use and population parameters of the background dataset. Indeed, soil/sediment and groundwater BTVs for environmental cleanup and risk assessments are commonly computed based on the 95-95 UTL which "is designed to contain, but not exceed, a large fraction (95%) of the possible background concentrations within a sampled population, thus providing a reasonable upper limit on what is likely to be observed in background with a 95% degree of confidence" (page 14 of 2019 draft IP). The 95% degree of confidence is considered a good compromise between false positives and false negatives and the UTL provides a predictive setup for future sampling results, unlike upper percentiles which "potentially may lead to a higher number of false positives resulting in unnecessary cleanup (i.e., determining a clean on-site location comparable to background as dirty)" (U.S. EPA Region 9, 2011). CCW is a proponent of a more conservative upper percentile that would lead to approximately 25% false positives (i.e., unnecessary cleanup at 25% of Sites); however, there is no statistical, environmental, or budgetary foundation for this statistic. The Permittees suggest a compromise: the 95-95 UTL BTV for undeveloped landscapes which tend to be associated with naturally occurring constituents, and the 90th percentile BTV for developed landscapes which tend to be associated with anthropogenic-related constituents.
U.S. EPA Region 9 (2011), "Statistical Methods used to Establish Background Datasets using Sampled Data Collected from DTLs, and Surface and Subsurface Soils of Three RBRAs of the Two Formations and Compute Estimates of Background Threshold Values Based Upon Established Background Datasets (with and Without Observations) For the Santa Susana Field Laboratory Investigation."

EPA Response: The final permit will utilize the 90th percentile BTVs for developed and undeveloped landscapes. Please see EPA response to NMED Comment #7.

Comment #33: Part I.C.2.b.(ii). Replace first sentence of intro to SD Tiered approach with the following language: "**When Permittees use Site-specific information in the SSD**, ~~Soil data can be used to help confirm site status, but cannot be the only factor in making a determination. Using~~ with validated surface soil data results (i.e., within 3 feet below ground surface) from Consent Order soil characterization efforts, the following comparison can be made: 95-95 upper tolerance limit (UTL)..." as this more closely mirrors the SW Tier description.

EPA Response: Change made accordingly.

Comment #34: Part I.C.2.b.(ii). Add a reference to the 2019 NMED "Risk Assessment Guidance for Site Investigations and Remediation; Volume 1 Soil Screening Guidance for Human Health Risk Assessments" as this is the screening guidelines the Permittees will use to perform soil screening.

EPA Response: EPA will update permit language to reference the 2021 NMED Risk Assessment Guidance for Site Investigations and Remediation, Volume I - Soil Screening Guidance for Human Health Risk Assessment (November 2021).
https://www.env.nm.gov/hazardous-waste/guidance-documents/

Comment #35: Part I.C.2.b.(ii). Please replace the existing SD Tier language with the following (per the Permittees' July 15, 2019, final Permit application): "SD Tier 1: When the soil sample result does not exceed the 95-95 UTL BTV for inorganic POCs or 10% of the SSL for organic POCs and inorganic POCs with no BTV, the Permittees can cease monitoring for that POC and it is not considered as a Site-related POC. If SW Tier 1 conditions are also met, Permittees may request the Site be deleted from the permit.
SD Tier 2: When the soil sample result of one or more POCs exceed(s) the 95-95 UTL BTV for inorganic POCs or 10% of the SSL for organic POCs and inorganic POCs with no BTV, the POC shall remain or be added to storm water monitoring requirements for that SMA if it is considered as a Site-related POC."

EPA Response: SD Tier Language has been adopted in the final permit.

Comment #36: Part I.C.2.b.(ii). Delete the third paragraph of this section: "The tier results of the confirmation…the POCs (see Part I.D)." as it is redundant with the introduction to Part I.C.2.

EPA Response: Change made accordingly.

Comment #37: Part I.C.2.c. The Permittees request clarification as to when, following provision of documentation to EPA regarding Site history, the Permittees can expect a response from EPA. The Permittees are requesting that the permit be edited as follows: "…not exposed to storm water. **Upon provision of documentation to EPA that a POC is not Site related the Permittees may cease monitoring for the POC. If EPA provides a response that the POC is not to be removed then the Permittees will initiate monitoring at that time.** Relevant documentation of Site-related knowledge shall be reported in the SIP."

EPA Response: Since EPA will review/approve or disapprove the SIP during the review process, the suggested sentence is not necessary.

Comment #38: Part I.C.3. Change final sentence in introductory paragraph as follows: "The Permittees may ~~submit a written request to EPA, with a copy to NMED, to~~ place a **Site or** Sites in the LTS Category if it meets one **or more** of the following conditions: ..." as Sites will be screened (and potentially categorized as LTS) annually and documentation of the SSD will be included in the SIP to support the LTS categorization.

EPA Response: The final permit retains the written request requirement and read as "The Permittees may submit a written request to EPA, with a copy to NMED, to place a **Site or** Sites in the LTS Category if it meets one **or more** of the following conditions: ..." This is expected to be handled annually through the SIP process.

Comment #39: Part I.C.3.(b). To be consistent with the Permittees' suggested revisions to Part I.C.2.b.(ii), remove Part I.C.3.(b) as it conflicts with the Permittees' proposed SD Tiered approach.

EPA Response: Part I.C.3.(b) deleted from the final permit.

Comment #40: Part I.C.3.(c). Why is this section called out specifically in LTS and does it preclude us from deleting a Site with Wildlife Habitat standards for non-perennial streams? Does this negate the BTVs for PCB and LTS using BTVs? This statement conflicts with the footnote in the TAL table (currently Appendix C) and the Fact Sheet (page 13).
The Permittees recommend deletion of this section.

EPA Response: See Response to Comment #12 to NMED.

Comment #41: Part I.C.3.(d). Change to "Storm water sample results are greater than Adjusted Gross Alpha (AGA) **ATAL** before monitoring requirements of AGA ~~is~~ **was** removed from the **2010** permit; or" to clarify which AGA data would qualify a Site to be placed into the LTS category.

EPA Response: Part I.C.3.(d) applies to any Site where AGA becomes the only unsolved POC. For clarification purposes, the sentence has been revised to read: *"Storm water sample results are greater than Adjusted Gross Alpha (AGA) ATAL before monitoring requirements of AGA was removed from the 2010 permit."*

Comment #42: Part I.C.3.(e). Edit language as follows "Sites **that** have no evidence of storm water discharges **(as required by Part I.B.2.b, Post Storm Rain Event Inspections)** for the past five years." For Site(s) where monitoring is required, Part I.B.2.b describes the process the Permittees will use to identify if there has been discharge at a Site.

EPA Response: For clarification purposes, Part I.C.3.(e) is revised accordingly.

Comment #43: Part I.C.3.(d) (if comments 39 and 40 are accepted). The Permittees request to add language to the end of Part I.C.3, Long-Term Stewardship, which reads:
"(d) A Site is deferred under the NMED Consent Order and Site investigations are delayed. When the Site is removed from the NMED Consent Order deferred list, active confirmation monitoring will resume at the Site per Part I.B." Under the NMED Consent Order: "'Deferred' or 'Deferred Site' means the SWMUs and AOCs for which full investigation and/or remediation is deferred until such time as the SWMU or AOC is taken out of service or otherwise becomes accessible (e.g., firing sites and active facilities). Deferred Sites include the SWMUs and AOCs where delayed investigation, due to active Facility operations, was proposed in NMED-approved investigation work plans and reports." This delay in investigation directly impacts the IP, as no soil samples will be collected until the Site is removed from the deferred list. Without soil sample results, the Permittees cannot fully perform a Site Evaluation per Part I.C. In addition, current operational activities, including firing, are ongoing at the Sites. Therefore, given the complex contractual and regulatory considerations associated with transferring Site management between LANL contractors (see comment number 86), and the inability to complete Site evaluations, the Permittees request to place the NMED Consent Order deferred Sites into Long-Term Stewardship (Part I.C.3) until they are removed from the deferred list and NMED Consent Order Site investigations resume. When the Site is removed from the deferred list, active confirmation monitoring will resume at the Site per Part I.B.

EPA Response: LANL Comment #39 was accepted, however Comment #40 was not accepted as proposed. See Response to NMED's Comment #13. RCRA deferred sites have been added to Part I.C.3 and the first LTS sentence has been modified to read: *"The Long-Term Stewardship (LTS) Category includes Sites that do not meet the requirements for Site deletion under Part I.C.4 and RCRA deferred sites with BMPs"*

Comment #44: Part I.C.4. Delete the first sentence of the last paragraph. If a Site is deleted from the Permit, BMPs will no longer need to be maintained because there will no longer be storm water discharges associated with industrial activities at that Site under 40 CFR 122.26(b)(14), as discussed in (a) through (f) of this section.

Replace the second sentence of the last paragraph with: "EPA may approve a Site deletion request as a minor modification to the Permit under 40 CFR 122.63(e) (2). If such a request is approved, EPA will notify the Permittees in writing and issue a written public notice that the Permit has been modified to remove the Site from the Permit prior to the expiration of the Permit." This language clarifies the approval and public notification process.

EPA Response: Regarding the comment on maintenance of BMPs following Site Deletions, please see EPA's response to NMED Comment #14.

Regarding the comment on the second sentence, the paragraph now reads: *"EPA may approve a Site deletion request as a minor modification to the Permit under 40 CFR 122.63(e) (2). If such a request is approved, EPA will notify the Permittees in writing and issue a revised page to the Permit."*

Comment #45: Part I.C.4.c. Sites are eligible for deletion from the Permit when "a minimum of two confirmation storm water samples were collected, no POCs exceeded the applicable TALs", the Permittees have identified the Sites (Attachment 8) that meet this criteria with samples collected under the 2010 Permit and are requesting they be deleted from the Permit.

Additionally, the Permittees request clarification as this deletion requirement of two confirmation samples with all results below TALs conflicts with Part I.B.1.i, "If the Permittees are unable to collect a second sample within two years, the results of the single sample may be considered to be representative of the discharge from that Site." Please edit Part I.C.4.c as follows: "For all SMAs that contain the Site, a minimum of two confirmation storm water samples were collected **(or see Part I.B.1.i)**, no POCs exceeded the applicable TALs, and therefore, the Permittees demonstrated that the Site is no longer considered an industrial activity for areas where industrial activity has taken place in the past pursuant to 40 CFR 122.26(b)(14);"

EPA Response: Please see Condition of Certification #5 – Site Deletions. For clarification purposes, the suggested reference to Part I.B.1.i is added to the final permit.

Comment #46: Part I.C.4.d. Edit the sentence as follows: "…exposed to storm water and/**or** demonstrating that no significant industrial materials from previous industrial activity remain at

the Site." It is not always the case that soil removal is needed to demonstrate than no significant industrial materials remain at the Site.

EPA Response: Paragraph I.C.4.d. specifically addresses if the Permittees wants to demonstrate no significant materials remain through soil removal. Paragraph I.C.4.c addresses "no significant materials remain" in general. No change made.

Comment #47: Part I.C.4.d. Under this section EPA states that Sites are eligible for deletion from the permit when, "The Permittees certified corrective action complete by removing soil that contained a release of Site-related pollutants that were exposed to storm water and demonstrating that no significant materials from previous industrial activity remain in the Site", this language covers Sites the Permittees certified corrective action complete through receipt of a certificate of completion (COC) from NMED under the 2010 IP. The Permittees have screened the Sites which were certified complete through this manner and for those Sites which qualify for Long-Term Stewardship the Permittees are requesting they be deleted from the Permit, the list of these Sites is included as Attachment 6.

EPA Response: See Condition of Certification #5 – Site Deletions.

Comment #48: Part I.C.4.f. Rewrite this section as follows: "I~~nsufficient storm water runoff results in confirmation samples not being collected at the associated SMA during the previous permit cycle. If the following criteria are met, the Sites are not discharging into a receiving stream or canyon:~~ **If, for Long-Term Stewardship Sites, no evidence of discharge is apparent at a Site after a 25-year, 24-hour storm event or, if the Site is being monitored, the following conditions are met**: …" to better clarify the conditions in which Site deletion would occur under this part of the Permit.

EPA Response: EPA agrees, the final permit adopts the suggested language.

Comment #49: Part I.D.1. Edit language as follows: "Once a ~~TAL or BTV~~ **composite BTV and/or TAL (per Part I.C.2)** has been exceeded..." as this language describes the conditions that prompt Corrective Action.

EPA Response: Change made accordingly.

Comment #50: Part I.D.1. In the Determination of Corrective Action Measures section, delete the second sentence: "At a minimum…from storm water." This sentence proposes requirements that are either overly onerous and inappropriate for an NPDES permit (i.e., "evaluation of the efficacy, limitations, and predicted water quality improvement performance of any proposed storm water controls based on published literature; or distribution of contaminants in soil and the predicted efficacy of any proposed soil removal on removal of POCs from storm water"), or are addressed during an internal, intensive decision-making process where many potential corrective actions are considered and includes an internal peer review process (i.e., "volume of storm water currently retained and the potential for additional retention of storm water; potential and physical limitation for installation of Site-appropriate storm water controls [with consideration of technological availability]").

EPA Response: EPA believes selection of corrective actions should be based on good engineering practices and would require consideration of the benefits of the various options and site limitations that would affect their applicability to a particular site.

To improve clarity, EPA has revised the sentence to read as: "*At a minimum, as applicable this corrective action determination shall consider one or more of the following: volume of storm water currently retained and the potential for additional retention of storm water; potential and physical limitation for installation of Site-appropriate storm water controls (with consideration of technological availability); evaluation of the efficacy, limitations, and predicted water quality improvement performance of any proposed storm water controls (may include information from published literature or manufacturers specifications); or distribution of contaminants in soil and the predicted efficacy of any proposed soil removal on removal of POCs from storm water.*"

Comment #51: Part I.D.1.a. Edit the sentence as follows: "Where feasible, these enhanced controls shall incorporate low-impact design and green infrastructure design features **(e.g., plunge pools, compost-filled wattles, and bio-retention basins)**" as the Permittees would like to include green infrastructure design features which are already in use or planned for future use.

EPA Response: The suggested language is added to the final permit as examples of green infrastructure.

Comment #52: Part I.D.1.b.ii. Please correct II to ii, to be consistent with the numbering schema in this section.

EPA Response: Correction made.

Comment #53: Part I.D.1.b.ii. Edit the first sentence as follows: "Soil removal. **The** Permittees shall demonstrate and certify to EPA, with a copy to NMED, that soil removal meets the requirements of this Part through collection and evaluation of ~~confirmation~~ soil sampling results." as the Permittees believe the inclusion of "confirmation" is unnecessary because they are soil sampling results, not storm water sampling results.

EPA Response: EPA agrees with the suggested revision and has modified in the final permit.

Comment #54: Part I.D.1.b.ii. Remove the Note from this section, as this conflicts with other parts of the Permit and the Permittees find the note to be vague as to what "evidence" would be considered under this Note.

EPA Response: After reconsideration, including NPDES permit jurisdiction being limited to discharges to the Waters of the U.S. and possible unintended impacts on the use of green infrastructure methods to mitigate runoff, this note is deleted from the final permit.

Comment #55: Part I.D.1.c. Edit the sentence in the second paragraph as follows: "The Permittees shall provide, in **the SDPPP**, information (e.g., sediment removal, sediment depth, water level, estimated capacity remaining, evidence of discharges, or others) to demonstrate the retention facility maintains capacity to **store runoff volume** from a 3-year, 24-hour storm

event." The Permittees would like to clarify where the information will be presented, as well as to use clear and consistent language with respect to a 3-year, 24-hour storm event.

EPA Response: Suggested changes made in the final permit for clarification purposes.

Comment #56: Part I.D.1.c. Edit the sentence in the fourth paragraph as follows: "In an event of discharge, the Permittees shall report such a discharge in the annual SDPPP and demonstrate that such a discharge is caused by a storm event that is equivalent to **greater than** a 3-year, 24-hour ~~or greater~~ storm **event**." The Permittees would like clarify that anything greater than (not equal to) storm water runoff from a 3-year, 24-hour storm event would be considered a discharge from a control structure designed to retain storm water runoff from a 3-year, 24-hour storm event.

EPA Response: Suggested changes made in the final permit for clarification purposes.

Comment #57: Part I.D.2. Edit the sentence as follows: "…or POCs that **exceed composite BTVs and/or TALs (per Part I.C.2)** are contributed by sources…" as this language describes the conditions that prompt Corrective Action.

EPA Response: Suggested change made in the final permit.

Comment #58: Part I.D.2. Remove "within 90-days of validated confirmation of TAL or BTV exceedance." This period of time is too short for what is required for an Alternative Compliance request and it conflicts with the Fact Sheet (page 27).

EPA Response: EPA agrees to delete the 90-day timeframe from the final permit since the Alternative Compliance will be accomplished on a case-by-case basis and 90-days may not be sufficient.

Comment #59: Part I.D.2. Please edit the Note as follows: "(Note: Alternative Compliance requests submitted ~~in 2015~~ under the previous permit conditions may be resubmitted with all supporting documents, if applicable under this permit, without reopening a new public notice.)" The Permittees request the ability to rescreen all Alternative Compliance requests submitted under the AC Permit.

EPA Response: EPA agrees to re-consider, upon request, all Alternative Compliance requests submitted under the Administratively Continued Permit. See EPA response to NMED Comment #3.

Comment #60: Part I.D.3. Edit the section as follows: "If ~~one or more of the exceedance POCs exceeding the applicable TALs or BTVs cannot be excluded as the source~~ **corrective action is required at the Site**, pursuant to Part I.C, the Permittees shall take proper corrective actions and complete installation of additional control measures **as soon as practicable**, or within 24 months from the date when the Permittees have knowledge of **composite BTV and/or TAL** or BTV exceedances **(per Part I.C.2)**. ~~The Permittees shall make reasonable efforts, in good faith, to achieve completion of corrective actions within the 24-month compliance schedule.~~ For Sites which require corrective actions prior to the effective date of the final permit, ~~corrective actions~~

installation of additional control measures shall be completed no later than ~~12~~ **24** months from the effective date of the final permit.
The proposed language is more precise, less redundant, and describes the conditions that prompt Corrective Action. Additionally, the Permittees are requesting additional time to complete installation of additional control measures to allow for proper data screening per the initial SIP, pursuant to Part I.E.2, which allows the Permittees one year from the effective date of the final permit to submit the initial SIP.

EPA Response: In response of this comment Part I.D.3 has been revised as follows: *"If corrective action is required at the Site, pursuant to Part I.C.1, the Permittees shall take proper corrective actions and complete installation of additional control measures as soon as practicable, but not later than 24 months from the date when the Permittees have knowledge of composite BTV and/or TAL exceedance (per Part I.C.2). For Sites which installation of additional control measures has been started prior to the effective date of the final permit, the Permittees shall complete it as soon as practicable. If such control measures have not been started prior to the effective date of the permit, and more than 24-months will be required to complete corrective action at a particular site, the permittee shall submit a compliance schedule to complete installation as soon as practicable but no later than the expiration date of this permit. Unless disapproved by EPA within 60-days, the permittees proposed schedule is provisionally approved."*

Comment #61: Part I.D.5. The Permittees recommend removal of this section. The difference between Certification of Completion of Corrective Action, Completion of Corrective Action, and Certification of Installation of a Control Measures is confounding. What exactly does it mean to certify that corrective action is complete? This section is redundant with requirements under Determination of Corrective Action Measures (Part I.D.1) and Confirmation Sampling (Part I.B.1). If this section remains, please consider the following comments:
Edit the preamble as follows: "Under this Permit, completion of corrective action **shall occur when** ~~shall mean~~:" to be more clear as to what conditions must be met to Certify Completion of Corrective Action.
The Permittees request to delete section Part I.D.5.a, because there are three pathways for Corrective Action, thus there should be three pathways for Completion of Corrective Action Certification, and because it is inconsistent with Part I.C.2.
Edit Part I.D.5.b as follows: "The installation of enhanced control measures under Part I.D.1.(a) with confirmation monitoring analytical results **that do not exceed** ~~less than~~ the applicable **composite BTVs and/or TALs (per Part I.C.2)** ~~TALs or BTVs~~ as demonstrated under Part I.B.1; or" This language describes the conditions that prompt Corrective Action and is consistent with other sections of the permit.
Edit Part I.D.5.c as follows: "The installation of control measures **or the removal of soil** that eliminate exposure of Site-related POCs to storm water under I.D.1.(b), with confirmation monitoring analytical results that **do not exceed** ~~less than~~ the applicable **composite BTVs and/or TALs (per Part I.C.2)** ~~TALs or BTVs~~ as demonstrated under Part I.C., if confirmation monitoring is required;" This language describes the conditions that prompt Corrective Action and is consistent with other sections of the permit.

EPA Response: EPA eliminated the number and subtitle for *Force Majeure,* however left the

paragraph explaining *Force Majeure,* and now I.D.5 is I.D.4. The four-status listed under Part I.D.4 could demonstrate that a Site has no significant amount of industrial materials remaining and exposed to storm water. Therefore, EPA requires the Permittees to certify it. For clarification purposes, permit conditions are reworded as:
"The Permittees must certify to EPA with a copy to NMED, pursuant to 40 CFR 122.22(b), upon completion of corrective actions. The Permittees shall certify for:
(a) A Site or Sites are not reasonably expected to be the source for remaining POCs as demonstrated under Part I.C.2 Site Specific Demonstrations; or
(b) The installation of enhanced control measures under Part I.D.2(a) with confirmation monitoring analytical results that do not exceed the applicable composite BTVs and/or TALs (per Part I.C.2) as demonstrated under Part I.B; or
(c) The installation of control measures or the removal of soil that eliminate exposure of Site-related POCs to storm water under I.D.1.(b), with confirmation monitoring analytical results that do not exceed the applicable composite BTVs and/or TALs (per Part I.C.2) as demonstrated under Part I.C., if confirmation monitoring is required as demonstrated under Part I.B., if confirmation monitoring is required; or
(d) The installation of control measures that retains a volume of storm water runoff or minimize discharges from a Site or SMA that is equivalent to a 3-year, 24-hour storm event under Part I.D.1(c).

Comment #62: Part I.D.6. Delete Part I.D.6, as it is redundant, confusing, and discussed in much greater detail in Confirmation Sampling (Part I.B.1). In a previous comment on Part I.C.2, the Permittees have recommended Part I.D.6.c be added to Part I.C.2 for clarity.

EPA Response: EPA agrees that Part I.D.6(a) and (b) may cause confusions because samples taken before a corrective action may not be eligible for confirmation purposes. Part I.D.6(c) may be moved to Part I.C.2 for clarification purposes. The remainder of Part I.D.6 is deleted from the final permit.

Comment #63: Part I.E.1. After the first sentence, add: "**The reporting period is from January 1 to December 31**." to clarify the reporting period and to be consistent with other sections in the permit.

EPA Response: The suggested sentence is added for clarification purposes.

Comment #64: Part I.E.1.c. Edit the following sentence as follows: "All Changes must be incorporated into the SDPPP. ~~and a summary of these changes must be included in the Annual Report.~~" The Annual Report is no longer a requirement in this permit, thus all references to it should be removed.

EPA Response: EPA agrees, as the Annual Report is no longer a requirement.

Comment #65: Part I.E.2. Edit the sentence as follows: "Within 1 year of the effective date of the Permit, the Permittees, ~~in consultation with EPA and NMED Surface Water Quality Bureau (SWQB),~~ shall evaluate the appropriate monitoring requirements and representative sampling locations for all Sites covered under this permit."

The Permittees find this language to be vague with respect to consultation requirements. If the language is not deleted, please clarify the period of time for consultation, how comments will be resolved, whether Permittees shall wait to proceed with monitoring prior to finalization, etc. Furthermore, the SWQB does not have primacy in New Mexico regarding EPA NPDES Permits, thus should be removed from this statement.

EPA Response: See Condition of Certification #1. The Permittees shall consult with the New Mexico Environment Department (NMED) prior to sending the Sampling Implementation Plan (SIP) updates to EPA for review.

Comment #66: Part I.E.2.a. Edit this section as follows: "For each SMA, if the sampler location changed or a new location was added ~~as an investigative sample location~~ from the previous year, report any updated latitude and longitude and indicate the reason for the change in the appropriate SIP section." If the Permittees choose to add additional sampling locations, samples collected at that location will be confirmation samples.

EPA Response: Change made accordingly. If samples from new or additional locations are representative, sampling results could be used for confirmation purposes.

Comment #67: Part I.E.2.b. Delete the following sentences from the 3rd paragraph of this section: "Permittees will evaluate current and necessary best management practices to address any exceedance. The Permittees shall document analytical results and any voluntary actions taken in the SIP". Without a TAL, an exceedance cannot occur and this is inconsistent with other sections of the permit which refer to TAL exceedances. Additionally, as per the Permit, the Permittees will initiate Corrective Action and install control measures as necessary when a TAL is exceeded. Analytical results are reported annually, as well as being available to the public via the Intellus interface.

EPA Response: In case new POCs were identified during the SIP evaluation process, the referenced paragraph in the final permit is revised to read as "If a new POC is added for monitoring, the Permittees shall collect two samples. If there is an associated water quality standard for that POC that is Site-related, the monitoring result shall be compared to that standard."

Comment #68: Part II.1. Edit the sentence as follows: " ~~If the Permittees submit to EPA a Watershed Protection Plan which can demonstrate significant reduction of nonpoint source and point source water POCs from being discharged into major canyons and therefore will result in improvement of receiving water quality,~~ EPA may consider ~~such~~ a Watershed Protection Plan as Alternative Compliance for ~~associated~~ Sites **upstream of a watershed control**. ~~within the scope of the Plan.~~ **Storm water results from samples collected downstream of the control will be treated as compliance samples and screened per the Site-Specific Demonstration (Part I.C.2)**". This language clarifies how SSD will occur under a Watershed Protection Approach.

EPA Response: EPA has edited the sentence to read as follows: *"For approved Water Protection Plan Alternative Compliance Sites, storm water results from samples collected*

downstream of the control may be used for alternative compliance sampling purposes and screened per the Site-Specific Demonstration (Part I.C.2).”

Comment #69: Part II.3.(c). Change public meeting frequency from every six (6) months to annually, as agreed upon in the meetings held between EPA, NMED, and CCW prior to the submission of the July 15, 2019, draft application by the Permittees.

EPA Response: Change made accordingly. Public Meetings will be required at least once a year as per the agreement.

Comment #70: FS, State Certification Section. Edit the sentence as follows: "Santa Clara is therefore not **understood** ~~believed~~ to be affected by the discharges proposed to be authorized by this permit." such that the language is less subjective.

EPA Response: Comment noted for the record. No change needed in final permit.

Comment #71: FS, Part III. Part III, Receiving Water Uses, is missing additional receiving waters covered under this permit, please edit as follows:
"The receiving waters are designated under the NM WQS for the following uses: Rio Grande Basin Unclassified **Waters of the State** Segment No. 20.6.4.98, designated for livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact; Rio Grande Basin Segment No. 20.6.4.126, designated for livestock watering, wildlife habitat, coldwater aquatic life and secondary contact; Rio Grande **Basin** Segment No. 20.6.4.128, designated for livestock watering, wildlife habitat, limited aquatic life and secondary contact; **and Rio Grande Basin Segment No. 20.6.4.114, designated for irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life, and public water supply** pursuant to the approved NMWQS."

EPA Response: Comment noted for the record. Change made in the final permit.

Comment #72: FS, Part VI. The numbering on this Part is incorrect, the Permittees request that the numbering be changed from “VI” to “IV”.

EPA Response: Comment noted for the record.

Comment #73: FS, Part V. In the first paragraph, please edit the language as follows: "The Department of Energy (DOE) and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) are co-permittees (“~~Permittees,” or~~ jointly referred to as **"the Permittees"** ~~LANL~~ for the purposes of this permit.” The Permittees are not currently associated with LANL and this reference is incorrect. For all subsequent references where “LANL” is used in place of the “the Permittees” please replace LANL and replace with “the Permittees”.

EPA Response: Comment noted for the record.

Comment #74: FS, Part VI. The Permittees request that the last sentence of this Part be edited as follows: "The proposed renewal permit retains the requirement that applicable Best Management

Practices (BMPs) be installed and maintained at every Site**, as necessary**." Baseline BMPs have been installed at every site as part of the AC Permit and, in the new Permit, BMPs will be installed as necessary and as outlined in the Corrective Action section of the Permit (Part I.D).

EPA Response: Comment noted for the record. No change to the final permit is required.

Comment #75: FS, Part VII. In the Acronyms and Abbreviations section, the Permittees request that "BV background value" be removed from the list of Acronyms and Abbreviations because it is not used in the permit.
The Permittees request that the list of MSGPs in the Acronym and Abbreviation be edited as follows: "MSGP Multisector General Permit **(**~~NMR053195~~, **NMR050011, NMR050012, NMR050013)**." NMR053195 was terminated on October 31, 2018 and replaced by NMR050013 and the other two Permits are relevant to Los Alamos National Laboratory.

EPA Response: Comment noted for the record. No change to the final permit is required.

Comment #76: FS, Part VII.A.4. The Permittees agree that wildlife habitat and aquatic life criteria for cyanide are more stringent than those for human health-organism only (HH-OO), and consistent with other analytes in the Permit, more stringent applicable criteria for cyanide may offer sufficient protection and make EPA's 2015 recommended HH-OO update (EPA 820-R-15-031) largely moot for the purposes of this Permit. The Permittees reiterate that EPA's 1984 AWQC are stated as free cyanide (the sum of HCN and CN-), and that this measure is "a more reliable index of toxicity." Now that free cyanide and acid-dissociable cyanide are more easily discriminated from the total recoverable cyanide by improved analytical techniques, NMED is encouraged to update New Mexico Water Quality Standards to reflect this knowledge and advance in methods.

In response to EPA's comment solicitation on updating or revising TALs through the annual SIP process to reflect New Mexico Water Quality Standard (NMWQS) updates, the Permittees do not believe that it is appropriate to change TALs within a permit cycle. The Permittees request that TALs be updated or revised only when the permit is renewed.

EPA Response: Comment noted for the record. See EPA response to NMED's Comment #1. Changing the TALs would require a Major Modification to the permit. LANL can use the TALs on the permit for the proposal, but the final permit has been modified to allow EPA to also consider any changes to the current WQS that would have resulted in a more stringent TAL when deciding to grant requests based on TALs. LANL is free to also consider updated WQS in deciding whether to make the request.

Comment #77: FS, Part VII.A.5. The Permittee agrees that monitoring dissolved chromium (sum of dissolved chromium III and dissolved chromium VI) is appropriate for Clean Water Act purposes. While chromium III is sparingly soluble, biologically relevant (probable trace element), and non-toxic; dissolved chromium III is supported, as it could oxidize to chromium VI (toxic form). The Permittees agree that chromium speciation may be indicated for site-specific reasons; however, monitoring chromium species for storm water events is operationally infeasible. The Permittees encourage NMED to allow general monitoring for total dissolved

chromium for State Water Quality purposes as it is a scientifically supportable compromise accounting for potentially biologically available (potentially toxic) forms of Cr.

EPA Response: Comment noted for the record. New Mexico WQS are established by NMED. Permittee may discuss this concern directly with NMED. Establishment of WQS are outside the scope of this permit action.

Comment #78: FS, Part VII.B. The Permittees are proposing to update the hardness-dependent MTALs to include hardness data from storm water samples collected in 2018 and 2019. The Permittees are submitting a redline/strikeout version of Appendix C (see Attachment 2).

EPA Response: Comment noted for the record. See Condition of Certification #2.

Comment #79: FS, Part VII.C. The Permittees continue to investigate the nature and toxicity of aluminum for the Pajarito Plateau/Jemez Region. While the impact of a 10-µm filtration is distinct for the Pajarito Plateau/Jemez Region than from the Rio Grande at Buckman, the site for the 2011 Aluminum Filtration study leading to the NMED guidance, the Permittees note that the 10-µm does not sufficiently exclude non-toxic mineral forms of aluminum on the Pajarito Plateau/Jemez Region. New, regionally based guidance is warranted to take into account the high but non-toxic aluminum present in many New Mexico surface water systems, particularly stormwater. Since the submittal of the July 15, 2019 permit application, additional analysis (Ryan et al., 2019) concluded that storm water samples from the Pajarito Plateau (greater than 100 locations from background sites and SMAs, collected between 2007 and 2017), often exceeded EPA and New Mexico ambient water quality criteria, regardless of sample location or restriction of pre-filtering. Additionally, toxicity testing using sensitive organisms indicated that aluminum concentrations several-fold greater than ambient water quality criteria did not elicit a toxic response (Dail et al., 2020, in preparation). Current aluminum impairments (364 river miles state-wide) may have been erroneously listed given this new understanding of the form and toxicity of geologic aluminum (Ryan et al., 2019).

EPA Response: Comment noted for the record. New Mexico WQS are established by NMED. Permittee may discuss this concern directly with NMED. Establishment of WQS are outside the scope of this permit action.

Comment #80: FS, Part VII.E. The Permittees are submitting the final Background Threshold Value Report (see Attachment 9). Therefore, the Permittees have revised the BTVs to be used in conjunction with this Permit and have provided them in a redline/strikeout to Appendix C (see Attachment 2).

EPA Response: Comment noted for the record.

Comment #81: FS, Part VII.E. The Permittees believe that the composite BTV equation should be added to this section of the Fact Sheet: "Composite BTV = [(% impervious SMA area * 90th percentile developed landscape BTV) + (% pervious SMA area * 95-95 UTL undeveloped landscape BTV)] / 100." This is critical information to include when discussing BTVs and how they will be used in the new Permit.

EPA Response: Comment noted for the record. See EPA response to NMED Comment #7.

Comment #82: FS, Part VII.E. Regarding EPA's response to the LANL comment: "To use BTVs instead of TALs in certain circumstances does not conflict with anti-backsliding regulations." The Permittees would like to know when using the BTVs would conflict with anti-backsliding regulations and recommend removal of "in certain circumstances" from this sentence.

EPA Response: Comment noted for the record. Anti-backsliding requirements and exceptions are found at Clean Water Act (CWA) section 402(o), 303(d)(4) and 40 CFR 122.44(l). No change in final permit is necessary.

Comment #83: FS, Part VII.H. There is conflicting information regarding the application of the Site-Specific Demonstration for PCBs between the Fact Sheet (page 13) and the Permit (Long-Term Stewardship Part I.C.3 and Appendix C). The Permittees re-propose the following TALs for PCBs: the human health-organism only aquatic life standard for perennial streams (Water Body Segment Nos. 20.6.4.126 and 20.6.4.114) and the wildlife habitat standard for non-perennial streams (Water Body operational Segment Nos. 20.6.4.128 and 20.6.4.98).

EPA Response: The Permittees have commented on the proposed permit condition for PCB and also see EPA's response to Comment #40 above and EPA's response to NMED's Comment #12. See also Footnote #7 in Appendix B-1 of the final permit.

Comment #84: FS, Part VII.H. N3B welcomes NMED's UAA work to determine applicability of aquatic life use and/or human health-organism only criteria to certain waters.

EPA Response: Comment noted for the record.

Comment #85: FS, Part VII.I. The Permittees concur that active outfalls should be removed from the Individual Permit. This situation applies to three SWMUs: 03-045(b), 03-045(c), and 03-049(a). These Sites have been removed from Appendix A in Attachment 2.

EPA Response: Comment noted for the record. See Condition of Certification #5.

Comment #86: FS, Part VII.I. The Permittees acknowledge the difficulties associated with managing storm water discharges from legacy SWMUs/AOCs co-located with currently operational facilities such as firing sites. However, numerous issues require resolution before proposing that Sites be deleted from the IP and covered by another permit. These include further analysis of which facilities are co-located with SWMUs/AOCs, whether adjustment of SWMUs/AOCs boundaries that are located both inside and outside of operational facilities is appropriate, and determining the regulatory impacts of covering legacy SWMUs/AOCs under different permitting mechanisms. Activities at LANL are currently managed by two distinct contractors operating under different environmental permits and regulatory programs. If Site management is transferred between these contractors, additional direction from EPA on future regulatory requirements is requested. In addition, internal discussions would be required to determine how to implement contract changes prior to transferring Sites between permits. The Permittees have requested the addition of language to the Permit to place deferred Sites into

Long-Term Stewardship (see comment number 43) and are providing EPA with a list of the Sites deferred under the NMED Consent Order in Attachment 7 Table 7-1. If the Sites become inactive, and investigations are allowed to take place, the Permittees request the ability to change the Site status in the Permit in order to perform storm water monitoring as required.

EPA Response: See Response to NMED's Comment #13.

Comment #87: FS, Part VII.I. Based on the conditions laid out in the Permit the Permittees have evaluated the Sites not on DOE property. Non-DOE Sites which do not qualify for Long-Term Stewardship under the draft Permit conditions, should not be removed from the Permit at this time. Attachment 3 is a revised list of Sites proposed for deletion from the Permit. Attachment 4 lists the non-DOE Sites requested for deletion along with relevant supporting information: Site descriptions, parcel identification numbers and NMED Consent Order status for EPA's consideration.

EPA Response: Comment noted for the record. See Condition of Certification #6.

Comment #88: FS, Part VII.J. Please edit the language as follows: "…and therefore EPA intents **intends** to delete the original Site numbers through this permit renewal process."

EPA Response: Comment noted for the record.

Comment #89: FS, Part VII.J. Following the submission of the Permit application, the Permittees identified additional Sites where no significant industrial materials were known to be used. For EPA's consideration, the Permittees are providing a list of these Sites in Attachment 5.

EPA Response: Comment noted for the record. See NMED's Condition of Certification #5.

Comment #90: FS, Part VII.J. The Permittees are providing a revised table of the "List of Sites Not to Be Included In the Permit Renewal." In addition to the table currently included in the Fact Sheet, this new table includes Sites to be removed for the following reasons: Certificate of Completion from NMED under the Consent Order and certified Corrective Action Complete with no Site-related TAL exceedances; and Sites with all confirmation sample results less than TALs. This revised table is included as Attachment 3. To supplement the additional Sites included in this table, the Permittees are including Site descriptions and other relevant information for all categories (except Administrative changes) in Attachments 4-8.

EPA Response: Comment noted for the record. See NMED's Condition of Certification #5.

Comment #91: FS, Part VII.K. In EPA's response to CCW's comment on Site Deletion, the last sentence is confusing: "To remove a Site from this permit coverage does not shield the Permittees from complying with other regulatory requirements or obligations." The Permittees request more information regarding other regulatory requirements or obligations the Permittees would be required to comply with as stated in EPA's response.

EPA Response: Comment noted for the record. It was a general statement, the Permittees need to determine whether any of those Sites may be subject to any other permit requirements, such as RCRA, CERCLA, Air, or state groundwater permits or any other applicable federal, state or local regulations.

Comment #92: FS, Part VII.K.b. The Permittees disagree with EPA's response and request it be deleted from the Fact Sheet. The Sites in the Permit are linked to Sites in the Consent Order. During Consent Order investigations, the nature and extent of POCs is investigated, and under these circumstances, the SWMU or AOC boundary would change. These changes would be included in the SDPPP/SIP, sampler locations would be adjusted, and SMA boundaries would be updated, but would not result in the creation of a new SWMU or AOC.

The Permittees recommend the following response to CCW's comment: "The BTV development document (Windward 2018) does contain descriptions of the drainage areas to the background sampling locations. Disturbances, such as Forest Service dirt roads, grazing activities, etc., do occur in these drainage areas; however, there is no land in the Jemez mountains that does not have some small disturbance, as these mountains have been inhabited for many, many years."

EPA Response: Comment noted for the record. This sub-paragraph is about POCs migration beyond original boundary. EPA agrees that if the Permittees could address such problems through annual SDPPP/SIP process, there will be no need to designate a new Site ID.

Comment #93: FS, Part VIII.Part I.A. The final sentence of this section is confusing: "If in any case, the Site releases pollutants to the environment due to failure of BMPs or due to any cause, such discharges are not authorized unless the Permittees requests the coverage for the Site." If a Site is deleted from the Permit, BMPs will no longer need to be maintained because there will no longer be storm water discharges associated with industrial activities at that Site under 40 CFR 122.26(b)(14), as discussed in the Permit, Part I.C.4, Site Deletion.

EPA Response: Comment noted for the record. See EPA response to NMED's Comment #14.

Comment #94: FS. Part VIII.Part I.B.1.c. To add clarity, please edit the sentence as follows: "However, NMED and the Permittees may propose such **priority** ~~propriety~~ during SIP process, if appropriate."

EPA Response: Comment noted for the record.

Comment #95: FS, Part VIII.Part I.B.1.d. Delete: "or if monitoring data (from the facility, state, or local agency) show an exceedance of applicable TALs" because the Permittees cannot control facility, state, or local agency's method of collection, sample handling/preservation/filtration, or laboratory method of analysis.

EPA Response: Comment noted for the record. Please see EPA response to LANL Comment #18.

Comment #96: FS, Part VIII.Part I.B.1.d. Edit the sentence as follows "shall initiate appropriate actions to correct the problems within **ninety (90)** ~~thirty (30)~~ days of being made aware of such information." The Permittees request 90 days because 30 days is not a sufficient amount of time.

EPA Response: Comment noted for the record. Please see EPA response to LANL Comment #18.

Comment #97: FS, Part VIII. Part I.B.2.c. To be consistent with the language in the Permit, edit the sentence as follows: "The results of the inspections are to be reported to EPA annually **in the SDPPP**."

EPA Response: Comment noted for the record. See Part I.E.1.b.4 of final permit.

Comment #98: FS, Part VIII.Part I.C.1. Remove the following sentence, as it is no longer applicable: "And a concentration of 100 mg/L TSS, based on the benchmark value in the MSGP, was used to calculate total-dissolved conversion factors in the AC permit, if necessary."

EPA Response: Comment noted for the record.

Comment #99: FS, Part VIII.Part I.C.4.b. Remove the following sentence: "If the soil data demonstrate no significant amount of pollutants remains in the soil within 3-feet below the ground surface, it should be reasonable to assume that no pollutants of concern would be exposed to storm water." This statement is not included in the Permit and is not consistent with the Permit (Part I.C.4).

EPA Response: Comment noted for the record. The statement is consistent with the final permit Part I.D.1.b(ii).

Comment #100: FS, Part VIII.Part I.C.4.d. Edit the sentence as follows: "…exposed to storm water and/or demonstrating that no significant industrial materials from previous industrial activity remain at the Site." It is not always the case that soil removal is needed to demonstrate than no significant industrial materials remain at the Site.

EPA Response: Comment noted for the record. See Response to Comment #46.

Comment #101: FS, Part VIII. Part I.C.4.d. Under this section EPA states that Sites are eligible for deletion from the permit when, "The Permittees certified corrective action complete by removing soil that contained a release of Sit-related pollutants that were exposed to storm water and demonstrating that no significant materials from previous industrial activity remain in the Site", this language covers Sites the Permittees certified corrective action complete through receipt of a COC from NMED under the 2010 IP. The Permittees have evaluated the Sites which were certified complete through this manner. Sites with a COC which qualify for Long-Term Stewardship in the draft Permit are being requested for deletion. Based on this evaluation, the Permittees are requesting the Sites included in Attachment 6 be deleted from the Permit.

EPA Response: Comment noted for the record. See Condition of Certification #5 – Site Deletions and see also Response to LANL Comment #47.

Comment #102: FS, Part VIII. Part I.C.4.e. Edit the sentence as follows: "…no applicable TAL or BTV exceedances are reasonably…" to be consistent with the Permit, which states that a Site is eligible for deletion from the Permit when there are no applicable TAL exceedances.

EPA Response: Comment noted for the record.

Comment #103: FS, Part VIII. Part I.C.4.f. Delete: "When EPA considers a 3-year retention technology in the area could be an acceptable and complying with the corrective action requirements" This information is not in the Permit and seems out of place in this section.

EPA Response: Comment noted for the record.

Comment #104: FS, Part VIII. Part I.C.4.f. In response to CCW's comment on the proposed site deletions, the Permittees have provided additional information on the 14 Sites noted in the comment made by CCW (see Attachment 10).

EPA Response: Comment noted for the record. Please see Condition of Certification #5.

Comment #105: FS, Part VIII. Part I.C.4.f. Regarding EPA's proposal to "...add a condition which requires the Permittees to certify that they will properly maintain BMPs in place, if applicable, and notify EPA for permit coverage if POCs re-exposed to storm water and trigger storm water discharge associated with industrial activity under 40 CFR 122.26(b)(14)." The Permittees strongly advise against this. If a Site is deleted from the Permit, BMPs will no longer need to be maintained because there will no longer be storm water discharges associated with industrial activities at that Site under 40 CFR 122.26(b)(14), as discussed in the Permit, Part I.C.4, Site Deletion.

EPA Response: See EPA's response to NMED's Comment #14.

Comment #106: FS, Part VIII. Part I.D.1. Edit the sentence as follows: "Once a **composite BTV and/or TAL (Part I.C.2 of the Permit)** ~~TAL or BTV~~ has been exceeded for a Site related constituent…" This language describes the conditions that prompt Corrective Action.

EPA Response: Comment noted for the record. See EPA response to LANL Comment #49.

Comment #107: FS, Part VIII. Part I.D.1. In the 2nd paragraph of this section, the Permittees disagree with EPA's consideration of using the 5-year, 24- hour storm event, and request that this language be deleted from the Fact Sheet. Use of the 3-year, 24-hour storm event was negotiated and agreed upon in webinars and meetings with EPA, NMED, and CCW between September 2018 and January 2019.

EPA Response: Comment noted for the record. The final permit used the 3-year, 24-hour storm event in Part I.D.

Comment #108: FS, Part VIII. Part I.D.1. In response to CCW's comment on "total retention", part (c), the Permittees would like to clarify that, for any soil removal, the Permittees follow the NMED-approved Sediment Management Decision Tree Guidance (LANL 2017).

EPA Response: Comment noted for the record. See EPA response to NMED Comment #4.

Comment #109: FS, Part VIII. Part I.D.1. In response to CCW's comment on "total retention", part (d), the Permittees are required to report annually to NMED regarding sediment management, as part of the NMED-approved Sediment Management Decision Tree Guidance (LANL 2017).

EPA Response: Comment noted for the record.

Comment #110: FS, Part VIII. Part I.D.1. In response to CCW's comment on "total retention", part (g), the Permittees are providing information regarding design standards. The Permittees' Conduct of Engineering requires construction projects to be in compliance with N3B Engineering Standards as outlined in the N3B Engineering Standards Manual (N3B ESM, N3B-STD-342) which governs requirements for project design and construction documents (i.e., drawings and specifications), including construction testing and inspection plans. N3B Engineering Standards are in accordance with DOE Standard 1020. The N3B Storm Water BMP Manual provides additional guidance on storm water management, sediment and erosion control, and low impact development features design, inspection, and maintenance.

EPA Response: Comment noted for the record.

Comment #111: FS, Part VIII. Part I.D.1. In response to CCW's comment on "total retention", part (h), the Permittees have an intensive internal peer review process on all engineering designs, as required by N3B quality control and assurance guidelines.

EPA Response: Comment noted for the record.

Comment #112: FS, Part VIII. Part I.D.1. Delete the following sentence in EPA's response to CCW's comment on soil removal: "If evidence show that contaminants…through the annual SIP process." The Sites in the Permit are linked to Sites in the Consent Order. During Consent Order investigations, the nature and extent of POCs is investigated, and under these circumstances, the SWMU or AOC boundary would change. These changes would be included in the SDPPP/SIP, sampler locations would be adjusted, and SMA boundaries would be updated, but would not result in the creation of a new SWMU or AOC.

EPA Response: Comment noted for the record. See EPA response to LANL Comment #92.

Comment #113: FS, Part VIII. Part I.D.2. In the Permit (Part I.D.2), EPA has set a deadline of 90 days for submittal of Alternative Compliance requests, which contradicts EPA's response in this section. Please remove the 90-day submission deadline from the Permit, as this period of time is too short for what is required for an Alternative Compliance request.

EPA Response: Comment noted for the record. See EPA response to LANL Comment #58.

Comment #114: FS, Part VIII. Part I.D.3. Edit language in this section as follows: "If additional corrective actions are required, the Permittees shall make reasonable efforts, in a good faith, ~~to achieve for completion of corrective actions~~ **install additional control measures** within the 24 months." Completion of corrective action requires collection of storm water samples and the Permittees cannot guarantee storm water samples will be collected within the 24-month timeframe.

EPA Response: Comment noted for the record. See EPA response to LANL Comment #60.

Comment #115: FS, Part VIII. Part I.D.3. Edit EPA's response as follows: "...EPA proposes that 'For Sites which require corrective actions prior to the effective date of the final permit, **installation of additional control measures** ~~corrective actions~~ shall be completed no later than **24** ~~12~~ months from the effective date of the final permit.' "The Permittees are requesting additional time to complete installation of additional control measures to allow for proper data screening per the initial SIP, pursuant to Part I.E.2, which allows the Permittees one year from the effective date of the final permit to submit the initial SIP. The edits to the quoted language here matches the Permittees' suggested edits to the Permit, Part I.D.3.

EPA Response: Comment noted for the record. See EPA response to LANL Comment #60.

Comment #116: FS, Part VIII. Part I.D.6. Part VIII, Part I.D.5 (should be I.D.6), Monitoring at Sites in Corrective Action. Please edit the sentence as follows: "If the Permittees have submitted requests for either Alternative Compliance or Force Majeure to EPA that are pending, the Permittees may complete a Site-Specific Demonstration pursuant to the permit." The Permittees would like this section to include all requests to EPA that are pending, the list of which can be found in Attachment 11.

EPA Response: Comment noted for the record. See EPA response to NMED Comment #3. EPA agrees that monitoring data and supporting information collected or submitted to EPA could be used for SSD screening purposes.

Comment #117: FS, Part II.1. The Permittees are in favor of a Watershed Protection Approach as outlined in the Permit (with minor editorial suggestions from the Permittees) and the Fact Sheet. Indeed, the Permittees are in favor of in-stream sediment removal credits as part of the Watershed Protection approach; however, the Permittees request more information as to how credit for in-stream sediment removal would work and what the guidelines would be. In addition, please add the following sentence to this section: "Storm water results from samples collected downstream of the control will be treated as compliance samples and screened per the Site-Specific Demonstration (Part I.C.2 of the Permit)." Upon issuance of the final Permit, the Permittees welcome the chance to begin a Pilot Watershed Protection Approach Project in conjunction with DOE National Nuclear Security Administration Los Alamos Field Office/Triad National Security, LLC.

EPA Response: Comment noted for the record. See Response to Comment #68.

Comment #118: FS, Part II.4. Regarding the EPA's proposal to replace the subtitle Water Quality-based Effluent Limits in the Permit with State Water Quality Standards, the Permittees are not in favor of this change because this Permit is based on non-numeric technology-based effluent limitations, not state water quality standards. Thus, the subtitle should be changed to Non-Numeric Technology-Based Effluent Limitations to be consistent throughout the Permit.

EPA Response: Comment noted for the record. EPA understood that this SWIP has Non-Numeric Technology-based Effluent Limitations. But the goal to implement those technology-based limitations is to mitigate discharges of POCs so runoffs from SWMUs/AOCs will not cause exceedance of State Water Quality Standards. In final permit, EPA uses Non-Numeric Technology-Based Effluent Limitations to satisfy both the technology and water quality-based requirements of the CWA. Part II.4 is included to document this approach.

Comment #119: FS, Part IX. The Permittees agree with EPA that the draft Permit conforms to the anti-backsliding provisions. The 2010 Permit contained non-numeric technology-based effluent limitations "as necessary to minimize pollutants in [LANL's] storm water discharges." Those limitations include erosion and sedimentation controls, management of run-on and runoff, employee training, elimination of non-storm water discharges not authorized in an NPDES permit, and other controls. The 2010 Permit included requirements for the installation and operation of the baseline control measures. Similarly, the draft permit continues the Permittees' requirement to "install and/or maintain structural and nonstructural control measures as necessary to meet the non-numeric technology-based effluent limits to minimize Site-related POCs in storm water discharges." While the draft permit eliminates the requirement to install baseline control measures, it does so because those measures have already been installed. The draft continues the requirement to operate those measures. Since the draft permit does not impose less stringent effluent limits than the 2010 Permit, it conforms to the Clean Water Act anti-backsliding provisions and EPA's anti-backsliding policy.

The Permittees agree that the Permit conforms to the State's anti-degradation policy; the draft Permit does not authorize new or increased discharges into the environment. It merely continues the requirements to control such discharges imposed by the 2010 Permit.

EPA Response: Comment noted for the record.

Comment #120: FS, General. The Permittees request a list of references be included for documents called out in the Fact Sheet.

EPA Response: Comment noted for the record.

Comment #121: General. The Permittees request that Site and Sites be capitalized when referring to SWMUs and AOCs covered under the Permit.

EPA Response: Comment noted for the record. This recommendation is adopted in the final permit.

Comment #122: General. The Permittees request that EPA review Permit cross-references, as many of them are incorrect or refer to parts of the Permit that do not exist.

EPA Response: Comment noted for the record. EPA will review the final permit for typographical errors.