EMID-700703
Rec'd 12/05/2019

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELA STREET, SUITE 500
DALLAS, TEXAS 75270-2102

NOV 2 9 2019

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7014 0150 0000 2406 3889)

Glenn Morgan
Newport News Nuclear BWXT-Los Alamos, LLC
1200 Trinity Drive, Suite 150
Los Alamos, New Mexico 87544

Doug Hintze
Environmental Management
Los Alamos Field Office
LANL, MS M984, P.O. Box 1663
Los Alamos, New Mexico 87545-1663

Re: NPDES Permit No. NM0030759
Los Alamos National Laboratory
Public Notice of Draft Permit

Dear Messrs. Morgan and Hintze:

Please find enclosed a copy of a draft National Pollutant Discharge Elimination System (NPDES) permit the Environmental Protection Agency's Permitting & Water Quality Branch has developed. The fact sheet explaining the basis for the permit conditions and the public notice for this permit are also enclosed. Upon final issuance, the permit will authorize the discharge of pollutants from your facility in accordance with the requirements of the Clean Water Act.

Any formal comments you wish to make should be submitted in writing by the due date stated in the public notice to Ms. Evelyn Rosborough (6WD-PN) at the above address. After all public comments have been received and carefully evaluated, the Agency will make a final permit issuance decision. A copy of the final permit will be mailed to you at that time.

If you have any questions or would like to discuss any aspect of this draft permit, please feel free to contact the permit writer, Isaac Chen, at VOICE:214-665-7364, FAX:214-665-2191, or EMAIL:chen.isaac@epa.gov.

Sincerely yours,

Brent Larsen
Chief
Permitting Section

Enclosures
cc (w/enclosures): New Mexico Environment Department

U.S. Environmental Protection Agency
Public Notice of Draft NPDES Permit(s)

NOVEMBER 30, 2019

This is to give notice that the U.S. Environmental Protection Agency, Region 6, has formulated Draft Permit(s) for the following facilities under the National Pollutant Discharge Elimination System (NPDES). Development of the draft permit(s) was based on a preliminary staff review by EPA, Region 6, and consultation with applicable States and/or Tribes. The permit(s) will become effective 30 days after the close of the comment period unless:

A. Applicable State and/or Tribe denies certification under section 401 of the Clean Water Act, or requests an extension for certification prior to the date.

B. Comments received by DECEMBER 29, 2019 in accordance with 40 CFR §124.20, warrant a public notice of EPA's final permit decision.

C. A public hearing is held requiring delay of the effective date.

EPA's contact person for submitting written comments, requesting information regarding the draft permit, and/or obtaining copies of the permit and the Statement of Basis or Fact Sheet is:

Ms. Evelyn Rosborough
U.S. Environmental Protection Agency
NPDES/Wetlands Review Section (6WD-PN)
1201 Elm Street, Suite 500
Dallas, Texas 75270-2101
(214) 665-7515 or rosborough.evelyn@epa.gov

EPA's comment and public hearing procedures may be found at 40 CFR §124.10 and §124.12. The comment period during which written comments on the draft permits may be submitted is noted for the individual Public Notice. During the comment period, any interested person may request a Public Hearing by filing a written request which must state the issues to be raised. A public hearing will be held when EPA finds a significant degree of public interest.

EPA will notify the applicant and each person who has submitted comments or requested notice of the final permit decision. A final permit decision means a final decision to issue, deny, modify, revoke or reissue, or terminate a permit. Any person who filed comments on or participated in a public hearing on the draft permit may appeal the Agency's final permit decision. However, the request must be submitted within 30 days of the date of the final permit decision and be in accordance with the requirements of 40 §CFR 124.19.

Further information regarding the administrative record may be requested from the EPA contact above or viewed at the above address between 8 a.m. and 4:30 p.m., Monday through Friday. It is recommended that you write or call to the contact above for an appointment, so the record (s) will be available at your convenience.

AUTHORIZATION TO DISCHARGE TO WATERS OF THE UNITED STATES,
NPDES PERMIT NO. NM0030759.

The stormwater discharges from Los Alamos National Laboratory (LANL) solid waste management units (SWMUs) are managed by

Newport News Nuclear BWXT-Los Alamos, LLC
1200 Trinity Drive, Suite 150
Los Alamos, New Mexico 87544

The facility locates in Los Alamos County, New Mexico. Under the Standard Industrial Classification (SIC) Codes 9922, 9711, 9661, and 9611, LANL is a large multi-disciplinary facility which conducts national defense research and development, scientific research, space research and technology development, and energy development.

The discharges are to receiving waters consisting of various tributaries in Waterbody Segment Code No. 20.6.4.126 and 20.6.4.128 of the Rio Grande Basin.

EPA proposed reissuance of LANL's NPDES storm water permit to replace the current permit which was modified in September 2010, with an effective date of November 1, 2010, and an expiration date of March 31, 2014. The modified permit, which has been administratively continued, authorizes discharges of storm water runoff from over 400 solid waste management units (SWMUs) and areas of concern (AOCs) on LANL property. This action also suspended the draft permit public noticed on March 28, 2015.

NPDES PERMIT NO. NM0030759
FACT SHEET

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT: Los Alamos National Laboratory (LANL), managed and owned by Permittees

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

ISSUING OFFICE: U.S. Environmental Protection Agency (EPA)
Region 6
1201 Elm Street, Suite 500
Dallas, Texas 75270-2102

PREPARED BY: Isaac Chen
Environmental Engineer
Permitting Section (6WD-PE)
Permitting & Water Quality Branch
Water Division
VOICE: 214-665-7364
EMAIL: chen.isaac@epa.gov

PERMIT ACTION: Proposed reissuance of LANL's NPDES storm water permit to replace the current permit which was modified in September 2010, with an effective date of November 1, 2010, and an expiration date of March 31, 2014. The modified permit, which has been administratively continued, authorizes discharges of storm water runoff from solid waste management units (SWMUs) and areas of concern (AOCs) on LANL property. This action also suspended the draft permit public noticed on March 28, 2015.

DATE PREPARED: November 19, 2019

40CFR CITATIONS: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of July 1, 2019.

STATE CERTIFICATION: The permit is in the process of certification by the State agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service; and to the National Marine Fisheries Service.

Several Pueblos are located in the vicinity of Los Alamos National Laboratory. They include the following: San Ildefonso, Santa Clara, and Cochiti. The Santa Clara Pueblo has approved water quality standards (WQS); however, it is not adjacent to any stream where discharges are proposed to be authorized. Santa Clara is therefore not believed to be affected by the discharges proposed to be authorized by this permit. Neither San Ildefonso nor Cochiti Pueblo has submitted WQS for approval at this time; therefore, the only 401 Certification required under CWA §401 is from the State of New Mexico. However, 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 all are part of Los Alamos Pueblos Project.

FINAL DETERMINATION: The public notice describes the procedures for the formulation of final determinations.

I. APPLICANT ACTIVITY

Under the Standard Industrial Classification (SIC) Codes 9922, 9711, 9661, and 9611, the applicant currently operates a large multi-disciplinary facility which conducts national defense research and development, scientific research, space research and technology development, and energy development.

II. DISCHARGE LOCATION

The 36-square mile LANL facility is located in Los Alamos County, approximately 25 miles northwest of Santa Fe, NM. The facility is situated on the Pajarito Plateau, which consists of a series of finger-like mesas separated by deep west-to-east oriented canyons. The facility has 37 active technical areas spread over 36 square miles. The administratively continued permit (AC Permit) categorized the Sites into Site Monitoring Areas (SMAs), sub-watersheds, and watersheds for monitoring purposes. An SMA is an area related to one or more Sites or industrial activities based on a common drainage area within a sub-watershed. A sub-watershed is a sub-area of the watersheds with its own defined drainage area. There are seven (7) major watersheds within the LANL facility boundary: Los Alamos/Pueblo, Sandia, Mortandad, Pajarito, Water/Canon de Valle, Ancho, and Chaquehui.

III. RECEIVING WATER USES

The receiving waters are designated under the NM WQS for the following uses: Rio Grande Basin 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 Segment No. 20.6.4.128, designated for livestock watering, wildlife habitat, limited aquatic life and secondary contact pursuant to the approved NMWQS.

VI. STATE STREAM STANDARDS

The general and specific stream standards are provided in "State of New Mexico Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC) New Mexico Water Quality Control Commission (WQCC). EPA approved the New Mexico Water Quality Standards (NMWQS) which were amended as of August 11, 2017.

V. BACKGROUND AND COVERAGE

The LANL facility is located in Los Alamos County, New Mexico. The Department of Energy (DOE) and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) are co-permittees ("Permittees," or jointly referred to as LANL) for the purposes of this permit. On February 3, 2005, LANL, EPA Region 6, and the New Mexico Environment Department (NMED) entered into a Federal Facility Compliance Agreement (FFCA), which established an interim compliance program to regulate storm water discharges from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) (collectively, as Sites) on LANL's property prior to issuance of an individual storm water permit. An AOC is any area that may have had a release of a hazardous waste or hazardous constituent and which is not a SWMU, as defined by the NMED Consent Order.

EPA issued the first individual NPDES storm water permit (IP) covering these SWMUs and AOCs on February 13, 2009. The 2009 IP covered a total 405 Sites and designated 250 Site Monitoring Areas (SMAs) as sampling locations for monitoring purposes. On March 13, 2009, the Western Environmental Law Center on behalf of Amigos Bravos, Concerned Citizens for Nuclear Safety, Embudo Valley Environmental Monitoring Group, Honor Our Pueblo Existence, New Mexico Acequia Association, Partnership for Earth Spirituality, J. Gilbert Sanchez, Kathy Sanchez, and Tewa Women United ("Petitioners") filed a Petition for Review of the 2009 permit with the EPA Environmental Appeals Board (EAB) under 40 CFR 124.19(a). On April 13, 2009, LANL filed a Motion to Intervene and Request for Leave to Respond to the Petition for Review. On April 21, 2009, the EAB granted LANL's request to intervene.

Following extensive settlement discussions, EPA, the Petitioners and LANL agreed to the terms and conditions of a permit modification addressing the concerns raised in the Petition for Review. The final modified IP was issued September 30, 2010 and expired on March 31, 2014. Because the Permittees submitted a timely application for permit renewal prior to expiration of the 2010 permit, the 2010 permit was administratively continued in accordance with 40 C.F.R. §122.6. The administratively continued permit ("AC Permit") does not cover storm water discharges associated with current conventional industrial activities or discharges from Sites co-located with the current conventional industrial activities. Discharges associated with conventional industrial activities will continue to be covered by the Multi-sector General Permit (MSGP).

EPA first proposed renewal of the 2010 AC Permit on March 28, 2015, and EPA received comment from the following entities:

Communities for Clean Water (CCW) via email dated June 25, 2015;
Los Alamos National Laboratory (LANL) via email dated June 25, 2015; and
New Mexico Environment Department (NMED) letter dated July 21, 2015.

Pursuant to the New Mexico Water Quality Act, the NMED is the agency tasked with providing State certifications of federal permits. NMED provided EPA Region 6 with its CWA Section 401 certification of the draft permit by a letter from James Hogan (MMED) to William K. Honker (EPA), dated July 21, 2015. Section 401(a) of the Clean Water Act (CWA or "the Act") provides that applicants for a Federal license or permit to conduct any activity that may result in a discharge to navigable waters must obtain a certification from the State in which the discharge originates that the discharge complies with the applicable provisions of the Act. Pursuant to Section 401(a)(1) of the Act and 40 CFR §124.53(a), EPA may not issue a permit unless such a certification has been granted or waived by the State. Section 401(d) further provides that any State certification provided under Section 401 of the Act "shall become a condition on any Federal license or permit subject to the provision of this section," and 40 CFR §124.55(a)(2) mandates that "no final permit shall be issued" unless it incorporates the State certification requirements.

Following EPA's proposal of the 2015 draft permit, but prior to permit reissuance, LANL notified EPA that it intended to significantly update its permit application based on new information, including additional

monitoring data and study results. 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.

Therefore, through today's action EPA is withdrawing the draft individual storm water permit No. NM0030759 proposed on March 28, 2015 ("2015 draft IP") and is proposing a new draft individual storm water permit No. NM0030759.

VI. TENTATIVE DETERMINATION

Based on preliminary staff review, consultation with NMED, and considerations of comments provided by the Communities for Clean Water (CCW), EPA has made a tentative determination to issue a renewal permit for the discharges described in LANL's revised application and supplemental information received on July 15, 2019. The proposed renewal permit retains the requirement that applicable Best Management Practices (BMPs) be installed and maintained at every Site.

VII. NEW AND SUBSTANTIAL INFORMATION PROVIDED BY LANL

In its revised application and supplemental information of July 15, 2019, LANL provided new information to support their requests for changes of certain conditions in the existing permit or in the March 28, 2015 proposed permit. Information provided in the 2019 Application is summarized below. A more detailed discussion of these issues can be found in LANL's application, which is posted on the Permittees' Individual Permit public website.

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
Consent Order	Compliance Order on Consent (NMED)
IP	Individual Permit (NM0030759)
LANL	Los Alamos National Laboratory
MSGP	Multi-Sector General Permit NMR053195
MTAL	maximum target action level
NFA	no further action
NM	New Mexico
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department

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)

LANL provided a number of comments on the 2015 draft IP. Because the 2015 draft IP has been withdrawn and not finalized, EPA is not required to respond to these comments under 40 C.F.R. §124.17. However, EPA has attempted to correct any errors or inconsistencies noted by LANL in the new draft permit and provides the following responses in an effort to further explain the Agency's rationale with regard to the new draft permit.

A. Correcting Errors and Inconsistencies

LANL: LANL noted several errors and inconsistencies regarding proposed permit conditions of gross alpha, manganese, mercury, cyanide and chromium between the 2010 IP and 2015 draft IP.

1. Gross Alpha: As noted in LANL's comments on the 2015 draft IP and 2015 NMED §401 Certification, differences exist regarding the basis of gross alpha measurement (i.e., adjusted gross alpha (AGA)[1] versus non-AGA).

EPA Response: EPA noted the difference.

1 New Mexico AWQC for the livestock watering designated use is 15 pCi/L based on AGA, a calculation that removes certain radionuclides in the sum; the excluded radionuclides are those regulated by the Atomic Energy Act (AEA) (see LANS comments on the 2015 draft IP, page 14-17 [LA-UR-15-24555]).

2. Manganese: Under Condition No. 2 in the 2015 NMED §401 Certification, NMED stipulated that manganese monitoring should be included in the IP. In LANL's comments on the 2015 NMED §401 Certification, LANL argued that no need for such monitoring had been demonstrated. Although a manganese TAL was not included in the 2010 IP, LANL proactively collected dissolved manganese data at 23 SMAs in 2017 and 2018 (Table 11 of Application). Among the SMA data, no maximum measured concentrations exceeded the New Mexico AWQC, and the highest observed value among the SMA data was less than one-half the AWQC value calculated at the canyon-specific hardness corresponding with the proposed revised Appendix F to the 2015 draft IP. At present, there are no sites where manganese has been identified as a potential pollutant of concern (POC) based on historical knowledge. Because of a lack of historical evidence suggesting a significant source of manganese, as well as a lack of exceedance of the New Mexico AWQC for manganese, LANL requested that manganese not be added as a TAL to the IP as a requirement for monitoring. Rather, LANL requested that the corrective action screening process be used to further evaluate manganese (i.e., by characterizing soil data), and that the annual monitoring plan be updated as appropriate based on the outcome of the corrective action screening process.

EPA Response: NMED required new TALs for total recoverable aluminum, dissolved chromium, dissolved chromium-III and dissolved manganese as conditions of State CWA §401 certification to the 2015 draft IP. Because EPA did not finalize the 2015 proposed permit, NMED's certification for the 2015 draft IP is no longer current and does not apply to the new draft permit. EPA has included a sampling implementation plan (SIP) or corrective action screening process in this proposed renewal IP, NMED has the opportunity to evaluate the new manganese information and determine whether it still believes monitoring of manganese is necessary. EPA is not proposing to add new monitoring requirements for manganese. EPA clarifies that listing pollutants in the Target Action Levels Table by itself does not trigger sampling/monitoring requirements.

3. Mercury: The 2015 draft IP listed both total and dissolved mercury, while the 2010 IP specified only total mercury. No rationale has been provided to justify the addition of dissolved mercury and so it should be deleted. The total mercury WQC for the wildlife habitat use, 0.77 µg/L, alone, is more stringent than any dissolved mercury criteria in 20.6.4.900 NMAC.

EPA Response: Dissolved mercury has acute aquatic life criteria to be used for MTAL. Because the total mercury ATAL, 0.77 µg/L, is much more stringent than the dissolved mercury MTAL, 1.4 µg/L, it will be unnecessary to monitor dissolved mercury. (Note: Site-specific monitoring requirements will be determined by site-specific information through annual SIP process. Pollutants or constituents listed in the Target Action Levels Table do not reflect sampling/monitoring requirements; rather, TALs are listed for compliance or corrective action purposes.)

4. Cyanide: Because the weak acid dissociable (WAD) method provides a better estimate of free cyanide, a change to the total recoverable basis specified in the 2015 draft IP should not be made in the renewed IP. Additionally, EPA updated the human health-organism only (HH-OO) criteria (EPA 2015, 700248) for cyanide to 400 µg/L, more than double the current New Mexico HH-OO criteria of 140 µg/L. New Mexico has not updated its standards to reflect these changes.

EPA Response: The most recent NMWQS, effective as August 11, 2017, has wildlife habitat and aquatic life standards for total recoverable cyanide. Therefore, total recoverable cyanide is used for TAL monitoring purposes. EPA solicits comments whether TALs could be revised or updated through the annual SIP process to reflect NMWQS update.

5. Chromium: As noted in LANL's comments on the 2015 NMED §401 Certification, the Permittees have requested that chromium III in the Appendix F Table in EPA's draft permit be replaced with chromium VI to be consistent with the TAL Table in EPA's 2015 draft permit. The Permittees disagree with NMED's request that "Cr-III should be added back to the TAL list in Part I.B, with a reference to Appendix F for the hardness based values."…. New Mexico's aquatic life criterion for chromium applies to chromium III specifically, as opposed to chromium VI or a combination of the two. Because of the difficulty and cost associated with measuring individual chromium species in surface water samples, the Permittees typically measure total dissolved chromium (i.e., the sum of dissolved chromium III and dissolved chromium VI). The comparison of total dissolved chromium to the hardness-dependent chromium MTAL, which is based on New Mexico's chromium III AWQC, is thus conservative.

EPA Response: To challenge State 401 condition of certification, appeal of such conditions must be made through applicable procedures of the State. The NMWQS indicates that at the lowest stream hardness of 25 mg/L, the dissolved Cr-III acute and chronic aquatic life standards are 180 µg/l and 24 µg/l, respectively. The dissolved Cr-VI acute and chronic aquatic life standards are 16 µg/l and 11 µg/l, respectively. The MTAL for total dissolved chromium is 210 µg/l. EPA will accept total dissolved chromium results against the Cr-III TAL to determine whether further corrective action is required. If there are sites for which Cr-VI shows up in the soil monitoring conducted under RCRA, then the monitoring could be tailored to that site. Monitoring requirement could be updated via annual SIP process.

B. Hardness-dependent TALs

LANL: The 2010 IP provided single-value TALs based on 30 mg/L hardness for each metal. Recognizing hardness differences among receiving waters, the 2015 draft IP proposed 25 watershed-specific TALs for the same metals that, like the TALs in the 2010 IP, are based on New Mexico acute AWQC. Additional hardness data have been collected at the relevant receiving water gaging stations since then and should be considered. Consequently, as part of the revised application, hardness-dependent MTALs have been updated based on updated geometric mean hardness values. The Permittees required that the number of watersheds be reduced from 25 to 7 because the hardness does not vary significantly within those 7 major watersheds and in order to simplify the implementation of the SIP data screening process.

EPA Response: EPA proposes using geo-mean of hardness from each major canyon to calculate major watershed-based hardness-dependent TALs.

C. Aluminum Measurement and Compliance Issues

LANL: LANL raised relevant issues pertaining to sample preparation methods for aluminum in natural surface waters and use of aluminum NM AWQC for derivation of MTALs. LANL stated that new data and recent evaluations demonstrate the uncertainties, flaws, and shortcomings associated with how potential water quality issues related to aluminum are assessed. These issues are particularly relevant on the Pajarito Plateau, where storm water samples typically contain elevated concentrations of aluminum-bearing suspended solids (receiving waters and SMAs). With recent and ongoing updates to aluminum EPA AWQC (described in the Application package), bioavailability considerations (based on results from laboratory toxicity tests) are being incorporated into AWQC. Despite updates and improvements to NM AWQC or EPA AWQC, quantification of toxicologically relevant forms of aluminum in surface waters remains a concern. LANL provided a summary of this issue and examples using data from surface waters in the LANL vicinity.

In evaluations completed since the 2014 IP application was submitted, LANL has shown that concentrations of aluminum measured at natural background locations and locations upstream and off-site and downstream from

LANL are similar to those in unfiltered samples, as well as in 10- and 0.45-µm sample filtrates. The current New Mexico AWQC were adopted in 2010 and are hardness based (i.e., AWQC change as a function of water hardness), but they are also based on "analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department." The current (2012) NMED guidance for filtration is to use a 10-µm filter if sample turbidity is greater than 30 nephelometric turbidity units (NMED 2012, 700224). Consequently, the 2015 draft IP shifted from a dissolved to a total recoverable basis for aluminum compliance monitoring. However, EPA did not reflect the NMED 2012 guidance insofar as the 10-µm pre-filtration method. Thus, at a minimum, LANL requests that EPA include the pre-filtration step, contingent on the outcomes of the LANL filtration and toxicity study currently underway.

EPA Response: Because the aluminum MTAL was based on the NM AWQC, the sample preparation method defined in the current NMED Guidance shall apply until NMED adopts or accepts a new procedure.

LANL: A recent LANL study (LANL 2018) suggests that nontoxic aluminosilicates are important contributors to total recoverable aluminum in samples that have been pre-filtered, and that potentially toxic, freshly precipitated amorphous aluminum hydroxide is not present in storm water samples. Additionally, recent work conducted by Rodriguez et al. (2019) provides further evidence that total recoverable aluminum concentrations are not toxicologically relevant in waters containing elevated suspended sediment concentration (SSC). Because it is widely understood that the total recoverable basis for quantifying aluminum concentrations in surface waters is inadequate, LANL has been collaborating with NMED to generate new data intended to evaluate the potential for toxicity because of aluminum in Pajarito Plateau waters (Windward 2019, 700289). Additionally, these data may demonstrate a more appropriate sampling methodology for aluminum in surface waters with naturally high SSC (i.e., consistent with Rodriguez et al. The plan for generating these data is described in the 2018 proposed toxicity testing plan (Windward 2019, 700289). The study will be completed in the 2019 monitoring season and results will be reported to EPA and NMED with recommendations. Because this important work will not be completed in time for EPA to consider it in the renewed IP, and because the work is critical to help guide the selection of more appropriate sample preparation methods, LANL requests that EPA include a compliance schedule item related to aluminum in the renewed IP.

EPA Response: The process to develop a new sample preparation method may take more time and encounter more opposition than expected. EPA does not believe a compliance schedule related to aluminum should be included in the permit at this time. Prior to a different sample preparation method being adopted or accepted by NMED, LANL must use the required method defined in the NMED Guidance. Whenever a new method becomes available, that new method may be incorporated into the annual SIP for implementation. Also, because TALs established in the permit are not effluent limitations, but benchmarks used to determine whether additional corrective actions are needed, EPA is open to considering other options, like using BTVs or alternative control measures to determine compliance status.

D. Biotic Ligand Model (BLM)-based Metals MTALs

LANL: Exposure conditions and water chemistry in ambient waters, especially ephemeral and intermittent waters, are also expected to differ significantly from the conditions used in laboratory-based toxicity tests to derive AWQC. As a result, the exposures and bioavailability of potential toxicants in surface waters may not be accurately reflected by the AWQC. Employing the water effect ratio is a well-known means of adjusting AWQC based on metals bioavailability, as acknowledged in EPA guidance (EPA 1994, 700274) and New Mexico WQS (Paragraph 4 of Subsection D of 20.6.4.10 NMAC). EPA's nationally recommended AWQC for copper (EPA 2007, 700258) are based on the biotic ligand model (BLM) and more accurately account for copper bioavailability than do the longstanding hardness-based AWQC. LANL argued that because the BLM is the basis of EPA's nationally recommended AWQC for copper, these AWQC are considered more accurate than

hardness-based AWQC. Also, because the BLM is accepted as a scientific tool for more accurately evaluating metal bioavailability in general, BLM-based AWQC should be considered as replacements for the hardness-based AWQC used for MTALs in the LANL IP. The Permittees plan to propose BLM-based, site-specific water quality criteria for the protection of aquatic life through the New Mexico rulemaking process."

EPA Response: If NMED and LANL reach agreeable BLM values through the annual Sampling Implementation Plan process, EPA may consider using BLM-based values for requirement of further corrective action instead of a basis to remove a site from the permit until the State adopts the BLM-based AWQC into the NMWQS.

E. 2018 Background Threshold Value (BTV) Report

LANL: Concentrations of constituents in certain storm water discharges, as well as receiving waters downstream of LANL, are influenced by upstream sources associated with background conditions related to both undeveloped and developed land on the Pajarito Plateau. Constituent concentrations are also influenced by anthropogenic baseline inputs (e.g., atmospheric deposition). The 2019 background threshold values (BTVs) report (Windward 2019, 700289) (presented in Attachment 2 to the Application and hereafter referred to as the 2019 BTV report) quantifies these varying sources in a statistically rigorous and defensible manner, thereby yielding a set of BTVs that can be compared to POC concentrations in storm water per the corrective action screening process. A 90% draft of the 2019 BTV report was provided by the Permittees to the NMED, EPA, and Communities for Clean Water stakeholder group in October 2018 for review and comment. The 2019 BTV report was finalized based on consideration of comments received through October 2018.

BTVs are proposed for use in the Site-Specific Demonstration (SSD) as described in the draft application. Certain BTVs calculated/quantified by the 2019 BTV report exceed IP MTALs for dissolved aluminum, copper, zinc, and total PCBs. Additionally, although normalization to SSC makes a direct comparison difficult, certain BTVs are likely to exceed IP MTALs for dissolved aluminum, total gross alpha, and radium-226 and -228, each of which is strongly related to SSC in the background datasets through 2017. Thus, SSC would be measured concurrently for POCs with SSC-normalized BTVs.

EPA Response: While air deposition and/or run-on are not industrial associated activities, it is reasonable to minimize those factors when dealing with the contamination caused by previous industrial activities. Because background contribution may be a cause of TAL exceedance at certain Sites, EPA is proposing different approaches in the permit to minimize the background contribution in determining compliance status. NMED questioned whether the use of BTVs instead of TALs for determining the need for corrective action triggers anti-backsliding in cases where BTVs are higher than the 2010 TALs. To use BTVs instead of TALs in certain circumstances does not conflict with the anti-backsliding regulations because TALs are not effluent limitations. The 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. EPA is not proposing any change to the non-numeric technology based effluent limitation. Further, this permit is designed to regulate pollutants contributed by previous industrial associated activities, not to address naturally occurring or non-industrial pollutants. Tier approach is proposed to determine further actions based on composite BTVs.

F. Biological Data

LANL: LANL provided some biological information and data to provide further address context for AWQC issue applicable to the receiving waters of the Pajarito Plateau. A summary is provided below.

A majority of receiving waters on the Pajarito Plateau are ephemeral streams, thus they are highly unlikely to contain the types or diversity of aquatic species (e.g., fish) that are included in the species sensitivity

distributions used to derive AWQC. Because the 2010 IP TALs are generally based on EPA AWQC and New Mexico AWQC for aquatic life, it may be reasonable to recalculate those AWQC based on a site-specific approach (according to EPA's species deletion approach.) Recent and historic survey data for aquatic life and other relevant biological and/or toxicology information have been collected by LANL, and those data could inform a species deletion approach to recalculating AWQC (and thus TALs) for Pajarito Plateau streams.

In 2017 and 2018, aquatic life surveys of surface waters within the Pajarito Plateau were performed as part of the sampling and monitoring Supplemental Environmental Projects (SEP). One goal of the aquatic life surveys was to determine which aquatic life species are present in ephemeral, intermittent, and perennial waters within and outside of LANL watersheds. The objectives of this study were to generate the data needed to evaluate whether existing AWQC are sufficient to provide the intended level of protection for the aquatic life communities found in the site and in reference waters on the Pajarito Plateau. The data that were collected for the 2017 and 2018 aquatic life surveys is provided in NPDES Form 2F, Section VIII of this IP renewal application. Data collection included sampling efforts for benthic macroinvertebrates, aquatic meiofauna, and aquatic vertebrates. Because of the intermittent and ephemeral nature of many watercourses on the plateau, sampling locations included ponded water and even dry bed sediments. Sampling results found in the benthos and meiofauna Metric Reports (NPDES Form 2F, Section VIII, Tables VIII-3 and VIII-5) are indicated as wet or dry, respectively.

Numerous historical biological studies have been conducted in LANL area waters. Appendix E-2 of the sampling and monitoring SEP (LANL 2017) provides a summary of studies from 1990 to 2008. A use attainability analysis (NMED 2007, 700287) included data from electrofishing surveys in the Sandia Canyon, Pajarito Canyon, and Cañon de Valle stream reaches. Fish were not located in those surveys. The 2007 use attainability analysis also relied on data from the U.S. Fish & Wildlife Service water quality assessment (Lusk et al. 2002, 700267) that evaluated biological, chemical, and physical characteristics of four intermittent streams within Los Alamos, Sandia, and Pajarito Canyons and in Cañon de Valle. The Lusk et al. (2002) report indicated that there was no source of fish in upstream perennial waters in the canyons surveyed. Thus, fish absence should be taken into account when considering the species sensitivity distributions behind the existing TALs and related AWQC.

Ecological risk assessments have been conducted for multiple canyon investigations conducted as part of the RCRA Consent Order. These assessments are also cited in NPDES Form 2F, Section VIII, Table VIII-6. The findings are presented in each investigation report. These assessments include toxicity testing on *Chironomus dilutus* (formerly *C. tentans*) per EPA test methods. Such testing provides a measure of potential effect on abundance and diversity of the aquatic community in the stream segments of the particular watershed. The reports indicated POC concentrations in sediment, surface water, and alluvial groundwater were either relatively stable or decreasing over time for POCs derived from Laboratory SWMUs or AOCs. Subsequent studies and data have confirmed that these temporal trends persist, indicating similar or decreased concentrations in canyon sediments compared with when the chironomid toxicity tests were first conducted. Several canyon reaches have been recently identified as impaired for aluminum (NMED 2018, 700253); however, preliminary toxicological testing similar to whole effluent toxicity testing suggests that mineral forms of aluminum arising from the local geology are nontoxic to an aluminum-sensitive test organism (Dail et al. 2018, 700238).

Several years of data for whole effluent toxicity testing have been generated for LANL's Outfall 001 using the sensitive test organism *C. dubia* following methods in EPA (2002, 700278). Of the 28 acceptable *C. dubia* 7-day survival and reproduction tests conducted since March 2015, none showed any effect on survival in full strength effluent. Of the 28 acceptable tests, reproduction was unaffected in 20 tests (71%). Of the 8 tests with an effect on reproduction, 3 test results were unreliable because of their either flat or unusual concentration response, and the other 5 test results had a very minor decrease in reproduction relative to the control organisms.

These results are pertinent for the IP because Sites 03-045(b) and 03-045(c) in S-SMA-2 are also regulated as active wastewater outfalls included in LANL's NPDES Permit No. NM0028355 for industrial and sanitary outfalls. Site 03-0345(b) is NPDES-permitted Outfall 001. Site 03-0345(c) is the former Outfall 03A027 that currently flows into Outfall 001. The NPDES-permitted Outfall 001 creates the baseflow included in storm water samples at S-SMA-2. The test data suggest no aquatic toxicity concerns for upper Sandia Canyon receiving waters and the respective co-located NPDES outfalls.

EPA Response: If a proper WET test protocol for stormwater runoffs could be developed, EPA may consider using 24-hour 100% acute toxicity test to determine whether runoffs from a specific Site with specific metals of concern in dispute have reasonable potential to cause toxicity to aquatic life if ATAL is in question.

G. Adjusted Gross-Alpha (AGA)

LANL: Alpha-emitting radiogenic minerals are present in natural rock throughout Laboratory property and are responsible for the high total gross-alpha activity in storm water. Gross-alpha measurements are performed on nonfiltered water samples that often contain high concentrations of suspended sediments, typical of storm water runoff in an arid environment. Gross-alpha exceedances of the New Mexico livestock WQC (the basis for the 2010 IP ATAL) are routinely observed in turbid stormflow upstream of Otowi Bridge in the Rio Grande as well. In addition, natural sediments entrained in turbid storm water runoff from SWMUs distant from developed landscapes are the leading factor for routine exceedances of the 2010 IP ATAL gross alpha within the Laboratory boundary.

Alpha-emitting radionuclides associated with source, special nuclear, or byproduct material as defined in the Atomic Energy Act (AEA) or the radioactive portion of mixed waste are exempt from regulation under the Clean Water Act (CWA). Although these radionuclides may be associated with the total gross-alpha radioactivity detected in the IP samples, they are excluded from the definition of AGA radioactivity. AGA radioactivity is the sum of alpha-emitting radionuclides (measured in units of pCi/L) in a sample minus the activity of AEA-exempt alpha-emitting radionuclides in the same sample.

EPA Response: NMAC 20.6.4.7A(5) defines "Adjusted gross alpha" to mean the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample, including radium-226 (Ra-226), but excluding radon-222 and uranium. Also excluded are source, special nuclear and by-product material as defined by the Atomic Energy Act of 1954." Based on information found at Nuclear Regulatory Commission's (NRC) website, https://scp.nrc.gov/narmtoolbox/radium faq102008.pdf, Ra-226 is regulated by NRC through the authority of AEA. If Ra-226 is included in AEA scope and exempted from the CWA, EPA does not have authority to regulate AGA which also includes Ra-226 through the NPDES permit. EPA is not including AGA monitoring requirements in the proposed permit. NMED may work with LANL through SIP process to monitor AGA, but EPA is not proposing requirements for corrective actions to address AGA issues.

H. Polychlorinated Biphenyls (PCBs)

LANL: In 2010–2012, DOE, the NMED DOE Oversight Bureau, and LANS conducted a cooperative study to characterize PCBs in certain surface waters located in the upper Rio Grande watershed and in areas in and around the Laboratory. The 2010-2012 Study found the baseline total PCB concentrations around the LANL range from below the New Mexico human health-organism only (HH-OO) criteria of 0.64 ng/L to 200 times of the HH-OO criteria. Data collected from 2012 through 2014 have indicated that the upper ranges of PCB concentrations in baseline and Rio Grande stormflows continue to be approximately an order of magnitude larger than those for precipitation (less than 1 ng/L in precipitation and 10 ng/L to 50 ng/L in stormflows). This difference was primarily from the presence of PCBs associated with suspended sediment in runoff. Dry

deposition of PCBs to forests and soil, as well as wet deposition that does not cause significant flow in the period antecedent to larger stormflows, can lead to mobilization of PCBs in excess of what can be measured in precipitation. Similarly, the upper range of PCBs in runoff from developed, urban areas (>100 ng/L) were an order or magnitude greater than PCBs in baseline and Rio Grande stormflows. LANL also pointed out that while PCB concentrations are elevated during storm water runoff events in perennial or intermittent waters, they may drop quickly to lower levels during the intervening periods of baseflow (unless baseflows are impacted by a significant pollution source). In other words, exposures to elevated levels during stormflows would be relatively short (on the order of a few hours). In some cases, exceedances of the HH-OO criterion in perennial waters could be attributable only to stormflow periods if the assessment data set includes samples collected when runoff was occurring. For perennial or intermittent surface waters, baseflow predominates perhaps 90% or more of the time. In contrast, surface waters during storm water runoff generally contained PCB concentrations above 5 ng/L and substantially above the HH-OO criterion. Such concentrations were measured even in the most remote parts of the watershed and can be attributed to PCBs associated with the increased concentrations of suspended soils and sediments carried by surface waters during storm water runoff.

In 2018, background storm water PCB concentration data were again evaluated for the purpose of developing BTVs (Windward 2019). The dataset evaluated at that time included all available and applicable monitoring data collected between 2011 and 2017. Based on that evaluation, it was again found that the baseline and urban background conditions for PCBs in Pajarito Plateau waters exceed the IP ATAL of 0.64 ng/L by up to a factor of 100 (for the 95% UTL of the 95th percentile [95–95 UTL]). In general, PCB concentrations were fairly similar between undeveloped and urbanized sampling locations (with UTLs of 58 and 64 ng/L, respectively). Contrary to the 2012 study findings, the 2018 BTV report found that PCBs in storm water were not statistically significantly related to suspended sediment. These results provide further support for regional aerial deposition processes as a key driver of baseline PCBs in Pajarito Plateau storm water. Slightly higher urban background PCBs (relative to undeveloped baseline PCBs) may be attributable to diffuse PCB sources (e.g., in building materials) or increased runoff of rainwater from impervious surfaces relative to undeveloped landscapes.

Given the rare occurrences of stormflows from the Pajarito Plateau to the Rio Grande, lack of fish in canyon waters, and the ephemeral nature of most canyon's hydrology, the New Mexico wildlife habitat criterion for PCBs is more appropriate for Pajarito Plateau waters. Thus, the Permittees request that the wildlife habitat criterion for PCBs (0.014 µg/L) be used as the ATAL.

EPA Response: In addition to new information provided by LANL, EPA has become aware of a report entitled "USE ATTAINABILITY ANALYSIS for Waters Located on Los Alamos National Laboratory as described in Sections 20.6.4.126 and 128 NMAC New Mexico Water Quality Standards, July 17, 2005" dated August 2007, since issuance the 2010 permit modification. The Use Attainability Analysis (UAA) concluded that a limited aquatic life use was attainable in Segment 128. The report stated that "Natural conditions of low flow and water level, the factor identified in 40 CFR 131.10(g)(2), prevent the attainment of primary contact uses in both segments as well as the attainment of a Section 101(a)(2) aquatic life use in Segment 128." It also stated that "In conclusion, a limited aquatic life use is attainable on stream reaches in Segment 128. Because fish species in Ecoregion 21 cannot survive in ephemeral and intermittent streams, Segment 128 streams cannot attain the Section 101(a)(2) aquatic life use due to the factor identified in 40 CFR 131.10(g)(2)." It is reasonable to believe that the HH-OO standards are unnecessary because of lack of fish and no possibility for fish-consumption in the permitting area. Also, the NMAC 20.6.4.11 G states that "Human health-organism only criteria in Subsection J of 20.6.4.900 NMAC apply to those waters with a designated, existing or attainable aquatic life use. When limited aquatic life is a designated use, the human health-organism only criteria apply only if adopted on a segment-specific basis. The human health-organism only criteria for persistent toxic pollutants, as identified in Subsection J of 20.6.4.900 NMAC, also apply to all tributaries of waters with a designated, existing or attainable aquatic life use." Both ephemeral and intermittent streams within LANL

(NMAC 20.6.4.128) have been designated for limited aquatic life use. If contaminated sediments reaching downstream Rio Grande are a concern, a regional watershed sediment control plan may be considered to address the persistent HH-OO pollutants. Based on new information provided in the Application, EPA is considering factors like PCBs contributed by precipitation, upstream runoff PCB concentrations, suspended sediments carried by runoff, and lack of fish in canyon waters in addressing PCBs in this permit renewal process. NMED also has numerous ongoing UAA to evaluate whether aquatic life or HH-OO criteria are applicable to certain waters or not.

EPA solicits comments whether or not EPA shall use 95-95 UTL BTV tier approach and/or wildlife habitat, instead of HH-OO, TALs to move Sites to the LTS category for further observations.

I. Active Sites or Sites Located Outside on Non-DOE Owned Property

It was brought to EPA's attention that certain Sites are not inactive and have ongoing activities and some Sites are located on non-DOE owned property and the Permittees have no access to those Sites for sampling or taking correction actions. The permit states "This Permit authorizes only those storm water discharges associated with solid waste management units (SWMUs) and area of concerns (AOCs) listed in Appendix A of the Permit. The SWMUs and AOCs identified in Appendix A are collectively referred to throughout this Permit as "Sites." This Permit does not authorize storm water discharges associated with current conventional industrial activities at the Permittees' LANL facility. Storm water discharges associated with current conventional industrial activities shall be covered under EPA's NPDES general permit for storm water discharges from industrial activity, also known as the Multi-sector General Permit (MSGP)." Although LANL included Sites 03-045(b) and 03-045(c) in the Appendix A of the Permit, it was not EPA's intent to regulate any active Sites (including some active firing ranges) through this permit action. LANL shall reconsider whether to remove any active Sites from the Application so that active Sites may be covered either by MSGP or by an individual permit like NM0028355. LANL shall provide EPA with a list of active Sites during the public comment period if such a list has not been provided yet. EPA may exclude such active Sites from the final permit.

EPA was also informed that LANL has no access to or control over certain Sites because those properties had been transferred to County authority or private owners. If LANL could not access those Sites for sampling or taking corrective actions, EPA may exclude those Sites from coverage of this proposed permit. If POCs are present in discharges from those properties and NPDES permit coverages may be required, EPA may consider issuing separate NPDES permits to address those Sites. LANL shall provide EPA with transaction agreements which identify responsible parties for clean-up of those Sites during the public comment period.

J. List of Sites Not to Be Included In The Permit Renewal

The Permittees provided a list of Sites to be deleted from the permit as below. 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. Sites not on DOE property will be reviewed during this permit renewal process to determine responsible operators. Sites which are claimed to have no significant industrial materials remaining will be evaluated and EPA will make the final decision during the permit final decision process. Hazardous waste sites which are regulated by RCRA program will be deleted from this permit. EPA will evaluate Sites which have no discharge during a 25-year, 24-hour storm event and make the decision based on the final permit conditions of the permit.

Site Monitoring Area	Site ID	Administrative changes discussed in the IP Annual	Not on DOE Property	Significant industrial materials were not	No longer RCRA Corrective Action Units,	SMA samplers were operational

		report since 2010		used or significant industrial materials were remediated such that storm water is not impacted	but are Hazardous Waste Management Units, and cannot be regulated under the Permit.	during a 25-year, 24-hour stormevent but did not collect a sample
R-SMA-0.5	C-00-020		X	X		
R-SMA-1	C-00-041		X			
R-SMA-2.05	00-011(c)			X		X
R-SMA-2.3	00-011(e)		X			
B-SMA-0.5	10-001(a)		X			
B-SMA-0.5	10-001(b)		X			
B-SMA-0.5	10-001(c)		X			
B-SMA-0.5	10-001(d)		X			
B-SMA-0.5	10-004(a)		X			
B-SMA-0.5	10-004(b)		X			
B-SMA-0.5	10-008		X			
B-SMA-0.5	10-009		X			
B-SMA-1	00-011(d)		X			
ACID-SMA-1.05	00-030(g)		X			
ACID-SMA-2/ ACID- SMA-2.1	01-002(b)-00		X			
ACID-SMA-2	45-001		X			
ACID-SMA-2	45-002		X			
ACID-SMA-2	45-004		X			
ACID-SMA-2.01	00-030(f)		X			
P-SMA-0.3	00-018(b)		X			
P-SMA-1	73-001(a)		X			
P-SMA-1	73-004(d)		X			
P-SMA-2	73-002		X			

P-SMA-2	73-006		X			
P-SMA-2.2	00-019		X			
P-SMA-3.05	00-018(a)		X			
LA-SMA-3.1	01-001(e)		X			
LA-SMA-3.9	01-006(a)		X			
LA-SMA-4.1	01-003(b)		X			
LA-SMA-4.1	01-003(b1)		X			
LA-SMA-4.1	01-006(b)	X	X			
LA-SMA-4.2	01-006(c)		X			
LA-SMA-4.2	01-006(d)		X			
LA-SMA-5.01	01-001(d)	X				
LA-SMA-5.01	01-001(d1)		X			
LA-SMA-5.01	01-001(d2)		X			
LA-SMA-5.01	01-006(h)	X				
LA-SMA-5.01	01-006(h1)		X			
LA-SMA-5.01	01-006(h2)		X			
LA-SMA-5.01	01-006(h3)		X			
LA-SMA-5.361	32-002	X				
LA-SMA-5.91	21-009		X			
LA-SMA-5.91	21-023(c)		X			
LA-SMA-5.91	21-027(d)		X			
LA-SMA-5.92	21-013(b)		X			
LA-SMA-5.92	21-013(g)					
LA-SMA-5.92	21-018(a)					
LA-SMA-6.27/ LA- SMA-6.36/ DP-SMA- 4	21-021					X
LA-SMA-6.27	21-027(c)					X
LA-SMA-6.36	21-024(a)					X
LA-SMA-10.11	53-002(a)					X
S-SMA-4.5	20-002(d)					X
CDB-SMA-0.55	46-004(e2)	X				
CDB-SMA-1	C-46-001					

CDB-SMA-1.35	46-004(a2)					X
CDB-SMA-1.35	46-004(u)					X
CDB-SMA-1.35	46-004(v)					X
CDB-SMA-1.35	46-004(x)					X
CDB-SMA-1.35/ CDB-SMA-1.54	46-006(d)					X
CDB-SMA-1.35	46-008(f)					X
CDB-SMA-1.54	46-004(h)					X
CDB-SMA-1.54	46-004(q)					X
CDB-SMA-1.55	46-003(e)					X
CDB-SMA-1.65	46-003(b)					X
M-SMA-9.1	35-016(f)					X
Pratt-SMA-1.05	35-004(h)					
Pratt-SMA-1.05	35-016(m)					
PJ-SMA-4.05	09-004(g)	x				
PJ-SMA-5.1	22-016	x				
PJ-SMA-13	18-002(a)					X
PJ-SMA-14	54-004					X
CDV-SMA-1.4	16-030(c)					
CDV-SMA-2.41	16-018				X	
CDV-SMA-2.42	16-010(b)				X	
CDV-SMA-2.5	16-010(c)				X	
CDV-SMA-2.5	16-010(d)					
CDV-SMA-6.03	14-002(d)	x				
CDV-SMA-6.03	14-002(e)	x				
PT-SMA-1.7	15-006(a)	x				
W-SMA-7	16-026(h2)	x				

K. Communities For Clean Water (CCW) Comments on the 2015 Draft IP and on LANL's current Permit Application

CCW in a letter dated October 3, 2019, provided many comments on LANL's Application package. CCW also attached a copy of its comments on EPA proposed 2015 draft permit. EPA addresses some CCW comments on the 2015 Draft IP in Section VIII-Draft Permit Rationale below when those comments are relevant to the 2019 proposed permit conditions. CCW provided 70 comments, in an Appendix to the letter, on LANL's Application package which may affect EPA's decisions on the proposed permit conditions. Because CCW will have opportunity to make their comments on the EPA proposed permit during the public comment period, EPA is only discussing CCW main comments listed in the letter so that EPA may propose the permit for the public review without further delay.

CCW Comment on Cultural Importance of Tewa Lands and Waters: 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. 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 is offering 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.

CCW Comment on 2010 Permit v. Unfinalized draft 2015 Permit: CCW has a general concern that the draft 2015 permit, which has yet to be approved, is being used as a baseline during this 2019 permit renewal process. CCW has numerous concerns with the 2015 draft permit which we outlined in our June 25, 2015 comments to EPA, which are attached and incorporated by reference to these comments.

EPA Response: EPA has considered CCW comments on the 2015 draft permit when those comments are relevant to this proposed permit conditions. Discussions of those comments could be found in Section VIII-Draft Permit Rationale below.

CCW Comment on Background Threshold Values (BTVs): CCW raised several concerns regarding use of BTVs in place of TALs.

(a) TALs are based on State water quality standards, but BTVs are not and BTVs are not subject to public oversight or regulatory agency approval. If BTVs are used, they should be used to not just to eliminate requirements for monitoring and corrective action, but also to identify sites that are contributing Pollutants of Concern (POCs). 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.

(b) Stormwater permits are not just for addressing contamination from POCs that have been added to a site from Permittee activities. Stormwater regulation and permits also address contamination through disturbance and the resulting mobilization of pollutants. Additionally, we are concerned that the BTV report and the Permittees' approach to the permit does not take this into account. The Permittees have not provided the necessary information for the public to understand the extent that disturbed areas have influenced the "undeveloped" reference sites. Drainage areas and detailed description of the drainage areas to these sites are not provided in the permit or the BTV development document (Windward 2018). Disturbances, such as roads, could inaccurately elevate the concentrations of POCs in "undeveloped" stormwater runoff and as currently written, inappropriately result in the establishment of high BTVs and therefore, in the elimination of SMAs or POCs from permit requirements. Undeveloped reference sites, with disturbance, should be removed from the BTV data set.

(c) Using the 90% BTV to screen out sites is not protective and will inappropriately eliminate sites of concern. 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 UTL is a more appropriate parameter that better reflects the uncertainty associated with stormwater data while ensuring that sites with significant background contributions are identified.

EPA Response: (a) Although EPA has TALs which values are equivalent to the State WQS in this permit, there is no regulatory requirements to use State WQS equivalent values to monitor stormwater. For instance, the national MSGP which provides rules and guidances to regulate stormwater associated with industrial activities has used "benchmark values" which are not based on any state WQS to monitor stormwater discharges associated with varied industrial activities.

(b) If POCs were mobilized and detected above associated TALs at downstream of the Site, a new Site ID could be added for monitoring purposes even after the source Site was closed.

(c) EPA will consider either 75th percentile or different number before issuing the final permit decision.

CCW Comment on Site Deletion: These subsections relate back to CCW's ongoing concern that "permanent control measures" even a cap or engineered cover requires inspection and maintenance performed on a regular schedule. In addition, control measures may be the reason that the SMA results are less than the TAL and/or BTV. Alternatively, control measures may be the reason that samples are not being collected. Large berms or other forms of installed corrective action controls may be controlling runoff and if those controls are damaged or removed by future activities at the site, the POCs could be mobilized and discharges could occur. Regular inspection and maintenance of controls is necessary, and as such, sites with controls, that may have POCs less than the TAL and/or BTV or no collected sample, should be entered into long-term stewardship, not deleted from the permit. The referenced three subsections must be deleted.

EPA Response: 40 CFR 122.26(b)(14) *Storm water discharge associated with industrial activity* means 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. The term does not include discharges from facilities or activities excluded from the NPDES program under this part 122. 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 by-products 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 [Emphasis added].
SWMUs or AOCs regulated by this permit are not currently active. The reason for those Sites to be regulated by this NPDES permit program was because those SWMUs or AOCs may still have significant materials remain and exposed to storm water. It is reasonable to release any Site which has been demonstrated "no significant materials remain or exposed to storm water" from this permit so that the Permittees may spend their resources on those Site at which significant materials remain and are exposed to storm water. If significant materials become re-exposed to storm water at any of these Sites in the future, it will be the Permittees' responsibility to file permit coverage for authorization of such discharges. To remove a Site from this permit coverage does not shield the Permittees from complying with other regulatory requirements or obligation.

CCW Comment on Run-on/Runoff: CCW has concern about the equation below and a concern that runoff concentration may be diluted by run-on.

Geomean (run-off) – Geomean (run-on) <= TAL."

EPA Response: EPA has proposed two equations recommended by the NMED in their 2015 State 401 Certification letter. State WQS apply to receiving streams and dilution within the receiving waterbody is permitted.

CCW Comment on Tiered Approach: CCW recommended revised tiered approach as below:
Tier 1: Cease monitoring for the POC where the SMA result is less than the TAL and 90% composite BTV, or for POCs without a BTV, less than the TAL. If all POCs are less than the TAL and the 90% composite BTV, or for POCs without a BTV, less than the TAL, the Permittees may request the Site be entered into longterm stewardship.

Tier 2: Enter the SMA into corrective action within 18 - 60 months if one or more POCs exceed the TAL but are less than the 90% composite BTV, or for POCs without a BTV, exceed the TAL.
Tier 3: Enter the SMA into corrective action within 6 months if one or more POCs exceed the 90% composite BTV.

EPA Response: To set State WQS equivalent TALs is a very conservative approach because it is equivalent to establishing WQS at the end-of-the-pipe without a dilution for a WQ-based effluent limitation. The reason to consider background contribution is because such background contributions have made TALs unachievable by implementing reasonable BMPs. If a discharge contains higher concentration of a POC than the background but still less than the TAL, the discharge is considered to have no reasonable potential to cause exceedance or violation of WQS. Also, the intent of the permit is to regulate pollutants remaining from previous activities, not to address pollutants from natural background, non-point sources, or even other on-going activities. If other non-natural sources are identified to contribute POCs to specific Sites, it may need a different permit coverage to authorize those discharges.

CCW Comment on Alternative Compliance: CCW believed 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: EPA likes to keep this Alternative Compliance option available for EPA to require the Permittees to take a final corrective actions if necessary. The Alternative Compliance request will need EPA's approval to be effective.

CCW Other Comments: CCW provided 70 comments in the Attachment to the letter.

EPA Response: EPA Response: Because the 2015 draft IP has been withdrawn and not finalized, EPA is not required to respond to CCW's comments under 40 CFR §124.17. However, EPA has attempted to respond to major comments that are relevant to provisions in the new proposed draft IP in an effort to further explain the Agency's rationale with regard to the new draft permit. Because CCW will have opportunity to provide comments on the new draft permit during the public comment period, EPA is not discussing all CCW comments listed in the attachment so that EPA may propose the permit for the public review without further delay.

VIII. DRAFT PERMIT RATIONALE

This section sets forth the principal factual, legal, methodological, and policy questions considered in preparing the draft renewal permit. Also set forth are any calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under 40 CFR 122.44, reasons why they are applicable, or an explanation of how alternate effluent limitations were developed. Following modification of the AC Permit in 2010, LANL, representatives of interested citizens groups (i.e., Communities for Clean Water – CCW, Amigos Bravos, etc.) and NMED held several meetings to discuss implementation issues related to the AC Permit. As a result of those meetings, LANL, NMED and CCW provided significant input to EPA for consideration in preparing the 2015 draft IP. In late 2018 and early 2019, LANL held several webinars to discuss new information and new approaches with NMED, CCW and EPA to smooth the permit renewal process. After reviewing information provided in LANL's 2019 permit renewal application, as well as NMED's and CCW's comments to LANL's proposed changes, EPA is proposing this draft permit. CCW comments on the EPA

proposed 2015 draft permit are also discussed below if those comments are relevant to this proposed permit conditions.

Part I of the Permit: In addition to proposed changes described in Section VII above, other changes from the AC permit are discussed below, section by section in the sequence of the proposed permit.

Part I. Requirements for NPDES Permits

The AC Permit contains non-numeric technology-based effluent limitations, coupled with a comprehensive, coordinated monitoring program, to minimize pollutants in LANL's storm water discharges. LANL is required to implement site-specific control measures (including best management practices) to address the non-numeric technology-based effluent limits as necessary to minimize pollutants in their storm water discharges. As used in the AC permit, "minimize" means to reduce and/or eliminate discharges of pollutants in storm water to the extent achievable using site-specific control measures (including best management practices) that reflect best industry practice considering their technological availability, economic achievability and practicability. This permit renewal retains the "non-numeric site-specific control measures" approach.

This Permit authorizes only those storm water discharges associated with inactive solid waste management units (SWMUs) and areas of concern (AOCs) listed in the Hazardous Waste Permit (Permit No. NM0890010515) for Los Alamos National Laboratory (LANL). This Permit does not authorize storm water discharges associated with current conventional industrial activities at LANL. Storm water discharges associated with current conventional industrial activities shall be covered under U.S. Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges from industrial activity, also known as the Multi-Sector General Permit (MSGP). Some of the discharges from Sites covered in the AC permit were related to "active or deferred" Sites that should not have been regulated under the AC permit but that should instead be regulated under the MSGP or another mechanism. These active Sites identified by the Permittees will be removed from the final permit.

Any noncompliance with any of the requirements of this Permit, except as otherwise provided in the permit, constitutes a violation of the CWA. Failure to take any required corrective actions constitutes an independent violation of this permit and the CWA. This permit has established non-numeric technology-based effluent limitations. If the permittees have installed baseline structural control measure(s) on a Site and maintain such control measures properly; and perform nonstructural control measures as required in Part I.A of the permit, EPA will consider the Site in compliance with the non-numeric effluent limitations unless discharge data show such control measures are insufficient.

Part I.A. Non-Numeric Technology-Based Effluent Limitations

The AC Permit required LANL to install and certify baseline control measures for each Site within six months of the effective date of the AC (November 1, 2010) and to maintain those control measures. The Permittees completed installation of baseline controls at all Sites by May 16, 2011. Maintenance of baseline controls has been performed and has been described in the Permittee's Annual Reports, various submittals and in the 2019 revised permit renewal application package. There are no significant changes to this part of the permit, although there has been some restructuring of the content. The list of Baseline Control Measures and the requirements for maintenance of control measures from the AC Permit remain but restructured to two subparts: structural control measures and nonstructural control measures. Because BMPs had been installed at all Sites, this proposed permit focus on maintenance, instead of installation, of BMPs. This section also covers requirements addressing soil disturbance caused by installation of control measures.

CCW Comment: Communities For Clean Water (CCW) in its letter of June 25, 2019, which provided comments on LANL's Application and proposed draft permit language, raised concerns regarding Sites which are removed from the permit. CCW suggested that the permit include language that indicates that controls at sites that have been removed from the permit (and that may be contributing to water quality performance) still require ongoing maintenance.

EPA Response: Once a Site, like an outfall, is removed from the permit, the Site is no longer legally bound by the permit and is also not authorized to discharge pollutants to the Waters of the United States. 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.

Part I.B. Monitoring Requirements

This section includes two subsections: Confirmation Sampling and Inspections. Under Confirmation Sampling, specific requirements for sampling location, sampling procedures, collection of partial samples, additional sampling requirements, sufficiently sensitive method, and data average are established. Inspection section includes significant event inspection, post-storm inspection, long-term stewardship inspection, and inspection reports.

1. Confirmation Sampling: Confirmation sampling is used to determine the effectiveness of baseline and enhanced control measures, and to inform the permittees if additional corrective actions are necessary. Confirmation monitoring is also a method of sharing the available results with regulators and the public.

a. Sampling Location: EPA proposes to allow sampling locations to be adjusted to ensure the sampling location is representative of storm water discharges from the Site-affected media as delineated by soil sampling data. Such changes may include minor updates in Site boundaries, changes in storm water drainage patterns, logistical, or security adjustment, through the annual SIP process.

b. Sampling Procedures: Grab or composite samples shall be taken during a storm which results in an actual discharge from the Site or Sites and that produces sufficient volume of discharge to perform the required analyses. The term "composite sample" means samples collected either by an automatic sampler or by manual, during the whole or part of a rainfall period, are composited prior to an analysis. The Permittees may use either grab samples or composite samples for monitoring purpose if it keeps practice consistency.

c. Collection of Partial Samples: The proposed permit allows collection and analysis of partial samples in the event the collected volume is insufficient to perform all required analyses. EPA is not proposing to set priority for POCs for partial sample test because we cannot predict volume of sample could be collected during a storm event. However, NMED and the Permittees may propose such propriety during SIP process, if appropriate.

d. Additional Sampling Requirements: If the installation of control measures at a Site involves soil disturbance of Site-affected soils, the proposed permit requires the Permittees to take all necessary steps to minimize migration of sediments and runoff from disturbed sites. If soil disturbance within the Site-affected media occurs, storm water samples collected by the Permittees following these activities shall be analyzed for all pollutants listed in the SIP for that SMA. (Installation of controls which cause limited soil disturbance and routine maintenance of monitoring devices are not considered soil disturbance.) Also, if a Site for which monitoring has ceased later exhibits evidence of a discharge of contaminated runoff or conditions that could lead to a discharge of contaminated runoff, such as control measure failure, erosion problems, re-exposure of "no exposure" Sites, 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.

e. Sufficiently Sensitive Method (SSM): In comments on the 2015 proposed draft renewal permit, the NMED raised a concern about situations where the Minimum Quantification Level (MQL) specified for a constituent is higher than the MDL for a method available in the 40 CFR 136 method and higher than NMWQC. NMED commented that due to the sufficiently sensitive rule (FR Vol. 79, No. 160, 2014), if there is a 136 approved method that will yield results below the MTAL or ATAL value, it must be used. EPA agrees and proposes to include the requirement to use the 40 CFR 136 approved sufficiently sensitive method for a constituent if its MQL is higher than its MTAL or ATAL in the Confirmation Sampling subsection.

f. Data Average: The data average refers to the geometric mean of applicable monitoring results at the SMA. If all analytical results are below analytical method detect level, a value of "zero" may be reported. If one or more data are above the detect level, a value of ½ detect level shall be assigned to those below detect level data for calculation purpose. If the average value of a specific pollutant is below its MQL, a value of "zero" may be reported for the average.

2. Inspections: The Permittees must conduct the following types of regular inspections.

a. Significant Event Inspections: The Permittees must inspect and re-evaluate all Sites after notice of a significant event, such as a fire or flood, which could significantly impact the control measures and environmental conditions in the affected area.

b. Post-Storm Inspection: The Permittees must inspect control measures and storm water management devices at any Site affected by a "storm rain event" within fifteen (15) days after such storm rain event. A "storm rain event" means a 0.50 inches or more intensive rain event within 30 -minutes.

c. Long-Term Stewardship (LTS) Inspection: This new type of inspection is to be conducted when a Site is assigned to a Long-Term Stewardship (LTS) location. The Permittees shall inspect and evaluate each Site and its associated controls annually (a) for a 5-year period (Permit cycle) and (b) after a 3-year, 24-hour return period storm. The results of the inspections are to be reported to EPA annually. An assessment will be conducted at the end of each Permit cycle to determine if adjustments should be made to the control measure inspection and included with the subsequent re-application submittal. Sites would be put in the LTS if confirmation sample results show that the Site is likely influenced by the background contributions. Permit Part I.C.3 sets conditions for Sites to be put into the LTS. The LTS is a new provision.

d. Inspection Reports: These inspection Reports will be retained in accordance with requirements established for Recordkeeping.

Part I.C. Site Evaluations

Results of site confirmation sampling are evaluated against the Target Action Levels (TALs).

1. Target Action Levels: 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. In a letter dated May 8, 2008, based on site-specific data, NMED required as a condition of certification of the AC Permit that EPA incorporate the maximum target action levels (MTALs) for hardness-dependent metals based on a hardness value of 30 mg/l as CaCO3. 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. During the time when EPA proposed the 2015 permit renewal, the NMED, LANL and CCW agreed to recommend use of receiving stream hardness to develop canyon-based TALs for hardness-dependent metals. The proposed permit adopts this suggestion. Hardness values provided in the Application are used to calculate the hardness-dependent MTALs. Hardness-dependent MTAL values for each canyon are attached as Appendix C-1 to the proposed permit. Target Action Levels are listed in Appendix C to the proposed permit.

2. Site-Specific Demonstration: Pollutants of concern contributed by background or natural sources was not considered when EPA issued the first permit. EPA became aware of the background issue and had addressed the issue in 2015 proposed permit. LANL proposed to consider Background Threshold Values (BTV) and soil data in determinations of effectiveness of BMPs through the annual SIP process. As more data become available, EPA is considering both background and soil data in the Site Evaluation processes to determine the compliance status of Sites. Sources that are outside the Permittees' control may include natural background and aerial deposition of contaminants not associated with the historic activities conducted by the Permittees. The demonstration must include data previously collected by the Permittees or others (including literature studies) that describe the levels of natural background and baseline concentrations of pollutants in storm water in the local area. This section provides more specific steps and means to address certain alternatives allowed by the Alternative Compliance in the AC Permit.

3. Long-Term Stewardship Category: The Long-Term Stewardship (LTS) Category includes Sites that do not meet the requirements for Site deletion and also do not currently require additional corrective action. Documentation of LTS Site categorization will be incorporated in the SDPPP. LTS sites are retained in the permit for continued observation and evaluation until further actions can be determined.

4. Deletion of Sites: The Permittees may submit a written request to remove a Site from coverage under the Permit if the Permittees can demonstrate that the Site no longer has "storm water discharges associated with industrial activity" under 40 CFR 122.26(b)(14).

EPA proposes to change some provisions of Deletions of Site from the AC Permit. Once a Site is terminated from coverage under the renewal permit, it will be the Permittees' responsibility to ensure that the Site complies with all other applicable regulatory requirements. Major changes are discussed below:

(a) No industrial activities as specified under 40 CRF 122.26(b)(14) ever took place at the Site. This provision excludes Sites which did not meet the definitions of industrial activities.

(b) Site-related pollutants have never been exposed, or will no longer be exposed, to storm water. The permittees may submit documentation that demonstrates historic activities that led the Site to be a SWMU or AOC did not result in significant materials exposed to storm water (e.g. Site-related pollutants are a minimum of 3-ft below the ground surface, below existing building), or that any later installed control measures will prevent pollutants of concern from being exposed to storm water. 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.

(c) Sites have no significant materials remaining that are exposed to storm water after installation of permanent control measures. The permittees collect two confirmation storm water samples and monitoring results show no pollutants exceeded the applicable TALs,

(d) 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.

(e) The Permittees may submit a request to EPA that the Site be removed from the Permit if the SSD demonstrates that no applicable TAL or BTV exceedances are reasonably expected to be Site-related, for all SMAs identified to contain the Site.

(f) The Permittees may request removal of a Site or Sites if no confirmation sample has been collected at the associated SMA during the previous permit cycle if the following criteria are met: (1) Samplers are in representative locations, (2) No confirmation sample has been collected after a 25-year, 24-hour return period storm, and (3) Inspection records validate full operability of sampler. When EPA considers a 3-year retention technology in the area could be an acceptable and complying with the corrective action requirements, if no samples could be collected during a 25-year, 24-hour return period storm event, it has reasonably demonstrated that no pollutant of concern from the Site may be discharged or reach the Water of the United States.

CCW Comment: It is not clear what types of sites are covered under this section. CCW asks EPA to answer the following questions: Does this Part apply to all sites where 2 confirmation samples were collected and no TALs were exceeded? How is the public to know if the control measures that were installed are the reason that no TAL standards are exceeded? At the very least, permit coverage should be continued so inspection and maintenance of these sites will continue. Even "permanent control measures" such as capping would require continued monitoring, inspection and maintenance. Parts (b) and (d) of this same section should also include provisions for maintaining control structures that may be contributing to water quality improvements.

EPA Response: For all SMAs, if a minimum of two confirmation storm water samples were collected and no POCs exceeded the applicable TALs, EPA considers that the Permittees have demonstrated that the Site has no significant industrial materials remain and therefore is no longer considered an industrial activity for areas where industrial activity had taken place in the past pursuant to 40 CFR 122.26(b)(14). This condition applies to all Sites covered by the permit. Once a Site is not an industrial activity, the NPDES Permit may not have proper authority to regulate it under the CWA. To address CCW concern regarding proper maintenance of BMPs, EPA proposes 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 stormwater and trigger stormwater discharge associated with industrial activity under 40 CFR 122.26(b)(14).

CCW Comment: CCW has reviewed the proposed deletions submitted with Permit Renewal Application by the Permittees and provided a series of comments on the following 14 Sites: R-SMA-2.05, 00-011 (c); R-SMA-2.3, 00-011 (e); ACID-SMA-2, 45-001; ACID-SMA-2, 45-002; LA-SMA-4.2, 01-001 (c); LA-SMA-4.2, 01-006-(d); CDB-SMA-1, C-46-001; CDB-SMA-4, 54-017; CDB-SMA-4, 54-018; M-SMA-4, 48-007 (a); M-SMA-4, 48-007 (d); M-SMA-12.5, 05-005 (b); PRATT-SMA-1.05, 35-016 (m); and T-SMA-5, 35-016 (a). CCW recommended that EPA to maintain all 14 sites on the permit, with the only acceptable exceptions being R-SMA-2.05, 00-011 and PRATT-SMA-1.05, 35-016(m) which post the least risk.

EPA Response: EPA will evaluate LANL's request and balance their justifications with CCW and NMED inputs prior to make the final decisions for those Sites.

Part I.D. Corrective Action

EPA proposes to rewrite this section based on new information which was not available when EPA issued the permit in 2009. The new structure contains following subsections as briefly described below.

1. Determination of Corrective Action Measures: Once a TAL or BTV has been exceeded for a Site related constituent, the Permittees shall perform a corrective action evaluation to determine the appropriate method for completion of corrective action. Corrective actions may include enhanced (i.e., additional, expanded or better-tailored) control measures to complete corrective action. Where feasible, these enhanced controls shall incorporate low-impact design and green infrastructure design features. The Permittees may decide to achieve corrective action through the elimination of exposure of Site-related pollutants to storm water. EPA proposes to include caps or other engineered covers and/or soil removal as options for the elimination of exposure to storm water. The Permittees may also achieve the corrective action through installation of control measures that retain a volume of storm water runoff from a Site or SMA that is equivalent to a 3-yr, 24-hr storm event based on the most representative rain gage historic records as described below.

LANL commented that "The current IP (the AC Permit) does not define design criteria for total retention. Without a design basis the co-Permittees have not been able to use total retention as a tool for the completion of corrective action. The proposed 3-year 24-hour (1.19 to 1.79 in. of precipitation; dependent upon location of the Site) design storm was chosen to be both conservative and technically achievable. A retention of the 3-year, 24-hour storm event represents a storm water capture volume that exceeds guidance provided by the Energy Independence Security Act and regulations implemented by leading Region 6 municipalities in the field of storm water quality. Despite the statistical annual risk of exceedance of the 3-year, 24-hour storm, only 13 storms in the 62-year period of record (1952 to 2013) have exceeded the 3-year, 24-hour storm. Research has demonstrated that increasing the capture volume (beyond basic water quality goals) is not correlated to an increase in removal efficiencies of targeted constituents." But, capture of storm runoffs will reduce volume of runoff reaches the water of the US. EPA proposes to replace "total retention" with "retention at a 3-year, 24-hour storm" because the frequency of 3-year, 24-hour storm, in average, is about once every 5 years, one permit term. In order to keep this option simple, achievable and enforceable, EPA may consider using the 5-year, 24-hour storm event to statistically limit one or less discharge within every permit term.

Under the proposed renewal permit, a Site will not be considered non-compliance if confirmation samples could not be collected and therefore no additional corrective action is required prior to analytical results of confirmation sampling becoming available. However, the Permittees is required to conduct inspections and maintenance of installed control measures.

CCW Comment: The Draft IP outlines a process by which Permittees can choose to cap or use an engineered cover to eliminate exposure of site-related pollutants to storm water. Requirement to mimic pre-development hydrology should be incorporated into the elimination of exposure corrective action option.

EPA Response: The permit has required that the Permittees must, to the extent practicable, divert, infiltrate, reuse, contain, detain, or otherwise reduce storm water run-on/runoff to minimize Site-related POCs from discharging to receiving waters. While run-on/runoff and/or other control measures still fail to bring discharges to meet TALs or BTVs, or run-of control is not feasible for certain Sites, cap or retention may become last few economically achievable technologies to bring Sites to the compliance with the permit. Also, cap or engineered cover is unlikely applicable to a huge area. EPA has no plan, prior to have sufficient information available, to set more restriction to this control option.

CCW Comment: CCW suggested the following requirements to address "total retention" option:
a. Ensure Total Retention is not used interchangeably with "3-year, 24-hr retention".
b. Strengthen requirement to maintain operational retention volume within Part I.A.b Maintenance of Control Measures to account for sediment accumulation within control structures.

c. Include provision requiring sampling and proper disposal for sediments removed from control structures. This should include public notice and an opportunity for public comment.
d. Require annual reporting of maintenance activities, sediment removal/depth measurements, monitoring data, detection of flow, and photographs be reported annually.
e. Include definition of the "3-year, 24-hr retention" storm event depths based upon location on the site to increase ease of review of proposed design approaches.
f. Include caveat that for certain high-risk sites EPA may request a higher retention volume.
g. Include flow monitoring for detection of flow (visual reporting or installed samplers); since water quality sampling is not required, this allows verification that controls are or are not retaining water based upon the recorded storm event classification. Encourage development of design standards.
h. Include a third-party review of retention designs.

EPA Response: (a) the term "total retention" is not used in the permit; (b) the permit requires 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 a 3-year, 24-hour storm; (c) sampling and/or monitoring of disposal requirements may be beyond the scope of NPDES authority unless the disposal site has potential to release pollutants to the Waters of the United States. In that case, authorization under a different permit may be more appropriate; (d) maintenance of retention technology is part of BMP maintenance requirements and no need additional requirement; (e) the depth criteria will be review on a case-by-case basis when a plan is submitted; (f) will be a case-by-case basis and to define high-risk during the permit renewal process could be time consuming and arguable; (g) inspection requirements set in Part I.B.2 also apply to this control technology; and (h) a thirty-party review will have potential to delay the schedule. Practically speaking, it will be everyone's (particularly for the Permittees to avoid potential problem in the future) interest that retention ponds are designed, built and maintained at a capacity to meet or even exceed a 3-year, 24-hour or equivalent storm event.

CCW Comment: The soil removal approach does not address pollutants that may still appear in stormwater runoff samples from contaminants that have migrated to the edges or outside of or beyond the solid waste management unit (SWMU) boundary. CCW would be more supportive of this option if confirmation stormwater sampling (2 samples) still occurred.

EPA Response: To define a scope of soil removal beyond the SWMU boundary is difficult and shall be evaluated on a case-by-case basis. It will be almost impossible to do it through the permitting process. If evidences show that contaminants have been migrated downstream or treated area is less than actual contaminated area, then a new designated Site number may need to address the issue through the annual SIP process. EPA believes that soil data will effectively demonstrate that POCs left from previous industrial activities are not exposed to the environment. While the proposed permit requires "Following certification of completion of soil removal, the Permittees shall perform storm water confirmation sampling." EPA cautions that such stormwater confirmation samples may also reveal contributions from natural or non-industrial activity sources.

2. Alternative Compliance: Where the Permittees believe based upon a technical evaluation of existing control measures that they will be unable to certify Completion of Corrective Action (individually or collectively) due, for instance, to site conditions that make it impracticable to install further control measures, or pollutants of concern exceed approved background or baseline values and are contributed by sources beyond the Permittees control, the Permittees may seek to place a site into Alternative Compliance, whereby Completion of Corrective Action will be accomplished on a case-by-case basis, and as necessary, pursuant to a individually tailored control measure by EPA. The public will have opportunity to review and comment on such requests.

EPA proposes to revise the section on Alternative Compliance in the AC Permit because of the following facts and/or concerns: (a) most of the issues (i.e., run-on, natural background, precipitation, and etc.) raised by LANL during the past years to justify its requests for alternative compliance could be resolved through proposed the new permit conditions; (b) the deadline set forth in the AC Permit for requesting Alternative Compliance already passed and factors like natural background or lack of storm events and run-on contribution were not considered when EPA proposed and established those dates; and (c) EPA believes it makes more sense to determine the status of compliance based on installed site-specific control measures (i.e., site clean-up, sediment control, combination of control measures, other approaches beyond the baseline control measures, and etc.) on a case-by-case basis under the authority of the CWA.

EPA proposes to revise the "Alternative Compliance" section to include that the Permittees provide a list of additional on-the-ground actions or a watershed protection approach which have resulted in a significant reduction of discharges of Site-related pollutants. EPA also proposes to require that the Permittees provide a list of BMPs which may further mitigate exposure of POCs to the environment through those additional BMPs, if applicable. EPA, after considering all the information submitted by the Permittees, including all comments received on the request and the Permittees response to those comments, may approve or deny the request. EPA may also require the Permittees to install Site-specific control measures to complete the corrective action as part of conditions of Alternative Compliance. EPA believes that it is necessary to keep the Alternative Compliance option in order to address some special cases.

CCW Comment: To adequately protect water quality, the alternative compliance section of the permit must clearly include requirements that the Permittees take further action to reduce discharges of pollutants. One mechanism to ensure that further action is taken would be to require that the Permittees submit an individual site-tailored workplan and schedule for completing further actions to reduce discharges as part of the alternative compliance request.

EPA Response: EPA adds site-tailored workplan and schedule to the Alternative Compliance requirements.

CCW Comment: CCW raised concerns about deadlines for the Permittees to submit the Alternative Compliance request and schedule for EPA to approve/deny the request.

EPA Response: Alternative Compliance should be the last approach after consideration/implementation of all feasible and economically achievable BMPs to meet the goal for completion of the corrective action. Therefore, EPA decides not to set a deadline for submittal of Alternative Compliance request. Also, since EPA is the regulatory agency, not the regulated entity, of this permit, EPA will not set deadlines/timelines for EPA's action.

CCW Comment: Include requirements that all individually tailored work plans outline monitoring plans, with a description of what is required, to determine the effectiveness of on-the-ground actions.

EPA Response: Alternative Compliance should be the last corrective action option to contain POCs from releasing to the environment. EPA may set site-specific requirements for inspection, maintenance, and/or monitoring. Alternative Compliance option could be used to move the related Site to the LTS category. Monitoring/inspection requirements are established for the LTS Sites.

CCW Comment: What is the fate of these alternative compliance requests under the new permit submitted by the Permittees in May 2015?

EPA Response: EPA is addressing certain factors, (i.e., natural background, run-on contribution, retention technology, measurable storm events for sampling and etc.) in this permit renewal process, and hopefully the

new permit will resolve most cases raised by the Permittees in 2015. If appropriate, the Permittees may resubmit those requests with information required by the new permit (without reopen public notice) to EPA for EPA review.

3. Schedules for Corrective Actions: If additional corrective actions are required, the Permittees shall make reasonable efforts, in a good faith, to achieve for completion of corrective actions within the 24 months. Since EPA issued the AC permit in 2009, EPA has learned that many Sites have not had "measurable storm" and therefore, LANL could not collect confirmation samples after installations of control measures. EPA's decision to propose and establish those fixed compliance schedules for High and Moderate Priority Sites in the AC permit was based on assumptions that the permittees could collect most of confirmation samples within a year or two. Such an assumption has been proved false. Because we won't know whether confirmation samples could be collected or not, EPA decides not to include hard deadlines for final actions requirements. If one or more POCs exceeding the applicable TALs or BTVs cannot be excluded as the source of the exceedance pursuant to Part I.C.1, the Permittees shall take proper corrective actions and complete installation of additional control measures no later than 24 months from the date when the Permittees have knowledge of TAL or BTV exceedance.

Because confirmation samples may only become available after a significant storm event, LANL may need to take several corrective actions if effluent data show exceedances of TALs or BTVs, during the same time frame. Also, more advanced or tailed BMPs are required, it is difficult to predict or to judge whether a 24-month schedule is adequate or manageable while so many Sites are covered by this permit. EPA will not consider any fixed "compliance schedules" for LANL to certify completion of corrective actions. To delete those fixed compliance schedules does not violate anti-backsliding regulation because those fix-deadlines conditions were based on insufficient information which caused ill judgment and resulted in technical error.

In the AC permit, Sites associated with previous PCBs operations were designated as High Priority, and the rest of Sites were designated as Moderate Priority Sites. Because the potential background contribution issues and all Sites already had BMPs installed, EPA will treat all Sites equally ranked in this permit renewal. The proposed permit no longer distinguishes PCB and non-PCB Sites. Also, because TAL for PCBs is based on the State HH-OO standards and fish is not found in the permitting area, it is no need to set a higher priority for PCB-contaminated Sites.

CCW Comment: CCW requests that EPA maintain the compliance deadline of 12 months from the collection of the first sample that is above TALs. This is the required compliance schedule in the 2010 IP for moderate priority sites. CCW believes that this is an CCW Comments to EPA appropriate amount of time to allow compliance and it gives an additional 6 months from what is currently allowed for high priority sites in the 2010 IP.

EPA Response: EPA has explained why a 24-month, not a shorter schedule, was proposed. EPA also believes that it is everyone's (particularly for the Permittees) interest to complete the corrective action sooner than later in considerations of man-power and time consuming on dealing with contract, paper work, inspection and also unpredictable fiscal budget. Although, the permit has a clause of Force Majeure to address unpredictable causes of corrective action delay, EPA does not want the Force Majeure procedure to be used too frequently because the permit set a tight action schedule.

CCW Comment: The final permit should clarify that sites in corrective action at the time the new permit is issued are operating under the 6-12-month compliance deadlines that were triggered under the 2010 Permit when the TAL exceedances were detected. Regardless of what the schedule is, clarity on compliance deadlines should be stated for these sites.

EPA Response: Prior to the effective date of the new permit, the Permittees must comply with conditions set in the existing AC permit. Once the new permit is in effect, in order to reduce burden to track those Sites that initiate corrective actions not long before the effect of the new permit, EPA proposes that "For Sites which require corrective actions prior to the effective date of the final permit, corrective actions shall be completed no later than 12 months from the effective date of the final permit."

4. Force Majeure: The Permittees may seek EPA approval for an extension if the Permittees can demonstrate that "force majeure" has resulted, or will result, in a delay in meeting the obligation to confirm completion of corrective action by the specified deadline.

5. Completion of Corrective Action: The Permittees must certify to EPA completion of corrective action wherever applicable for Sites eligible either for removal from the permit coverage or to be placed in the long-term stewardship inspection category. Many factors (i.e., background contribution, lack of measurable storm events, inaction of RCRA program, etc.) might have delayed the permittees to certify Completion of Corrective Action, so it would be appropriate to place some Sites in a stewardship inspection category.

EPA is not proposing to include the RCRA "corrective action complete without controls/corrective action complete with controls" status to determine Completion of Corrective Action as permitted in the AC Permit. But, if the permittees could demonstrate or already demonstrated that the permit provision of Part I.I.2(b) of the AC Permit "[T]he Site has met RCRA's "corrective action complete without controls/corrective action complete with controls" status or the Site has received a Certificate of Completion under NMED's Consent Order and confirmation samples of runoff have demonstrated concentrations no greater than applicable target action levels.", or other Deletion of Sites criteria listed in the AC Permit, prior to the effective date of this proposed permit, EPA will not include those Sites in the new permit.

5. Monitoring at Sites in Corrective Action: Confirmation samplings are required for Sites after corrective actions. If the Permittees have submitted request for either Alternative Compliance or Force Majeure to EPA that are pending, the Permittees may complete a Site-Specific Demonstration pursuant to the permit.

Part I.E. Plans and Reports

1. Site Discharge Pollution Prevention Plan (SDPPP): EPA proposes to retain the requirements of SDPPP from the AC permit with a few changes. The facility's SDPPP must describe all control measures installed to meet the requirements of this Permit. The Permittees shall update the facility's SDPPP and Sampling Implementation Plan (SIP) annually, submit it to EPA and copy NMED by May 1 of each calendar year of the Permit and post the SDPPP and SIP on the Permittees' Individual Permit public website. The annual update shall fully incorporate all changes made during the previous year and reflect any changes projected for the following year. The facility's SDPPP must remain compliant with relevant State, Tribal, and local regulations, if applicable.

CCW Comment: A requirement that all SSD submittals and correspondence associated with the SSD submittals should be posted at the Permittees website.

EPA Response: The following permit language "The Permittees shall update the facility's SDPPP annually, submit it to EPA and copy NMED by May 1 of each calendar year of the Permit and post the SDPPP on the Permittees' Individual Permit public website within 30-days after the submittal." is proposed.

CCW Comment: It is CCW's interpretation of the Draft IP that sites for which a SSD has been submitted by the Permittees to EPA, but no action has yet been taken by EPA to approve or disapprove the SSD, are still subject to the compliance deadlines outlined in Part 1.D.3. Schedules for Corrective Actions.

EPA Response: The proposed permit requires SDPPP to include Schedules for Control Measure Installation which states that "The Permittees shall update the SDPPP as necessary to include schedules for additional control measure installation and implementation resulting from corrective action under Part I.D of this Permit." Unless a longer schedule is proposed in the SDPPP and approved by EPA, schedules set in Part I.D.3 apply.

2. Annual Sampling Implementation Plan (SIP): When EPA proposed the 2015 permit renewal, NMED issued §401 Certification of Conditions that required the final permit to include "Sampling Implementation Plan" (SIP). NMED required an annual update to the SIP as part of the renewed permit and LANL agreed that an annual update is reasonable and achievable. EPA is including the SIP in the proposed permit.

The SIP is to be "an ongoing evaluation of Sites based on all available information to accurately determine Site-related constituents and monitoring requirements in storm water runoff. This monitoring requirement is necessary to ensure that monitoring data is representative of Site discharges so that compliance with the water quality standards can be appropriately evaluated."

3. Annual Compliance Report: The AC permit required two separate reports: Compliance Status Report and Annual Report. The proposed permit requires the Annual Compliance Status Report be integrated into the SDPPP, to reduce unnecessary reporting burden and duplicate information.

Part II. Other Conditions

This section consolidates certain provisions in the AC Permit which were addressed in varied sections.

1. Watershed Protection Approach: EPA encourages the Permittees to voluntarily install watershed-based control measures, such as sediment barriers, to mitigate sediment or storm water runoff reaching the main channels of the canyons and/or the Rio Grande. EPA may consider such a Watershed Protection Plan as alternative compliance for associated Sites within the scope of the Plan.

The AC Permit has a provision which encourages the Permittees to voluntarily install watershed-based control measures. However, the AC Permit does not recognize watershed-based control measures as acceptable for compliance purposes. EPA proposes to allow the Permittees to use a watershed-based control approach for compliance purposes on a case-by-case basis if the Permittees demonstrate that significant reduction of pollutants discharged into major canyons has been accomplished. The NMED questioned whether "significant reduction" means that storm water discharges at the bottom of the watershed meets WQS. EPA is not proposing to use state WQS to define "significant reduction" because the scope of a watershed will cover a wider drainage area than storm runoffs from Sites within the watershed and pollutants contributed by naturally occurring or developed landscape background and non-point sources may cause exceedance of state WQS. Also, this is not a water quality-based permit, but rather a non-numeric technology-based permit, with site-specific control measures, including BMPs, expected to be protective of water quality. The Permittees are complying with the permit if they implement appropriate basic (including structural and non-structural) control measures and take timely corrective actions in accordance with the permit conditions. A watershed protection approach could reduce the total load of pollutants from entering the waters of the downstream canyons. However, if storm water discharges at the bottom of the watershed meet WQS, it could be a sign of compliance for all Sites within the watershed or sub-watershed.

Although EPA established TALs based on state WQS in the AC permit, it was not EPA's intent that these TALs (particularly for chronic or human health-based pollutants) be used as "standards" or "criteria." Rather, as stated in the AC Permit, "Permittees must control discharges from all Sites as necessary to ensure that such

discharges will not cause or contribute to a violation of applicable water quality standards. EPA believes that compliance with the technology-based effluent limitations and other terms and conditions of this permit will control discharges as necessary to meet applicable water quality standards." EPA took a BMP approach and used TALs as benchmarks to determine whether more BMPs beyond those basic BMPs were necessary. Also, EPA determined that if a discharge met TALs, that discharge would not cause or contribute to a violation of state WQS. But EPA also realized that if a discharge exceeded TALs, it might or might not (it is difficult to determine reasonable potential for storm water discharge) cause or contribute to a violation of state WQS. While the TALs apply to discharges from Sites without accounting for dilution in the receiving water, the NM WQS apply to the waters of the U.S. or to State waters, not to a discharge itself. Therefore, EPA determined that BMPs were the most reasonable approach to deal with runoff from the SWMUs and AOCs. EPA also established the alternative compliance process to deal with non-site related sources of pollutants which might cause or contribute to exceedances of TALs and could not be properly addressed by BMPs.

To control each Site separately, individually, and independently and then confirm effectiveness with runoff monitoring is not only time consuming, but also resource intensive. Because metals and persistent pollutants likely remain in the sediments and sediment movements caused by storm water discharges may eventually reach the downstream waterbodies, it may be more meaningful, in certain circumstances, to control sediment than to control runoff in terms of protection of downstream (e.g., canyons and Rio Grande) water quality. One example of technology for watershed protection approach is to build sediment control barriers in the runoff pathways. EPA also solicits for comments whether to give credit or not in some fashion for in-stream sediment removal as part of watershed protection approach.

2. Record Keeping: The Permittees shall retain records of all monitoring information and reports, Site inspections and reports, decision-making procedures and supporting documents and records, and annual SDPPP updates with supplemental information for at least three (3) years after the issuance of the next permit renewal.

3. Public Involvement: The Permittees shall maintain a public website where information on the Permit will be made available. The Permittees will provide the opportunity for members of the public to register for and receive e-mail notifications on compliance with the Permit on the public web site. LANL requests that public meetings to be held annually, instead of semi-annually.

4. State Water Quality Standards: EPA believes that compliance with the non-numeric technology-based effluent limitations and other terms and conditions of this Permit will control discharges as necessary to meet applicable water quality standards. EPA proposes to replace the subtitle Water Quality-based Effluent Limits shown in the AC permit with State Water Quality Standards to avoid confusion because this permit has established non-numeric technology effluent limitations.

5. Permit Reopener: The Permit may be reopened and modified during the life of the Permit. EPA proposes to move "Permit Reopener" clause from Part II to Part I, so Part II will only address other reporting requirements.

24-Hour Oral Reporting

The AC permit had a provision that requires the permittees make an oral report within 24 hours for any exceedance of MTAL. The permittees requested to remove this oral reporting requirement. Because the exceedance of MTAL will not likely impose imminent threatens to human health in the downstream residents and the State is unlikely to make the downstream public aware of such exceedance immediately upon the receipt of the oral report so that the downstream public may take necessary precautionary actions, EPA does not deem that an oral reporting requirement is necessary. EPA is not including the oral reporting requirement in the

proposed permit. The Annual Compliance Report requires the Permittees to identify POCs that exceed the applicable TAL or BTV.

IX. ANTI-BACKSLIDING AND ANTI-DEGRADATION POLICY

The New Mexico 20.6.4 NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The permit renewal does not authorize new or increased discharges into the environment; rather, it enforces BMP requirements aiming at reduction of pollutants released to the environment.

EPA proposes several changes due to new information revealed during the term of the AC permit, and all those changes are complying with EPA's anti-backsliding policy. EPA proposes to replace the requirements for installation of baseline control measures with maintenance of those control measures because all Sites regulated by the AC Permit have had baseline control measures in place. Therefore, maintaining those baseline control measures will meet the non-numeric technology-based effluent limitations in the AC permit.

X. VARIANCE REQUESTS

No variance requests have been received.

XI. ENDANGERED SPECIES ACT

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, the EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. According to the most recent county listing of species, shown on the U.S. Fish and Wildlife Service's Information, Planning, and Conservation System, the following species with critical habitats may be present in the county where the proposed NPDES discharge occurs: Mexican spotted owl (*Strix occidentalis lucida*) and Jemez Mountains salamander (*Plethodon neomexicanus*). The following species may be present in the county where the proposed NPDES discharge occurs without critical habitats: New Mexico meadow jumping mouse (*Zapus hudsonius luteus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and yellow-billed cuckoo (*Coccyzus americanus*).

Mexican spotted owl. The Mexican spotted owl prefers forested mountains and canyons with mature trees that create high, closed canopies, which are good for nesting. They also nest in stick nests built by other birds, in tree cavities and caves and on cliff ledges. The main threats to the Mexican spotted owl are starvation, fire, and loss of habitat due to logging, which also causes a greater risk of predation by great horned owls as a result of increased open space. The reissuance of this permit will not contribute any threats to the Mexican spotted owls. EPA determines that reissuance of this permit has "no effect" on the species.

Jemez Mountains Salamander. LANL developed a Habitat Management Plan (HMP) entitled "Threatened and Endangered Species Habitat Management Plan Area of Environmental Interest Site Plan for the Jemez Mountains Salamander", dated July 2013. The HMP states that the primary threats to the JMS on Los Alamos National Laboratory (LANL) property are impacts to habitat quality or destruction of individual salamanders caused by LANL or Los Alamos County operations. Forested LANL property is also subject to impacts from severe wildland fire and wildfire suppression. During periods of the year when the salamanders are on the soil surface, when conditions are warm and wet (generally July – September), they are vulnerable to injury and mortality from soil-disturbing activities, including operation of heavy equipment in core habitat. They also are at risk to be found and collected by people.

The HMP has identified areas of environmental interest (AEIs) which consist of two areas, a core area and a buffer area. The core habitat is defined as suitable habitat where the JMS occurs or may occur at LANL. The core habitat consists of sections of north-facing slope that contain the required micro-habitat to support the salamanders. The buffer area is 328 feet (100 meters) wide extending outward from the edge of the core area. LANL has identified core habitats which contain contiguous and noncontiguous habitat areas. The largest contiguous section of habitat at LANL is in Los Alamos Canyon. There are two noncontiguous areas of habitat in Two-mile Canyon, four in Pajarito Canyon, one contiguous area in Cañon de Valle, and the entire Fenton Hill facility.

The HMP provides the guidelines for habitat alterations and allowable activities in AEI core and buffer areas for the salamanders. It describes what and where habitat alterations are allowed under the guidelines of this site plan. If an activity does not meet the restrictions given in the guidelines, the activity must be individually reviewed for ESA compliance through the section 7 consultation process. Because any activity conducted by LANL which may affect federally listed endangered species requires compliance with ESA section 7 consultation process and LANL has implemented the HMP to protect the species habitats, EPA determines that the reissuance of this permit has "no effect" upon the baseline of the HMP. If any site-specific information indicates that to comply with the permit requirements may cause adverse effect to the species during the term of the permit, then EPA may reevaluate the effect for that specific Site.

New Mexico Meadow Jumping Mouse. New Mexico Meadow Jumping Mouse has been proposed to be listed in the federal endangered species list. LANL stated in the August 2013 email that LANL does not have any New Mexico Meadow Jumping Mouse habitat at LANL. Experts from NMDGF (New Mexico Department of Game and Fish) have surveyed areas of possible habitat and they have confirmed that LANL does not have habitat for that species. Therefore, any federal action on the facility will have "no effect" on the species.

Southwestern willow flycatcher. LANL has provided a statement to EPA, via an email dated August 26, 2013, when EPA prepared the permit reissuance for LANL's industrial wastewater discharge permit (NM0028355) that "The only area of habitat that we currently manage as Southwestern Willow Flycatcher habitat is the wetlands complex on the north side of Pajarito Road just east of TA-18. We have been surveying the area since the mid-90s and have never had any nest, but we occasionally do have migrant Willow Flycatchers come through. Since none of them have stayed and nested we cannot say that they were the endangered southwestern subspecies." Based on the new information available, since the southwestern willow flycatcher has not been observed for staying or nesting in LANL since the mid-90s, EPA has determined that this permitting action has "no effect" on southwestern willow flycatcher.

Yellow-billed cuckoo. Yellow-billed Cuckoos use wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes. In the Southwest, yellow-billed cuckoos breed in riparian woodlands of willows, cottonwoods and dense stands of mesquite to breed. The LANL HMP does not have any requirements for this species since it does not contain any breeding habitat on-site. Therefore, the reissuance of this permit has "no effect" on this species.

Therefore, EPA has determined that the reissuance of this permit will have no effects on any of those listed species upon either previous ESA consultation, new information available to EPA, or existing Habitat Management Plan baselines.

XII. ADMINISTRATIVE RECORD

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by 40 CFR 124.9:

A. APPLICATION(S)

EPA Application Forms 1 and 2F submitted on July 16, 2019.
New electronic version of Form 1 and Form 2C via email dated October 15, 2019.

B. STATE WATER QUALITY REFERENCES

STATE ADMINSTRATIVE CODE

The general and specific stream standards are provided in "The State of New Mexico Standards for Interstate and Intrastate Surface Waters 20.6.4 NMAC" (20.6.4 NMAC, effective August 11, 2017)

WATER QUALITY STANDARDS IMPLEMENTATION

Region 6 Implementation Guidance for State of New Mexico Standards for Interstate and Intrastate Stream, May 15, 2012.

C. Communities For Clean Water letter dated October 3, 2019.

PROPOSED PERMIT

Region 6
1201 Elm Street, Suite 500
Dallas, Texas 75270-2102

NPDES Permit No. NM0030759

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATIONSYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Los Alamos National Laboratory (LANL), managed and owned by Permittees

Newport News Nuclear BWXT-Los Alamos, LLC
600 Sixth Street
Los Alamos, New Mexico 87544

and

U.S. Department of Energy
Office of Environmental Management
Los Alamos Field Office
P.O. Box 1663
Los Alamos, New Mexico
87545-1663

is authorized to discharge storm water associated with industrial activities from specified solid waste management units (SWMUs) and areas of concern (AOCs) (as identified in Appendix A and referred to herein as "Sites") from the facility located at Los Alamos, New Mexico, to receiving waters named:

Tributaries or main channels of Mortandad Canyon, Canada del Buey, Los Alamos Canyon, DP Canyon, Sandia Canyon, Ten Site Canyon, Canyon de Valle, Water Canyon, Ancho Canyon, Bayo Canyon, Chaquehui Canyon, Fence Canyon, Pajarito Canyon, Twomile Canyon, Threemile Canyon, Potrillo Canyon, Pueblo Canyon, and Rendija Canyon, in Water Body Segment No. 20.6.4.98, 20.6.4.126 or 20.6.4.128 of the Rio Grande Basin,

in accordance with this cover page and monitoring requirements, and other conditions set forth in the Requirements for NPDES Permits and Appendices, hereof.

This permit, prepared by Isaac Chen, Environmental Engineer, Permitting Section (6WDPE), supersedes and replaces the administratively continued NPDES Permit No. NM0030759 issued February 13, 2009, then modified September 30, 2010, with an expiration date of March 31, 2014.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Issued on

Charles W. Maguire
Director
Water Division

BLANK PAGE

TABLE OF CONTENTS

BLANK PAGE

PART I. REQUIREMENTS FOR NPDES PERMITS

1. Purpose

This Permit contains non-numeric technology-based effluent limitations, coupled with a comprehensive, coordinated monitoring program and corrective action where necessary, to minimize pollutants of concern (POC), in Permittees' storm water discharges. As used in this Permit, "minimize" means to reduce and/or eliminate discharges of POCs in storm water to the extent achievable using site-specific control measures (including best management practices) that reflect best industry practice considering their technological availability, economic achievability and practicability.

The Permittees are required to implement site-specific control measures (including best management practices) to address the non-numeric technology-based effluent limits contained in this Permit, followed by confirmation monitoring screened against New Mexico water-quality criteria-equivalent target action levels (TALs) to determine the effectiveness of the site-specific measures. Any TAL exceedances will be evaluated potentially taking into account background threshold values (BTVs) (see Part I.C.2) for those POCs that may be released by natural or urban environments and may not be Site-related. The Permittees must also develop, maintain, and update a Site Discharge Pollution Prevention Plan (SDPPP) and Sampling Implementation Plan (SIP) consistent with Part I, subparts D.1 and F.1 of this Permit. Collectively, these plans describe the control measures used to meet the requirements of this Permit.

2. Coverage

This Permit authorizes only those storm water discharges associated with industrial activity from inactive solid waste management units (SWMUs) and areas of concern (AOCs) listed in Appendix A. The SWMUs and AOCs identified in Appendix A are collectively referred to throughout this Permit as "Sites." This Permit does not authorize storm water discharges associated with current conventional industrial activities at LANL. Storm water discharges associated with current conventional industrial activities are covered under U.S. Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges from industrial activity, also known as the Multi-Sector General Permit (MSGP). Unless otherwise specified, references to "industrial activity" or "industrial storm water" under this Permit refer to the definition of "storm water discharge associated with industrial activity" at 40 C.F.R. § 122.26(b)(14).

3. Permit Compliance

Any noncompliance with any of the requirements of this Permit, except for exceptions provided in the permit, constitutes a violation of the CWA. Failure to take any required corrective actions constitute an independent violation of this Permit and the CWA. Where corrective action is triggered by an event that does not itself constitute Permit noncompliance, such as an exceedance of applicable TALs or BTVs, there is no violation of the Permit, provided the Permittees take the required corrective action within the relevant deadlines.

PART I.A. NON NUMERIC TECHNOLOGY BASED EFFLUENT LIMITATIONS

For all Sites identified in Appendix A of this Permit, the Permittees shall 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. Nothing in this Permit relieves the Permittees of the obligation to implement additional control measures required by other Federal authorities or by a State or local authority. Structural control measures, the installation of which involve the discharge of dredge or

placement of fill material into any receiving waters (e.g., wetlands), may require a separate permit under section 404 of the Clean Water Act (CWA) before installation.

1. Limits Required Structural Control Measures

a. Basic structural control measures include:

(i) Erosion and Sedimentation Controls. The Permittees must minimize discharges of POCs caused by onsite erosion and sedimentation. The Permittees must implement structural, vegetative, and/or stabilization control measures as necessary to achieve this requirement.

(ii) Management of Run-on and Runoff. The Permittees must, to the extent practicable, divert, infiltrate, reuse, contain, detain, or otherwise reduce storm water run-on/runoff to minimize Site-related POCs from discharging to receiving waters.

(iii) Other Controls. The Permittees must do the following where applicable:

(a) Implement controls to prevent the discharge of waste, garbage, or floatable debris to receiving waters, except as authorized by a permit issued under section 404 of the CWA;

(b) Minimize the generation of dust, along with vehicles tracking raw, final, or waste materials or sediments off-site;

(c) Minimize the introduction of raw, final, or waste materials to exposed areas;

(d) Minimize the effects of any increase in downstream erosion resulting from the construction and operation of structural controls; and

(e) Place flow velocity dissipation devices at discharge locations and along the length of any discharge channel if the flows would otherwise create erosive conditions.

b. The Permittees must maintain control measures in effective operating condition. Failure to do so is a violation of this Permit. These maintenance requirements under this Permit do not apply to:

(i) A Site has been removed from the Permit so that discharges from that Site are no longer authorized under this permit, or

(ii) A control measure that has been replaced by another control measure, or

(iii) A control measure that has been retired because it is no longer necessary to perform the functions of a control as defined by Part I.A.1(a)(i) or (ii).

c. The Permittees must keep documentation onsite that describes procedures and a plan for inspection and preventative maintenance of all control measures and specifies backup practices to be used should a runoff event occur while a control measure is off-line. Nonstructural control measures must also be diligently maintained (e.g., employee training described in Part A.2). Nothing in this Permit shall be construed to prevent the Permittees from taking action(s) to modify control measures as appropriate to address deficiencies.

d. If, during an inspection or other event, a control measure is identified as not operating effectively, the Permittees must repair or replace the control before the next anticipated storm event if possible, or as soon as practicable, following that storm event. In the interim, the Permittees must have backup measures in place.

e. Requirements of inspection and maintenance of existing control measures described in this part, Part I.A, also apply to additional, enhanced, or advanced control measures.

f. Soil Disturbance Associated with the Installation of Control Measures

If the installation of control measures at a Site involves soil disturbance of Site-affected soils, the Permittees shall temporarily suspend sampling activities and take all necessary steps to minimize migration of sediments and runoff from disturbed sites. Steps taken to minimize discharges of contaminated runoff during remediation activity shall be included in the SDPPP update. The Permittees shall conduct site inspections once a week while installing control measures to ensure sediment and runoff control measures are maintained in good order. Corrective actions shall be taken immediately if deficiencies of sediment and runoff control measures are noticed either by inspectors or contractors. After completion of such mitigation measures, the Permittees shall reactivate the sampler and analyze the storm water sample in accordance with Part I.B.1.

Storm water discharges associated with construction activity disturbing one (1) acre or more are not covered under this permit. Storm water discharges associated with construction activity disturbing one acre or more must be covered under EPA's Construction General Permit (CGP) or through a separate individual NPDES permit.

2. Limits Required Nonstructural Control Measures

a. Training. The Permittees must provide training at least once per year to employees who are responsible for implementing activities identified in the Permit and the SDPPP (e.g., inspectors, maintenance personnel), including members of the Site Discharge Pollution Prevention Team (referred to as Pollution Prevention Team in this Permit). Training must cover the specific components of the Permit, the scope of the SDPPP, and the control measures required under this Part. The Permittees shall maintain records of employee training with the SDPPP as detailed in Section I E.1.a (a) below.

b. Unauthorized Discharges. The Permittees must eliminate non-storm water discharges (e.g., process wastewater, spills or leaks of toxic or hazardous materials, contaminated groundwater, or any contaminated non–storm water) not authorized by an NPDES permit.

PART I.B. MONITORING REQUIREMENTS

The Permittees shall monitor POCs in storm water discharges from Sites at specified sampling points known as site monitoring areas (SMAs). The Permittees shall perform confirmation monitoring as detailed below following installation of each site-specific control measure. The Permittees are also required to conduct regular inspections of all Sites as described under Part I.B.2 to ensure that all control measures are properly operating..

1. Confirmation Sampling

If, during the previous Permit, all analytical results(s) for a particular POC at a particular SMA listed in Appendix A were at or below the maximum target action level (MTAL) and/or the geomean of all analytical sampling result(s) was at or below the average target action level (ATAL), monitoring of that POC at the

same SMA is not required, unless the sampling location was moved or constituents were added to the monitoring suite during the Sampling Implementation Plan conducted during 2016-2018.

If corrective action was initiated, but confirmation monitoring was not completed, during the previous Permit, the Permittees shall perform confirmation monitoring requirements based on the Annual Sampling Implementation Plan (SIP; Part I.D.1). Annual confirmation monitoring requirements shall be maintained in the SIP. If confirmation monitoring is required, the Permittees shall collect two confirmation samples. A Site will not be considered non-compliant if confirmation samples could not be collected.

Confirmation sampling is used to determine the effectiveness of baseline and enhanced control measure installations, and to inform the Permittees if additional corrective actions are necessary. There are several categories of confirmation monitoring required by this Permit;

(a) After baseline or enhanced control measures are installed, the Permittees shall collect two confirmation samples within two years. If the permittee is 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.

(b) 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.

(c) Following certification of completion of soil removal in accordance with Part I.D.1.b,ii, the Permittees shall perform storm water confirmation sampling. The Permittees shall collect two confirmation samples. If a TAL is not exceeded for two samples, then further monitoring is not required for the remainder of Permit and the Permittees may seek to delete the Site or Sites from the Permit pursuant to Part I.C.4. If the permittee is 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.

(d) After installation of control measures that retain a volume of storm water runoff from a Site or SMA that is equivalent to a 3-year, 24-hour storm event or greater, the Permittees will be in compliance with this Permit at that Site or SMA once they have certified through the submission of certified as-built drawings, that such measures have been properly installed to perform their function to retain the appropriate design volume of storm water. No further confirmation monitoring is required post-certification, unless required by Part I.B.1.d.

a. Sampling Locations

All samples collected for purposes of confirmation monitoring shall be collected in accordance with the monitoring requirements specified below at the SMAs identified in Appendix A of this Permit. SMA locations are based on reasonable site accessibility for sampling purposes and samples taken will be representative of discharges of storm water from Site-affected media (soil, sediment, or bedrock) as determined by the SIP. The drainage area of each SMA shall be representative of the Site or Sites within the SMA.

(i) Sampler location adjustments. The Permittees may move a sampler to make adjustments that arise from changes in natural conditions, installation of structural controls, unexpected events, or as otherwise necessary to ensure the sampling location is representative of storm water discharges from the Site-affected media as delineated by soil sampling data. Such changes may include minor updates in Site

boundaries, changes in storm water drainage patterns, or adjustments due to logistical or security issues. Any such movement of a sampler shall be documented in the annual SIP and SDPPP.

(ii) Sampler additions: In case potential discharges from a Site within an SMA do not flow through the current monitoring location identified in the Annual SIP, the Permittees shall add additional sampling locations during the Permit term in order to collect additional investigation samples. Each additional sampling location and the corresponding sampling results are subject to the sampling, reporting, inspection, and corrective action requirements of this Permit.

b. Sampling Procedures

Any sampling performed for purposes of confirmation monitoring at a particular SMA must be performed after installation of applicable control measures and following a storm event that results in an actual discharge from the Site or Sites and that produces sufficient volume to perform the required analyses (referred to herein as a "measurable storm event"). For each sampling event, the Permittees must identify the date and duration (in hours) of the storm event(s) sampled, rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff, and the duration between the storm event sample collection and the end of the previous measurable storm event. The Permittees may take meteorological information from the nearest meteorological tower or rain gage. Snowmelt samples shall not be used for purposes of confirmation monitoring.

Grab samples shall be taken within the first thirty (30) minutes of (or as soon after as practical but beginning no later than one (1) hour after) a measurable storm event.

Unless otherwise specified in this permit, the term "composite sample" means samples collected either by an automatic sampler or by manual, during the whole or part of a rainfall period, are composited prior to an analysis. The Permittees may use either grab samples or composite samples for monitoring purpose if it keeps practice consistency.

c. Collection of Partial Samples

In the event the volume of any stormwater sample collected is insufficient to perform all required analyses listed in the SIP, the partial sample shall be analyzed in accordance with a priority list of Site-specific POCs determined based upon a review of site history, soil data, and other acceptable knowledge. The priority list for each Site is documented in the SIP.

In the event a partial sample is collected, the Permittees shall immediately reactivate the sampler to attempt to complete the full Site-specific POC suite listed in the SIP.

d. Additional Sampling Requirements

(i) If soil disturbance within the Site-affected media occurs, 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 monitoring devices are not subject to the requirements of this Part.

(ii) Notwithstanding the provisions of Parts I.B.1 and I.C.1, and except as provided in Part I.I.1, if a Site for which monitoring has ceased later exhibits

evidence of a discharge of contaminated runoff or conditions that could lead to a discharge of contaminated runoff, such as control measure failure, erosion problems, re-exposure of "no exposure" Sites, 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).

e. Sufficiently Sensitive Method (SSM)

The Permittees shall use sufficiently sensitive EPA-approved analytical methods (under 40 CFR part 136 and 40 CFR chapter I, subchapters N and O) when quantifying the presence of pollutants in a discharge for analyses of pollutants or pollutant parameters under the permit. The permittees shall use EPA-approved methods which are sufficiently sensitive, as defined under 40 CFR 122.44(i)(1)(iv)(A), to the TALs, except for parameters for which a specific test method has been required under this permit.

f. Data Averaging

The average refers to the geometric mean of applicable monitoring results at the SMA. If all analytical results are below analytical method detect level (MDL), a value of "zero" may be reported. If one or more data are above MDL, a value of ½ detect level shall be assigned to those below detect level data for calculation purpose. If the average value of a specific pollutant is below its MDL, a value of "zero" may be reported for the average.

If a new or an enhanced BMP is installed, the average shall be calculated based on analytical results from samples taken after installation of the BMP.

2. Inspections

The Permittees must conduct the following types of regular inspections. The Permittees may conduct a combined inspection for a Site, if appropriate.

a. Significant Event Inspections

The Permittees must inspect and re-evaluate all Sites after notice of a significant event, such as a fire or flood, which could significantly impact the control measures and environmental conditions in the affected area. Such inspection and reevaluation should be conducted, and any repairs or adjustments completed, before the next anticipated storm event or as early as practicable.

b. Post-Storm Inspection

The Permitees must inspect control measures and storm water management devices at any Site affected by a "storm rain event" defined below, within fifteen (15) days after such storm rain event. The occurrence of a "storm rain event" as defined below shall be determined based on data from the nearest meteorological tower to any particular Site. A "storm rain event" under this paragraph means a 0.50 inches or more intensive rain event within 30 - minutes.

If several storms exceeding the above intensity threshold occur over a period not to exceed fifteen (15) days from the first event, a single inspection following these storms is sufficient for compliance with this requirement, provided that the inspection occurs no more than fifteen (15) days from the date of the first storm. If adverse weather conditions prevent a site inspection within the required time period, the Permittees shall inspect the Site as soon as practicable. Adverse weather events shall be documented, and this information shall be maintained with the SDPPP. Adverse weather conditions include dangerous weather-related events (e.g., flooding, wildfires, hail, or lightning) that make site inspection dangerous for worker safety.

c. Long-Term Stewardship Inspections

When a Site and its associated controls are designated as a LTS location under Part I.C.32~~(b)~~, Permittees shall inspect and evaluate each Site and its associated controls annually (a) for a 5-year period (a Permit cycle) and (b) after a 3-year, 24-hour return period storm. The reporting of inspection results shall meet all requirements set forth in Part I.G.4. An assessment shall be conducted around the end of each Permit cycle to determine if the storm water runoff or erosion potential at each Site is in a stable condition and if adjustments should be made to the control measure inspection frequency set forth in this Part. A determination of future inspection frequency or termination of LTS shall be included with subsequent re-application submittals. Sites in LTS will be tracked by Site, not to the individual control, and the inspection dates, maintenance dates, maintenance activities, and LTS listing date will be tracked for each Site.

d. Inspection Reports

All regular inspection reports shall include, at a minimum, the following items:

(i) The personnel who conduct the inspections;

(ii) Date(s) on which inspection was performed;

(iii) A written summary of major observations, including observation of deficiency;

(vi) A summary of evidence of potential contaminants, failure of a best management practice, or alteration of management structure or runoff pathway, etc;

(v) Actions that should be taken to correct noted deficiencies;

(vi) Photo documentation of findings at the Site, if necessary; and

(vii) The signature of the delegated official of the Permittees and certification of findings, including observation of no deficiency.

These inspection Reports will be submitted in accordance with Part I.E.3, Annual Compliance Status Report, and retained in accordance with Part II.2, Recordkeeping.

PART I.C. SITE EVALUATIONS

Results of site confirmation sampling are evaluated against the Target Action Levels (TALs).

1. Target Action Levels (TALs)

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.

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.

2. Site-Specific Demonstration (SSD)

The Permittees may use 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. For Sites where data has been collected under the 2010 Permit, this demonstration must be conducted within 1 year of the effective date of this Permit. For Sites with a completed SSD, the tier results of the confirmation monitoring and soil data comparisons shall be used to determine annual sampling requirements. The results shall be provided in the initial SIP pursuant to Part I.E.1 and annually thereafter.

a. Run-on and runoff evaluation

This approach may be used at Sites where run-on control cannot be reasonably or economically installed. This demonstration shall include the collection of storm water run-on data for all POCs that exceeded the TALs, from a sampler located above the Site. In addition, the Permittees shall collect additional runoff data below a Site or Sites. The runoff sampler may or may not be the SMA sampler location, but the runoff sampler location should be representative of runoff from Site-affected media for the Site(s) being evaluated by the SSD. An example where a runoff sampler is not the SMA sampler is where two or more Sites exist within an SMA and the Permittees monitor runoff from a single Site in the SMA.

If the following condition is met, the Permittees will have demonstrated that the Site or Sites are not reasonably expected to be the sole source for one or more of the remaining POCs and the Permittees will have also demonstrated that discharges from the Site or Sites do not cause the exceedance of TALs. Further confirmation sampling for those POCs are not required.

(1) $V(\text{run-off}) - V(\text{run-on}) \leq 0$; or

(2) $$\frac{[V(\text{runoff}) * \text{total catchment area}] - [V(\text{run-on \& precipitation}) * \text{Non-site area}]}{(\text{site area})} \leq \text{TAL}$$

Where, V = Geomean of sampling results

b. Site-specific information

If the Permittees collect a minimum of one confirmation sample that exceeds a TAL, the Permittees may use this data, along with other Site-specific information, to determine if the Site or Sites are reasonably expected to be the source of the POC that exceeds the applicable TAL(s). Sources of site-specific information include, but are not limited to, site history,

validated surface soil data (i.e., collected in top 3 feet), BTVs, information on land use upstream of and within the SMA, and scientific literature.

(i) Storm Water (SW): When Permittees use Site-specific information in the SSD, confirmation storm water monitoring results shall be compared to the TALs (Appendix C) and to the BTVs (Appendix B) using the composite BTV formula below. Permittees shall compare the confirmation sample results to the composite BTV.

90^{th} percentile composite BTV = (% impervious SMA area * 90^{th} percentile developed landscape BTV) + (% pervious SMA area * 90^{th} percentile undeveloped landscape BTV)

where the % impervious SMA area is the % impervious, or developed, area of the SMA, and the % pervious SMA area is the % pervious, or undeveloped, area of the SMA. The % impervious and pervious SMA areas and the resulting composite BTV for each Site shall be listed in an appendix of the annual SIP. The Permittees shall provide the results of the screening process in the annual SIP based on the comparison of confirmation sample results with composite BTVs and TALs. The results of the comparison shall be sorted into the following tiers:

SW Tier 1: When the confirmation sample result is less than the TAL, the Permittees can cease monitoring for that POC for the remainder of the Permit.

SW Tier 2: When the confirmation sample result of one or more POCs exceeds the TAL but is less than the 90^{th} percentile composite BTV, the SMA shall be assigned to long-term stewardship (LTS) and meet the requirements of Part I.G.3. However, if the BTV and the confirmation sample result are less than the TAL, SW Tier 1 applies.

SW Tier 3: When the confirmation sample result of one or more POCs exceeds the TAL and 90^{th} percentile composite BTV, the SMA shall enter into corrective action per Part I.D. However, if the BTV and the confirmation sample result are less than the TAL, SW Tier 1 applies.

(ii) Soil Data (SD): Soil data can be used to help confirm site status, but cannot be the only factor in making a determination. Using 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) BTVs for inorganic POCs (LANL 1998, "Inorganic and Radionuclide Background Data for Soils, Canyon Sediments, and Bandelier Tuff at Los Alamos National Laboratory"), and 2019 NMED soil screening levels (SSLs) for organic POCs and inorganic POCs with no BTV. The results of the comparison shall be sorted into the following tiers:

SD Tier 1: When the soil sample result is less than the SSL for the particular POC, the POC can be removed from the monitoring suite for that site in the next SIP if all POC are Tier 1, Permittees may request the Site be deleted from the Permit.

SD Tier 2: When the soil sample result is above SSL, but less than the 95-95 UTL BTV for inorganic POCs or less than 10% of the SSL for organic POCs and inorganic POCs with no BTV, the Permittees may assign the SMA to long-term stewardship (LTS) and meet the requirements of Part I.G.3.

SD Tier 3: When the soil sample result of one or more POCs is above the SSL and exceeds 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.

The tier results of the confirmation and soil data comparisons shall be used to determine annual sampling requirements and whether POCs are reasonably expected to be the source for one or more of the POCs (see Part I.D).

Note: The 95-95 upper tolerance limit (UTL) 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.

c. Site History

If the Permittees believe a POC is not Site-related and monitoring for that POC should not be required under the SIP, the Permittees may provide documentation to EPA to demonstrate that the POC was not potentially managed or released at the Site during historic industrial activities; or evidence to demonstrate that supports that the Site is not exposed to storm water. Relevant documentation of Site-related knowledge shall be reported in the SIP.

3. Long-Term Stewardship (LTS) Category

The Long-Term Stewardship (LTS) Category includes Sites that do not meet the requirements for Site deletion under Part I.C.4 and also do not currently require additional corrective action. Documentation of LTS Site categorization will be incorporated in the SDPPP. The Permittees may submit a written request to EPA, with a copy to NMED, to place a Sites in the LTS Category if it meets one of the following conditions:

(a) Storm water sample results are greater than TALs because of background contribution as specified in Part I.C.1(a)(i) SW Tier 2;

(b) Soil sample results meet conditions specified in Part I.C.1(a)(ii) SD Tier 2;

(c) Storm water sample results are greater than HH-OO based TALs, but below Wildlife Habitat TALs for discharges to non-perennial streams;

(d) Storm water sample results are greater than Adjusted Gross Alpha (AGA) TAL before monitoring requirement of AGA is removed from the permit; or

(e) Sites have no evidence of storm water discharges for the past five years.

4. Deletion of Site

The Permittees may submit a written request to remove a Site from coverage under the Permit if the Permittees can demonstrate that the Site no longer has "storm water discharges associated with industrial activity" under 40 CFR 122.26(b)(14) as follows:

(a) No industrial activities as specified under 40 CRF 122.26(b)(14) ever took place at the Site;

(b) Site-related POCs have never been exposed, or will no longer be exposed, to storm water. A request to EPA to remove a Site meeting the conditions of this Part shall include documentation that demonstrates historic activities that led the Site to be a SWMU or AOC did not result in significant materials exposed to storm water (e.g. Site-related POCs are a minimum of 3 feet below the ground surface, below existing building);

(c) Sites have no significant industrial materials remaining that are exposed to storm water after installation of permanent control measures. For all SMAs that contain the Site, a minimum of two confirmation storm water samples were collected, 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);

(d) The Permittees certified corrective action complete under Part I.D.1(b) by removing soil that contained a release of Site-related POCs that were exposed to storm water and demonstrating that no significant materials from previous industrial activity remain in the Site. A request to EPA to remove a Site meeting the conditions of this Part shall include the certification of correction action complete under Part I.D.1(b) and storm water confirmation sampling results, if applicable;

(e) Storm water discharges associated with industrial activity no longer occur at the Site when the SSD shows that the data screening for all POCs resulted in a SW Tier 1 and SD Tier 1 result per Part I.C.2(b); or

(f) Insufficient 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:

(i) Active samplers are in representative locations;
(ii) No confirmation sample has been collected after a 25-year, 24-hour return period storm; and
(iii) Inspection records validate full operability of sampler.

Upon the Permittees certifying that they will properly maintain BMPs in place, if applicable, and notify EPA for permit coverage if POCs re-exposed to stormwater and trigger stormwater discharge associated with industrial activity under 40 CFR 122.26(b)(14), EPA may approve such a request in writing by issuing a minor permit modification pursuant to 40 CFR 122.63(e)(2). Documents to support such requests and decisions must be kept with facility's SDPPP and published on the Permittees' Individual Permit public website. Once a Site is removed from the Permit, a discharge of contaminated point-source runoff is no longer authorized by this Permit.

PART I.D. CORRECTIVE ACTION

1. Determination of Corrective Action Measures

Once a TAL or BTV has been exceeded for a Site-related POC, the Permittees shall determine the appropriate corrective action. At a minimum, this corrective action determination shall consider 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 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. The options for implementation of corrective action may include installation of enhanced control measures, elimination of exposure to POCs, or retention of a 3-year, 24-hour storm event as described below.

a. Installation of Enhanced Control Measures

Enhanced (i.e., additional, expanded or better-tailored) control measures may be used to complete corrective action. Where feasible, these enhanced controls shall incorporate low-impact design and green infrastructure design features.

The enhanced control process may include more than one iteration of control measure installation followed by confirmation monitoring, pursuant to Parts I.B and I.C.1, after each control measure installation.

Permittees shall certify completion of installation of control measures under this subpart to EPA, with a copy to NMED, within 30 days of completion of all such measures at the Site. Such certification shall be signed in accordance with 40 CFR 122.22(b) and shall include a description and photographs of all completed measures and the results of the corrective action measures evaluation performed in Part I.E.1. Except as provided in Part I.I.2, the Permittees are required to continue to inspect the Site in accordance with Part I.G and to maintain all control measures in effective operating condition as required by Part I.A.

b. Elimination of Exposure of Site-Related POCs to Storm Water

To complete corrective action at a Site or Sites within an individual SMA, the Permittees may pursue elimination of exposure of Site-related POCs to storm water. Elimination of exposure of Site-related POCs to storm water may be achieved in one of two ways:

(i) Constructing a cap or other engineered cover. the Permittees shall demonstrate that a cap or other engineered cover has been constructed to address contamination at a SWMU that has adequate soil data to identify the entire area of contamination. The Permittees shall be in compliance with this Permit once they have certified and demonstrated to EPA, through the submission of certified as-built drawings, that such measures have been properly installed to perform their function to eliminate exposure of Site-related POCs to storm water as plan. One confirmation sample is required if capped area is smaller than the SMA drainage area. Otherwise, no further confirmation sampling is required, unless required by Part B.5.

(II) 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. Following certification of completion of soil removal, the Permittees shall perform storm water confirmation sampling.

If the Permittees certify that 3 feet or more depth of soils are removed and replaced with clean soils and EPA determines new soil data has demonstrated that no significant amount of industrial materials remain on the Site, the Permittees will have demonstrated completion of corrective action. The Permittees may submit soil data for new fill soil, or soil data from upstream background soil to demonstrate no significant materials from past industrial activities would remain exposed to storm water. EPA may require soil testing for some radius outside the remediated area to ensure "no significant industrial materials remain" in the soil on the water pathway

(Note: If evidence shows that surface runoff from that Site will penetrate deeper than 3 feet, the Permittees may not use this approach.)

The Permittees shall certify elimination of exposure under this Part to EPA, with a copy to NMED, within 30-days of completion of all such measures at the Site. Such certification shall be signed in accordance with 40 CFR 122.22(b) and shall include a description and photographs of all completed measures and the results of the corrective action measures evaluation performed in Part I.E.1. Except as provided in Part. I.I.2, the Permittees are required to continue to inspect the Site in accordance with Part I.G and to maintain all control measures in effective operating condition as required by Part I.A.

c. Retention of a 3-Year, 24-Hour Storm

The Permittees may achieve completion of corrective action under this Part through installation of control measures that retain a volume of storm water runoff from a Site or SMA that is equivalent to a 3-year, 24-hour storm event based on the most representative rain gage historic records from the nearest meteorological tower or rain gage. The Permittees shall be in compliance with this Permit at that Site or SMA once they have certified and demonstrated to EPA, with a copy to NMED, through the submission of certified as-built drawings, that such measures have been properly installed to perform their function to retain the appropriate design volume of storm water. No further confirmation sampling is required post-certification, unless required by Part I.B.5.

Identification of the rain gage applicable to each Site shall be maintained within the SDPPP. The Permittees shall provide 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 a 3-year, 24-hour storm.

The Permittees may install run-on control measures to reduce run-on and sediment (i.e., low impact development, green infrastructure, sediment detention basin or berm, etc.), and such installations shall minimize discharges to the equivalent of a 3-year, 24-hour storm event.

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 a 3-year, 24-hour or greater storm. The Permittees are required to continue to inspect the Site in accordance with Part I.B.2 (as applicable) and to maintain all control measures in effective operating condition as required by Part I.A. The site shall be re-evaluated with the SIP process to determine if monitoring is required in the future.

2. Alternative Compliance

Where the Permittees believe, based upon a technical evaluation of existing control measures, that they will be unable to certify corrective actions under Part I.E.1(a) through (c) above (individually or collectively) due, for instance, to site conditions that make it impracticable to install further control measures, or POCs that exceed BTVs or TALs are contributed by sources beyond the Permittees control, the Permittees may seek to place a site into Alternative Compliance, whereby completion of corrective action shall be accomplished on a case-by-case basis, and as necessary, pursuant to an individually tailored control measure by EPA.

To seek to place a Site or Sites into Alternative Compliance, the Permittees must file a written request with

EPA and provide written notice to the public and opportunity for public comment, within 90-days of validated confirmation of TAL or BTV exceedance. Such a request must include the following:

(a) A comprehensive description of the control measures installed at the Site or Sites.

(b) A list of additional on-the-ground actions or a watershed protection approach (see Part II.1) which have resulted in a reduction in the potential for Site-related POC discharges to reach downstream canyons.

(c) A detailed demonstration, including any underlying studies and technical information, of how the Permittees reached the conclusion that they are unable to certify completion of corrective action under Parts I.D.5 (a) through (d) (individually or collectively). And,

(d) A list of economically achievable BMPs with site-tailored workplan and schedules which may further reduce discharges or exposure of POCs to the environment, if applicable.

Upon submitting such a request to EPA, the Permittees shall make the request and all supporting information available to NMED and the public for review and comment for a period of forty-five (45) days and shall develop and provide to the commenters a written response document addressing all relevant and significant concerns raised during the comment period. The Permittees' request under this Part, along with the complete record of public comment and the Permittees' response to comments, shall be submitted to EPA Region 6 for a final determination on the request. The Permittees' response to comments may include a revision to the Alternative Compliance request and/or the proposed individually tailored work plan.

The Permittees shall not be out of compliance with the applicable requirements for achieving completion of corrective action with respect to the Site or Sites covered by a request. The Permittees shall continue to conduct inspections and maintenance of existing control measures on those Sites.

If EPA, after considering all the information submitted by the Permittees, including all comments received on the request and the Permittees response to those comments, denies the request, EPA may require the Permittees to install Site-specific control measures to complete the corrective action, in writing.

If EPA approves the request, EPA may set site-specific requirements for inspection, maintenance, and/or monitoring.

(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.)

3. Schedules for Corrective Actions

If one or more POCs exceeding the applicable TALs or BTVs cannot be excluded as the source of the exceedance pursuant to Part I.C.1, the Permittees shall take proper corrective actions and complete installation of additional control measures no later than 24 months from the date when the Permittees have knowledge of TAL or BTV exceedance. 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 shall be completed no later than 12 months from the effective date of the final permit.

4. Force Majeure

The Permittees may seek EPA approval for an extension if the Permittees can demonstrate that "force majeure" has resulted, or will result, in a delay in meeting the obligation to confirm completion of corrective

action by the specified deadline. An event that constitutes "force majeure," includes, but is not limited to (a) Acts of God, natural disasters such as fire or flood, war, terrorism, insurrection, civil disturbance, or explosion; (b) a federal government shut down, such as the ones that occurred in 1996 and 2018; (c) unanticipated breakage or accident to machinery, equipment or lines of pipe; (d) restraint by court order; (e) inability to obtain the necessary authorizations, approvals, permits or licenses due to an action or inaction caused by another governmental authority; (f) unanticipated delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisition procedures; and (g) inability to secure the reasonable cooperation of any other property owner in addressing storm water run-on to a Site or Sites from such property.

To obtain an extension from EPA, the Permittees shall describe in detail (a) the cause or causes of the delay; (b) the expected duration of the delay, including any obligations that would be affected; (c) the actions taken or to be taken by the Permittees to minimize the delay; and (d) the timetable by which those actions are expected to be implemented. If EPA does not act within 60-days upon receipt of "force majeure" request, the request is deemed "granted." EPA may notify the Permittees whether an extension is reasonably justified and provide a new reasonable deadline that takes into account the actual delay resulting from the event, anticipated seasonal construction conditions, and any other relevant factors. If EPA does not agree to the extension, it will notify the Permittees in writing and provide the basis for its conclusion.

5. Completion of Corrective Action Certification

The Permittees must certify to EPA with a copy to NMED, pursuant to 40 CFR 122.22(b), upon completion of corrective actions. Under this Permit, completion of corrective action shall mean:

(a) No exceedances of applicable TAL or BTV which are reasonably expected to be Site-related 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 less than the applicable TALs or BTVs as demonstrated under Part I.B; or

(c) The installation of control measures that eliminate exposure of Site-related POCs to storm water under Part I.D.2(b), with confirmation monitoring analytical results less than the applicable TALs or BTVs 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.E.1(c).

6. Monitoring at Sites in Corrective Action

For each SMA with Sites in corrective action, the following requirements apply:

(a) If the Permittees have collected a confirmation sample and are currently in corrective action, they shall complete the corrective action and proceed to confirmation monitoring pursuant to Part I.B.

(b) If the Permittees have previously installed and certified enhanced controls, they shall collect two confirmation samples if no sample has been collected, or one confirmation sample if a sample has already been collected.

(c) If the Permittees have submitted requests (e.g., Alternative Compliance, or force majeure) to EPA that are pending, the Permittees may complete an SSD pursuant to Part

I.C.2 to determine if the Site or Sites are reasonably expected to be the source of the POC that exceeds the applicable TALs or BTVs.

PART I.E. PLANS AND REPORTS

1. Site Discharge Pollution Prevention Plan (SDPPP)

The Permittees shall update the facility's SDPPP annually, submit it to EPA and copy NMED by May 1 of each calendar year of the Permit and post the SDPPP on the Permittees' Individual Permit public website within 30-days after the submittal. The annual update shall fully incorporate all changes made during the previous year and reflect any changes projected for the following year. The facility's SDPPP must remain compliant with relevant State, Tribal, and local regulations, if applicable.

a. Contents of SDPPP

The facility's SDPPP must describe all control measures installed to meet the requirements of this Permit. In addition, the facility's SDPPP must contain all the elements described below. The SDPPP must also address the inspection requirements set forth in Part I.G below.

(1) **Site Discharge Pollution Prevention Team.** The Permittees must identify the staff members (by name or title) that comprise the facility's Site Discharge Pollution Prevention Team (Pollution Prevention Team). The Permittees' Pollution Prevention Team is responsible for assisting the facility manager in developing and revising the facility's SDPPP as well as maintaining control measures and taking corrective actions for deficiencies. Specific responsibilities of each staff individual on the Team must be identified and listed in the SDPPP. Each member of the Pollution Prevention Team must have ready access to either an electronic or paper copy of applicable portions of this Permit and the facility's SDPPP.

(2) **Site Description.** The facility's SDPPP must include a description of historical activities at each Site, precipitation information, general location map, and Site maps.

(3) **Receiving Waters and Wetlands.** The SDPPP must include the name(s) of all receiving waters that receive discharges from Sites covered by this permit. The SDPPP must also include the size and description of wetlands or other special aquatic sites.

(4) **Summary of Potential POC Sources.** The SDPPP must identify each Site at the facility where industrial materials or activities were previously exposed to storm water and from which allowable non–storm water discharges were released. The SDPPP must also identify the POCs associated with those activities.

(5) **Description of Control Measures.** The Permittees must update the SDPPP as needed to document all structural control measures installed at a Site as well as the dates installation was completed. The SDPPP must include sufficient detail to identify and describe the Site-specific control measures.

(6) **Schedules for Control Measure Installation.** The Permittees shall update the SDPPP as necessary to include schedules for additional control measure installation and implementation resulting from corrective action under Part I.D of this Permit.

(7) **Monitoring and Inspection Procedures.** The Permittees must document in the SDPPP schedules and planned procedures for sample collection and site inspection. For each sample to be collected, the SDPPP must identify:

(a) Locations where samples are to be collected, including coordinates for sampling locations, and any determination that two or more Sites are substantially identical;

(b) Person(s) or positions of person(s) responsible for sample collection;

(c) Parameters to be sampled and frequency of sampling for each parameter;

(d) Procedures for gathering storm event data.

The Permittees must document in the SDPPP all tentative schedules and procedures for significant event and post-storm inspections as described in Parts I.B.2.a and I.B.2.b of this Permit.

(8) **SMA Maps.** The Permittees must include a map with the following information in their SDPPP regarding each SMA:

(a) Location of each Site within the SMA drainage area;

(b) Coordinates and locations of the SMA samplers (with updates as adjustments occur). ~~and~~

(c) Estimates of the size (in acres) of the SMA and of Site(s) within the SMA.

(d) Any adjustments/changes to sampler locations under Parts I.B.2 and the associated documentation for the sampler move.

(e) Coordinates and identification of any run-on sampler locations.

(9) **Annual Compliance Status Reports.** Annual Compliance Status Reports as specified in Part I.H shall be integrated into the SDPPP.

(10) **Annual SIP.** The annual SIP, as specified in Part I.D shall be integrated into the SDPPP.

(11) **Signature Requirements.** The SDPPP shall be signed, certified and dated in accordance with 40 CFR 122.22(b) prior to submittal of annual updates.

b. SDPPP Documentation

The Permittees are required to maintain inspection, monitoring, and certification documentation with the SDPPP that together keep the records complete and support ongoing SDPPP implementation activities. These records are maintained alongside the SDPPP document, thereby providing a consolidated record of documented storm water requirements and implementation procedures.

The Permittees must, at a minimum, keep the following records and documentation alongside the SDPPP:

(1) Dates of training sessions, names of employees trained, and subject matter of training under Part I.A.2.;

(2) Sampling reports including sampling dates, analytical results, outfall locations, name and qualifications of technician;

(3) Annual SIP: monitoring location lists, monitoring requirements lists including storm water and sediment sample screening results, adjustments to annual monitoring plan, and re-initiating monitoring requirements where applicable;

(4) Inspection reports and any other information required to be included in an Inspection Report under Part I.B.2.

(5) An accounting and an explanation of the length of time it takes to modify control measures or implement additional control measures following the discovery of a deficiency or the need for modification;

(6) Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, the date(s) that control measure(s) were returned to full function and the justification for any extended maintenance/repair schedules.

c. Required Modifications

The Permittees must keep documents and records with the SDPPP as necessary to reflect:

(1) Construction or a change in design, operation, or maintenance at the facility having a significant impact on the discharge, or potential for discharge, of POCs from the facility;

(2) Findings of deficiencies in control measures during inspection or based on analytical monitoring results;

(3) Any change of monitoring requirement or compliance status;

(4) Any change of SMA location in accordance with Part I.B.2; and

(5) Summary of changes from the last year's SDPPP.

If any of the circumstances described above occur at any Site, the Permittees must address these changes or deficiencies to ensure compliance with this Permit's conditions and applicable monitoring requirements. All changes must be incorporated into the SDPPP and a summary of these changes must be included in the Annual Report.

d. SDPPP Availability

The Permittees must retain a paper copy of the current SDPPP required by this Permit at the facility, and it must be immediately available to EPA, a State, Tribal or local agency approving storm water management plans, the Pollution Prevention Team members, and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an on-site inspection or upon request. A copy of the SDPPP shall also be made available on the Permittees' Individual Permit public website.

2. Annual Sampling Implementation Plan (SIP)

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. Before May 1 of subsequent years, the Permittees shall review all new available information to determine if the current SMA storm water

sampling location is representative of storm water discharges from Site-affected media and submit the appropriate monitoring requirements list for the upcoming field season to NMED and EPA for review.

Changes to monitoring locations or POCs shall be documented in the annual SIP update. EPA may require the Permittees to submit additional information to justify proposed changes or document site knowledge regarding a Site in the SIP. If sampler moves are required by the SIP, samplers shall be moved to more representative locations at the initiation of the storm water sampling season or as soon as practicable to facilitate sample collection.

The SIP shall include the following:

a. **Monitoring location list** – 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. The representative sampling location review conducted in 2016–2018 resulted in new sample locations for several SMAs constitutes an initial review that shall be provided in the first SIP update following the issuance of this Permit. Monitoring locations shall be reviewed annually to ensure representative samples will continue to be collected.

When a Site and the associated controls are designated as a LTS location, monitoring is no longer required. The Permittees shall update the list of these Sites annually in the SIP. The Permittees shall meet the inspection requirements per Part I.B.2 and must track the status of inspections and maintenance completed.

(b) **Monitoring requirements list** – For each SMA, the Permittees must annually complete an SSD screening if? New confirmation samples or soil data are received during the previous year as required by Part I.C.1.

If the SIP requires the addition of one or more POCs for monitoring and the Site has previously entered corrective action, the Permittees are required to complete all applicable requirements of Part I.B.1 and initiate confirmation monitoring for all added POCs.

If a POC that has been added for monitoring does not have a TAL or BTV listed in this Permit, the Permittees shall collect two samples. If there is an associated water quality standard for that water POC that is Site-related, the monitoring result shall be compared to that standard. 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.

The results of the SIP updates must be presented in the annual update to the SDPPP as required by Part I.F.1. Additionally, the SIP updates must be published on the IP Public website per Part I.7(a).

3. Annual Compliance Status Reports (CSR)

The Permittees shall submit Annual Compliance Status Reporting (CSR) information. The reporting period is from January 1 to December 31. The reporting requirements shall be integrated into the SDPPP, due by May 1 of the following year, and shall include the following:

(a) For each SMA (or Site), a summary of the Site-specific compliance status during the report period;

(b) Monitoring information which shows the results available during the reporting period and that include the following information required in (i) through (iii) below;

(i) SMA and associated outfall and Site(s) numbers/identifications;

(ii) Monitoring results available during the reporting period;

(iii) Identification of POCs that exceed the applicable TAL or BTV;

(c) Description of control measures installed during the reporting period, including the certification of completion date;

(d) Description of corrective actions required under Part E of this Permit to be taken, or having been taken, including completion date or targeted completion date, and progress update;

(e) Description of sampler maintenance and identification of all missed sample opportunities during storm rain events and the cause of missed opportunity (i.e., sampling equipment malfunctioning, repairs, construction activities) with an explanation of circumstances;

(f) Highlights of any change of compliance status from the previous Annual Compliance Status Report;

(g) Lists of requests, including any requests for change of monitoring location or Site deletion and any requests to place a Site or Sites into Part I.D.2, Alternative Compliance; and

(h) A summary of inspections performed in accordance with Part I.B.

EPA may require the Permittees to submit additional information. This CSR information shall be signed, certified, and dated in accordance with 40 CFR 122.22(b). Only one signature is required to cover all CSR forms.

Part II. OTHER CONDITIONS

1. Watershed Protection Approach

EPA encourages the Permittees to voluntarily install watershed-based control measures, such as sediment barriers, to mitigate sediment or storm water runoff reaching the main channels of the canyons and/or the Rio Grande. The Permittees should include information and monitoring data regarding the installation of any such watershed-based control measures in the SDPPP. 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 within the scope of the Plan.

2. Record Keeping

The Permittees shall retain records of all monitoring information and reports, Corrective action evaluations and certifications, Site inspections and reports, decision-making procedures and supporting documents and records, and annual SDPPP updates with supplemental information for at least three (3) years after the issuance of the next permit renewal.

3. Public Involvement

(a) **Individual Permit Public Website**: The Permittees shall maintain a public website where information on the Permit, including the SDPPP, Annual SIP, Annual Compliance Status Reports, Corrective action reports, transmittal correspondence including Alternative Compliance requests between Permittees and EPA, and other relevant data and documents, shall be made available. A copy (either paper or electronic) of these documents shall also be made available by the Permittees as soon as practicable to any member of the public who makes such a request in writing. Confidential Business Information (CBI) may not be withheld from regulatory agencies but may be withheld from the public. All portions of the SDPPP not identified as CBI, pursuant to 40 CFR Part 2, must be provided to the public upon request.

(b) **E-mail notification**: The Permittees shall provide the opportunity for members of the public to register for and receive e-mail notifications on compliance with the Permit on the public website. E-mail notifications shall provide notice of completion of installation of control measures, updates on Permit compliance, any requests for time extensions, spill information, and notification of any modification to the Permit, SIP, or SDPPP including changing SMA locations, removing, deleting, or adding Sites, and completion of corrective actions. Such notifications shall have a direct link to the specific document to which it relates. Notice shall also be provided for any request to complete correction action under Alternative Compliance, Part I.E.3 of this Permit.

(c) **Public Meetings**: The Permittees shall publish a public notice and send an e-mail notification to members of the public who have registered as provided in Part I.I.7(b) about public meetings that shall be held approximately every six (6) months. The Permittees shall update the public on implementation of and compliance with the Permit and provide an opportunity for both written and oral public comment. The meetings may be combined with other public meetings, but the Permittees shall provide a discrete, separate time for comment and discussion of this Permit. The Permittees shall e-mail a draft agenda at least one (1) week before the meeting, publish the draft agenda on the Permittees' Individual Permit public website, and consider suggestions from the public for changes or additions to the agenda. The Permittees shall publish the final agenda on the Permittees' Individual Permit public website no later than three (3) days before the meeting.

4. State Water Quality Standards

The Permittees must control discharges from all Sites (individually or collectively) as necessary to ensure such discharges will not cause or contribute to a violation of applicable water quality standards. EPA believes that compliance with the non-numeric technology-based effluent limitations and other terms and conditions of this Permit will control discharges as necessary to meet applicable water quality standards.

5 Permit Reopener

The Permit may be reopened and modified during the life of the Permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, or new state water quality standards are established and/or remanded by the New Mexico Water Quality Control Commission. The Permit also may be reopened and modified if new information, e.g., EPA approved TMDLs, etc., is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance. EPA may choose not to reopen the Permit if changes of monitoring requirements could be incorporated into SIP or SDPPP.

PART III - STANDARD CONDITIONS FOR NPDES PERMITS

A. GENERAL CONDITIONS

1. INTRODUCTION
In accordance with the provisions of 40 CFR Part 122.41, et. seq., this permit incorporates by reference ALL conditions and requirements applicable to NPDES Permits set forth in the Clean Water Act, as amended, (hereinafter known as the "Act") as well as ALL applicable regulations.

2. DUTY TO COMPLY
The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. TOXIC POLLUTANTS

   a. Notwithstanding Part III.A.5, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.

   b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

4. DUTY TO REAPPLY
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR Part 122.6 and any subsequent amendments.

5. PERMIT FLEXIBILITY
This permit may be modified, revoked and reissued, or terminated for cause in accordance with 40 CFR 122.62-64. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. PROPERTY RIGHTS
This permit does not convey any property rights of any sort, or any exclusive privilege.

7. 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.

8. CRIMINAL AND CIVIL LIABILITY
Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to 18 U.S.C. Section 1001.

9. OIL AND HAZARDOUS SUBSTANCE LIABILITY
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

10. STATE LAWS
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

11. SEVERABILITY
The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

B. PROPER OPERATION AND MAINTENANCE

1. NEED TO HALT OR REDUCE NOT A DEFENSE
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

2. DUTY TO MITIGATE
The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

3. PROPER OPERATION AND MAINTENANCE

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

4. BYPASS OF TREATMENT FACILITIES

a. BYPASS NOT EXCEEDING LIMITATIONS
The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.B.4.b. and 4.c.

b. NOTICE

(1)ANTICIPATED BYPASS
If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2)UNANTICIPATED BYPASS
The permittee shall, within 24 hours, submit notice of an unanticipated bypass as required in Part III.D.7.

c. PROHIBITION OF BYPASS

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required by Part III.B.4.b.

(2) The Director may allow an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed at Part III.B.4.c(1).

5. UPSET CONDITIONS

a. EFFECT OF AN UPSET
An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part III.B.5.b. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. CONDITIONS NECESSARY FOR A DEMONSTRATION OF UPSET
A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required by Part III.D.7; and,

(4) The permittee complied with any remedial measures required by Part III.B.2.

c. BURDEN OF PROOF
In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. REMOVED SUBSTANCES
Unless otherwise authorized, solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. PERCENT REMOVAL (PUBLICLY OWNED TREATMENT WORKS)
For publicly owned treatment works, the 30-day average (or Monthly Average) percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR 133.103.

C. MONITORING AND RECORDS

1. INSPECTION AND ENTRY
The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

2. REPRESENTATIVE SAMPLING
Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. RETENTION OF RECORDS
The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

4. RECORD CONTENTS
Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. The date(s) and time(s) analyses were performed;

d. The individual(s) who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

5. MONITORING PROCEDURES

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

6. FLOW MEASUREMENTS
Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

D. REPORTING REQUIREMENTS

1. PLANNED CHANGES

a. INDUSTRIAL PERMITS
The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or,

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements listed at Part III.D.10.a.

b. MUNICIPAL PERMITS
Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. ANTICIPATED NONCOMPLIANCE
The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. TRANSFERS
This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. DISCHARGE MONITORING REPORTS AND OTHER REPORTS
Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until approved for Net DMR, the permittee shall request temporary or emergency waivers from electronic reporting. To obtain the waiver, please contact: U.S. EPA - Region 6, Water

Enforcement Branch, New Mexico State Coordinator (6ECD-W), (214) 665-7179. If paper reporting is granted temporarily, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and copies to NMED as required. Duplicate copies of all other reports shall be submitted to NMED at the following address(es):

EPA:
Enforcement & Compliance Assurance Division
Water Enforcement Branch (6ECD-W)
U.S. Environmental Protection Agency, Region 6
1201 Elm Street, Suite 500
Dallas, TX 75270

New Mexico:
Program Manager
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
1190 Saint Francis Drive
Santa Fe, NM 87502-5469

5. ADDITIONAL MONITORING BY THE PERMITTEE
If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

6. AVERAGING OF MEASUREMENTS
Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

7. TWENTY-FOUR HOUR REPORTING

a. The permittee shall report any noncompliance which may endanger health or the environment. Notification shall be made to the EPA at the following e-mail address: R6_NPDES_Reporting@epa.gov, as soon as possible, but within 24 hours from the time the permittee becomes aware of the circumstance. Oral notification shall also be to the New Mexico Environment Department at (505) 827-0418 as soon as possible, but within 24 hours from the time the permittee becomes aware of the circumstance. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

(1) A description of the noncompliance and its cause;

(2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,

(3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The following shall be included as information which must be reported within 24 hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and,

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part II (industrial permits only) of the permit to be reported within 24 hours.

c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

8. OTHER NONCOMPLIANCE
The permittee shall report all instances of noncompliance not reported under Parts III.D.4 and D.7 and Part I.B (for industrial permits only) at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.7.

9. OTHER INFORMATION
Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

10. CHANGES IN DISCHARGES OF TOXIC SUBSTANCES
All existing manufacturing, commercial, mining, and silvacultural permittees shall notify the Director as soon as it knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) One hundred micrograms per liter (100 µg/L);
(2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2, 4-dinitro-phenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the Director.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) Five hundred micrograms per liter (500 µg/L);

(2) One milligram per liter (1 mg/L) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the Director.

11. SIGNATORY REQUIREMENTS
All applications, reports, or information submitted to the Director shall be signed and certified.

a. ALL PERMIT APPLICATIONS shall be signed as follows:

(1) FOR A CORPORATION - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a)A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,

(b)The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP - by a general partner or the proprietor, respectively.

(3) FOR A MUNICIPALITY, STATE, FEDERAL, OR OTHER PUBLIC AGENCY - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(a)The chief executive officer of the agency, or

(b)A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

b. ALL REPORTS required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental

matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the Director.

c. CERTIFICATION
Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations"

12. AVAILABILITY OF REPORTS
Except for applications, effluent data permits, and other data specified in 40 CFR 122.7, any information submitted pursuant to this permit may be claimed as confidential by the submitter. If no claim is made at the time of submission, information may be made available to the public without further notice.

E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

1. CRIMINAL

a. NEGLIGENT VIOLATIONS
The Act provides that any person who negligently violates permit conditions implementing Section 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

b. KNOWING VIOLATIONS
The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

c. KNOWING ENDANGERMENT
The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

d. FALSE STATEMENTS
The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309.c.4 of the Clean Water Act)

2. CIVIL PENALTIES
The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed $37,500 per day for each violation.

3. ADMINISTRATIVE PENALTIES
The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

   a. CLASS I PENALTY
   Not to exceed $16,000 per violation nor shall the maximum amount exceed $37,500.

   b. CLASS II PENALTY
   Not to exceed $16,000 per day for each day during which the violation continues nor shall the maximum amount exceed $177,500.

F. DEFINITIONS
All definitions contained in Section 502 of the Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. ACT means the Clean Water Act (33 U.S.C. 1251 et. seq.), as amended.

2. ADMINISTRATOR means the Administrator of the U.S. Environmental Protection Agency.

3. APPLICABLE EFFLUENT STANDARDS AND LIMITATIONS means all state and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards or performance, toxic effluent standards and prohibitions, and pretreatment standards.

4. APPLICABLE WATER QUALITY STANDARDS means all water quality standards to which a discharge is subject under the Act.

5. BYPASS means the intentional diversion of waste streams from any portion of a treatment facility.

6. DAILY DISCHARGE means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day. "Daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be arithmetic average (weighted by flow value) of all samples collected during that sampling day.

7. DAILY MAXIMUM discharge limitation means the highest allowable "daily discharge" during the calendar month.

8. DIRECTOR means the U.S. Environmental Protection Agency Regional Administrator or an authorized representative.

9. ENVIRONMENTAL PROTECTION AGENCY means the U.S. Environmental Protection Agency.

10. GRAB SAMPLE means an individual sample collected in less than 15 minutes.

11. INDUSTRIAL USER means a non-domestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

12. MONTHLY AVERAGE (also known as DAILY AVERAGE) discharge limitations means the highest allowable average of "daily discharge(s)" over a calendar month, calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes daily average concentration effluent limitations or conditions, the daily average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily concentration, F = daily flow, and n = number of daily samples; daily average discharge =

$$\frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

13. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Act.

14. SEVERE PROPERTY DAMAGE means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

15. SEWAGE SLUDGE means the solids, residues, and precipitates separated from or created in sewage by the unit processes of a publicly owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff that are discharged to or otherwise enter a publicly owned treatment works.

16. TREATMENT WORKS means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof.

17. UPSET means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

18. FOR FECAL COLIFORM BACTERIA, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.

19. The term "MGD" shall mean million gallons per day.

20. The term "mg/L" shall mean milligrams per liter or parts per million (ppm).

21. The term "µg/L" shall mean micrograms per liter or parts per billion (ppb).

22. MUNICIPAL TERMS

    a. 7-DAY AVERAGE or WEEKLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. The 7-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

    b. 30-DAY AVERAGE or MONTHLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The 30-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

    c. 24-HOUR COMPOSITE SAMPLE consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.

    d. 12-HOUR COMPOSITE SAMPLE consists of 12 effluent portions collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.

    e. 6-HOUR COMPOSITE SAMPLE consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.

    f. 3-HOUR COMPOSITE SAMPLE consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Los Alamos/Pueblo	Rendija Canyon	R003	R-SMA-1.95	00-015	Rendija Canyon
		R006	R-SMA-2.5	00-011(a)	Rendija Canyon
	Pueblo Canyon	P007	P-SMA-2.15	31-001	Pueblo Canyon
	Los Alamos Canyon	L001	LA-SMA-0.85	03-055(c)	Los Alamos Canyon
		L002	LA-SMA-0.9	00-017	Los Alamos Canyon
				C-00-044	
		L003	LA-SMA-1	00-017	Los Alamos Canyon
				C-00-044	
		L004	LA-SMA-1.1	43-001(b2)	Los Alamos Canyon
		L005	LA-SMA-1.25	C-43-001	Los Alamos Canyon
		L006	LA-SMA-2.1	01-001(f)	Los Alamos Canyon
		L007	LA-SMA-2.3	01-001(b)	Los Alamos Canyon
	Los Alamos Canyon	L008	LA-SMA-3.1	01-003(a)	Los Alamos Canyon
		L009	LA-SMA-3.9	01-001(g)	Los Alamos Canyon
		L010	LA-SMA-4.1	01-003(b2)	Los Alamos Canyon
		L011	LA-SMA-4.2	01-001(c)	Los Alamos Canyon
		L012	LA-SMA-5.01	01-001(d3)	Los Alamos Canyon
		L012A	LA-SMA-5.02	01-003(e)	Los Alamos Canyon
		L013	LA-SMA-5.2	01-003(d)	Los Alamos Canyon
		L015	LA-SMA-5.31	41-002(c)	Los Alamos Canyon
		L016	LA-SMA-5.33	32-004	Los Alamos Canyon
		L014	LA-SMA-5.35	C-41-004	Los Alamos Canyon
		L017	LA-SMA-5.361	32-002(b1)	Los Alamos Canyon
				32-002(b2)	
		L017A	LA-SMA-5.362	32-003	Los Alamos Canyon
		L018	LA-SMA-5.51	02-003(a)	Los Alamos Canyon
				02-003(e)	
				02-004(a)	
				02-005	
				02-006(b)	
				02-006(c)	
				02-006(d)	
				02-006(e)	
				02-008(a)	
				02-009(b)	
				02-011(a)	

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Los Alamos/Pueblo	Los Alamos Canyon	L018	LA-SMA-5.51	02-011(b)	Los Alamos Canyon
				02-011(c)	
				02-011(d)	
				02-014	
		L018A	LA-SMA-5.52	02-003(b)	Los Alamos Canyon
				02-007	
				02-008(c)	
		L018B	LA-SMA-5.53	02-009(a)	Los Alamos Canyon
		L018C	LA-SMA-5.54	02-009(c)	Los Alamos Canyon
		L019	LA-SMA-5.91	21-021	BV Canyon - Tributary to Los Alamos Canyon
		L019A	LA-SMA-5.92	21-021	BV Canyon - Tributary to Los Alamos Canyon
		L020	LA-SMA-6.25	21-021	Los Alamos Canyon
				21-024(d)	
				21-027(c)	
		L022	LA-SMA-6.3	21-006(b)	Los Alamos Canyon
		L022A	LA-SMA-6.31	21-027(a)	Los Alamos Canyon
		L023	LA-SMA-6.32	21-021	Los Alamos Canyon
		L024	LA-SMA-6.34	21-021	Los Alamos Canyon
				21-022(h)	
		L026	LA-SMA-6.38	21-021	Los Alamos Canyon
				21-024(c)	
		L027	LA-SMA-6.395	21-021	Los Alamos Canyon
				21-024(j)	
		L028	LA-SMA-6.5	21-021	Los Alamos Canyon
				21-024(i)	
		L029	LA-SMA-9	26-001	Los Alamos Canyon
				26-002(a)	
				26-002(b)	
				26-003	
		L030A	LA-SMA-10.12	53-008	Los Alamos Canyon

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Los Alamos Pueblo	DP Canyon	D001	DP-SMA-0.3	21-029	DP Canyon
		D002	DP-SMA-0.4	21-021	DP Canyon
		D003	DP-SMA-0.6	21-021	DP Canyon
				21-024(l)	
		D004	DP-SMA-1	21-011(k)	DP Canyon
				21-021	
		D005	DP-SMA-2	21-021	DP Canyon
				21-024(h)	
		D006	DP-SMA-2.35	21-021	DP Canyon
				21-024(n)	
		D007	DP-SMA-3	21-013(c)	DP Canyon
				21-021	
Sandia	Sandia Canyon	S001	S-SMA-0.25	03-013(a)	Sandia Canyon
				03-052(f)	
		S002	S-SMA-1.1	03-029	Sandia Canyon
		S003	S-SMA-2	03-012(b)	Sandia Canyon
				03-045(b)	
				03-045(c)	
				03-056(c)	
		S003A	S-SMA-2.01	03-052(b)	Sandia Canyon
		S004	S-SMA-2.8	03-014(c2)	Sandia Canyon
		S005	S-SMA-3.51	03-009(i)	Sandia Canyon
		S005A	S-SMA-3.52	03-021	Sandia Canyon
		S005B	S-SMA-3.53	03-014(b2)	Sandia Canyon
		S006	S-SMA-3.6	60-007(b)	Sandia Canyon
		S007	S-SMA-3.7	53-012(e)	Sandia Canyon
		S008	S-SMA-3.71	53-001(a)	Sandia Canyon
		S009	S-SMA-3.72	53-001(b)	Sandia Canyon
		S010	S-SMA-3.95	20-002(a)	Sandia Canyon
		S011	S-SMA-4.1	53-014	Sandia Canyon
		S013	S-SMA-5	20-002(c)	Sandia Canyon
		S014	S-SMA-5.2	20-003(c)	Sandia Canyon
		S015	S-SMA-5.5	20-005	Sandia Canyon
		S016	S-SMA-6	72-001	Sandia Canyon
Mortandad	Cañada del Buey	C001	CDB-SMA-0.15	04-003(a)	Cañada del Buey
				04-004	
		C002	CDB-SMA-0.25	46-004(c2)	Cañada del Buey
				46-004(e2)	

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Mortandad	Cañada del Buey	C003	CDB-SMA-0.55	46-004(g)	Cañada del Buey
				46-004(m)	
				46-004(s)	
				46-006(f)	
		C004	CDB-SMA-1	46-003(c)	SWSC Canyon - Tributary to Canada del Buey
				46-004(d2)	
				46-004(f)	
				46-004(t)	
				46-004(w)	
				46-008(g)	
				46-009(a)	
		C005	CDB-SMA-1.15	46-004(b)	Cañada del Buey
				46-004(y)	
				46-004(z)	
				46-006(d)	
		C010	CDB-SMA-4	54-017	Cañada del Buey
				54-018	
				54-020	
	Mortandad Canyon	M001	M-SMA-1	03-050(a)	Mortandad Canyon
				03-054(e)	
		M002	M-SMA-1.2	03-049(a)	Mortandad Canyon
		M002A	M-SMA-1.21	03-049(e)	Mortandad Canyon
		M002B	M-SMA-1.22	03-045(h)	Mortandad Canyon
		M003	M-SMA-3	48-001	Mortandad Canyon
				48-005	
				48-007(c)	
		M004	M-SMA-3.1	48-001	Mortandad Canyon
				48-007(b)	
		M005	M-SMA-3.5	48-001	Mortandad Canyon
				48-003	
		M006	M-SMA-4	48-001	Effluent Canyon - Tributary to Mortandad Canyon
				48-005	
				48-007(a)	
				48-007(d)	
				48-010	

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Mortandad	Mortandad Canyon	M007	M-SMA-5	42-001(a)	Effluent Canyon - Tributary to Mortandad Canyon
				42-001(b)	
				42-001(c)	
				42-002(a)	
				42-002(b)	
		M008	M-SMA-6	35-016(h)	Effluent Canyon - Tributary to Mortandad Canyon
		M009	M-SMA-7	35-016(g)	Effluent Canyon - Tributary to Mortandad Canyon
		M010	M-SMA-7.9	50-006(d)	Effluent Canyon - Tributary to Mortandad Canyon
		M012	M-SMA-10	35-008	Mortandad Canyon
				35-014(e)	
		M012A	M-SMA-10.01	35-016(e)	Mortandad Canyon
		M013	M-SMA-10.3	35-014(e2)	Mortandad Canyon
				35-016(i)	
		M014	M-SMA-11.1	35-016(o)	Mortandad Canyon
		M015	M-SMA-12	35-016(p)	Mortandad Canyon
		M016	M-SMA-12.5	05-005(b)	Mortandad Canyon
				05-006(c)	
		M017	M-SMA-12.6	05-004	Mortandad Canyon
		M018	M-SMA-12.7	05-002	Mortandad Canyon
				05-005(a)	
				05-006(b)	
				05-006(e)	
		M019	M-SMA-12.8	05-001(a)	Mortandad Canyon
				05-002	
		M020	M-SMA-12.9	05-001(b)	Mortandad Canyon
				05-002	
		M021	M-SMA-12.92	00-001	Mortandad Canyon
		M022	M-SMA-13	05-001(c)	Mortandad Canyon
	Ten-Site Canyon	T001	Pratt-SMA-1.05	35-003(h)	Pratt Canyon - Tributary to Ten-Site Canyon
				35-003(p)	
				35-003(r)	

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Mortandad	Ten-Site Canyon	T001	Pratt-SMA-1.05	35-009(d)	Pratt Canyon - Tributary to Ten-Site Canyon
				35-016(k)	
				35-016(l)	
		T002	T-SMA-1	50-006(a)	Ten-Site Canyon
				50-009	
		T003	T-SMA-2.5	35-014(g3)	Ten-Site Canyon
		T004	T-SMA-2.85	35-014(g)	Ten-Site Canyon
				35-016(n)	
		T005	T-SMA-3	35-016(b)	Ten-Site Canyon
		T006	T-SMA-4	35-004(a)	Ten-Site Canyon
				35-009(a)	
				35-016(c)	
				35-016(d)	
		T007	T-SMA-5	35-004(a)	Ten-Site Canyon
				35-009(a)	
				35-016(a)	
				35-016(q)	
		T008	T-SMA-6.8	35-010(e)	Ten-Site Canyon
		T009	T-SMA-7	04-003(b)	Ten-Site Canyon
		T010	T-SMA-7.1	04-001	Ten-Site Canyon
				04-002	
Pajarito	Twomile Canyon	E001	2M-SMA-1	03-010(a)	Twomile Canyon
		E002	2M-SMA-1.42	06-001(a)	Twomile Canyon
		E003	2M-SMA-1.43	22-014(a)	Twomile Canyon
				22-015(a)	
		E004	2M-SMA-1.44	06-001(b)	Twomile Canyon
		E005	2M-SMA-1.45	06-006	Twomile Canyon
		E006	2M-SMA-1.5	22-014(b)	Twomile Canyon
		E007	2M-SMA-1.65	40-005	Twomile Canyon
		E008	2M-SMA-1.67	06-003(h)	Twomile Canyon
		E009	2M-SMA-1.7	03-055(a)	Twomile Canyon
		E010	2M-SMA-1.8	03-001(k)	Twomile Canyon
		E011	2M-SMA-1.9	03-003(a)	Twomile Canyon
		E012	2M-SMA-2	03-050(d)	Twomile Canyon
				03-054(b)	
		E013	2M-SMA-2.2	03-003(k)	Twomile Canyon
		E014	2M-SMA-3	07-001(a)	Twomile Canyon
				07-001(b)	
				07-001(c)	
				07-001(d)	

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Pajarito	Twomile Canyon	E015	2M-SMA-2.5	40-001(c)	Twomile Canyon
	Threemile Canyon	H001	3M-SMA-0.2	15-010(b)	Threemile Canyon
		H002	3M-SMA-0.4	15-006(b)	Threemile Canyon
		H003	3M-SMA-0.5	15-006(c)	Threemile Canyon
				15-009(c)	
		H004	3M-SMA-0.6	15-008(b)	Threemile Canyon
		H005	3M-SMA-2.6	36-008	Threemile Canyon
				C-36-003	
		H006	3M-SMA-4	18-002(b)	Threemile Canyon
				18-003(c)	
				18-010(f)	
	Pajarito Canyon	J001	PJ-SMA-1.05	09-013	Pajarito Canyon
		J002	PJ-SMA-2	09-009	Pajarito Canyon
		J003	PJ-SMA-3.05	09-004(o)	Pajarito Canyon
		J004	PJ-SMA-4.05	09-005(g)	Pajarito Canyon
		J005	PJ-SMA-5	22-015(c)	Pajarito Canyon
		J006	PJ-SMA-5.1	22-010(b)	Pajarito Canyon
		J007	PJ-SMA-6	40-010	Pajarito Canyon
		J008	PJ-SMA-7	40-006(c)	Pajarito Canyon
		J009	PJ-SMA-8	40-006(b)	Pajarito Canyon
		J010	PJ-SMA-9	40-009	Pajarito Canyon
		J012	PJ-SMA-10	40-006(a)	Pajarito Canyon
		J013	PJ-SMA-11	40-003(a)	Pajarito Canyon
		J014	PJ-SMA-11.1	40-003(b)	Pajarito Canyon
		J016	PJ-SMA-13.7	18-010(b)	Pajarito Canyon
		J018	PJ-SMA-14.2	18-012(b)	Pajarito Canyon
		J019	PJ-SMA-14.3	18-003(e)	Pajarito Canyon
		J020	PJ-SMA-14.4	18-010(d)	Pajarito Canyon
		J021	PJ-SMA-14.6	18-010(e)	Pajarito Canyon
		J022	PJ-SMA-14.8	18-012(a)	Pajarito Canyon
		J023	PJ-SMA-16	27-002	Pajarito Canyon
		J024	PJ-SMA-17	54-018	Pajarito Canyon
		J026	PJ-SMA-18	54-014(d)	Pajarito Canyon
				54-017	
		J025	PJ-SMA-19	54-013(b)	Pajarito Canyon
				54-017	
				54-020	

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Pajarito	Pajarito Canyon	J027	PJ-SMA-20	54-017	Pajarito Canyon
		J028	STRM-SMA-1.05	08-009(f)	Pajarito Canyon/Starmers Gulch
		J029	STRM-SMA-1.5	08-009(d)	Pajarito Canyon/Starmers Gulch
		J030	STRM-SMA-4.2	09-008(b)	Pajarito Canyon/Starmers Gulch
		J031	STRM-SMA-5.05	09-013	Pajarito Canyon/Starmers Gulch
Water/Cañon de Valle	Cañon de Valle	V001	CDV-SMA-1.2	16-017(b)-99	Cañon de Valle
				16-029(k)	
		V002	CDV-SMA-1.3	16-017(a)-99	Cañon de Valle
				16-026(m)	
		V003	CDV-SMA-1.4	16-020	Cañon de Valle
				16-026(l)	
				16-028(c)	
		V004	CDV-SMA-1.45	16-026(i)	Cañon de Valle
		V005	CDV-SMA-1.7	16-019	Cañon de Valle
		V006	CDV-SMA-2	16-021(c)	Cañon de Valle
		V007	CDV-SMA-2.3	13-001	Cañon de Valle
				13-002	
				16-003(n)	
				16-003(o)	
				16-029(h)	
				16-031(h)	
		V009	CDV-SMA-2.5	16-028(a)	Cañon de Valle
		V009A	CDV-SMA-2.51	16-010(i)	Cañon de Valle
		V010	CDV-SMA-3	14-009	Cañon de Valle
		V011	CDV-SMA-4	14-010	Cañon de Valle
		V012	CDV-SMA-6.01	14-001(g)	Cañon de Valle
				14-006	
		V012A	CDV-SMA-6.02	14-002(c)	Cañon de Valle
		V013	CDV-SMA-7	15-008(d)	Cañon de Valle
		V014	CDV-SMA-8	15-011(c)	Cañon de Valle
		V015	CDV-SMA-8.5	15-014(a)	Cañon de Valle
		V016	CDV-SMA-9.05	15-007(b)	Cañon de Valle
	Fence Canyon	F001	F-SMA-2	36-004(c)	Fence Canyon
	Potrillo Canyon	I001	PT-SMA-0.5	15-009(e)	Potrillo Canyon
				C-15-004	
		I002	PT-SMA-1	15-004(f)	Potrillo Canyon
				15-008(a)	

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Water/Cañon de Valle	Potrillo Canyon	I003	PT-SMA-1.7	15-003	Potrillo Canyon
		I004	PT-SMA-2	15-008(f)	Potrillo Canyon
				36-003(b)	
				36-004(e)	
		I004A	PT-SMA-2.01	C-36-001	Potrillo Canyon
				C-36-006(e)	
		I005	PT-SMA-3	36-004(a)	Potrillo Canyon
				36-006	
		I007	PT-SMA-4.2	36-004(d)	Potrillo Canyon
	Water Canyon	W001	W-SMA-1	16-017(j)-99	Water Canyon
				16-026(c2)	
				16-026(v)	
		W002	W-SMA-1.5	16-026(b2)	Water Canyon
				16-028(d)	
		W003	W-SMA-2.05	16-028(e)	Water Canyon
		W004	W-SMA-3.5	16-026(y)	Water Canyon
		W005	W-SMA-4.1	16-003(a)	Water Canyon
		W006	W-SMA-5	16-001(e)	S-Site Canyon - Tributary to Water Canyon
				16-003(f)	
				16-026(b)	
				16-026(c)	
				16-026(d)	
				16-026(e)	
		W007	W-SMA-6	11-001(c)	Water Canyon
		W008	W-SMA-7	16-029(e)	Water Canyon
		W009	W-SMA-7.8	16-031(a)	Water Canyon
		W010	W-SMA-7.9	16-006(c)	Water Canyon
		W011	W-SMA-8	16-016(g)	Water Canyon
				16-028(b)	Water Canyon
		W012	W-SMA-8.7	13-001	Water Canyon
				13-002	
				16-004(a)	
				16-026(j2)	
				16-029(h)	
				16-035	
		W012A	W-SMA-8.71	16-004(c)	Water Canyon
		W013	W-SMA-9.05	16-030(g)	Water Canyon

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Water/Cañon de Valle	Water Canyon	W014	W-SMA-9.5	11-012(c)	S-Site Canyon - Tributary to Water Canyon
		W015	W-SMA-9.7	11-011(a)	S-Site Canyon - Tributary to Water Canyon
				11-011(b)	
		W016	W-SMA-9.8	11-005(c)	S-Site Canyon - Tributary to Water Canyon
		W017	W-SMA-9.9	11-006(b)	S-Site Canyon - Tributary to Water Canyon
		W018	W-SMA-10	11-002	S-Site Canyon - Tributary to Water Canyon
				11-003(b)	
				11-005(a)	
				11-005(b)	
				11-006(c)	
				11-006(d)	
				11-011(d)	
		W019	W-SMA-11.7	49-008(c)	Water Canyon
		W020	W-SMA-12.05	49-001(g)	Water Canyon
		W021	W-SMA-14.1	15-004(h)	Water Canyon
				15-014(l)	
		W022	W-SMA-15.1	49-005(a)	Water Canyon
Ancho	Ancho Canyon	A001	A-SMA-1.1	39-004(a)	North Ancho Canyon
				39-004(d)	
		A002	A-SMA-2	39-004(b)	North Ancho Canyon
				39-004(e)	
		A003	A-SMA-2.5	39-010	North Ancho Canyon
		A004	A-SMA-2.7	39-002(c)	North Ancho Canyon
				39-008	
		A005	A-SMA-2.8	39-001(b)	North Ancho Canyon
		A006	A-SMA-3	39-002(b)	North Ancho Canyon
				39-004(c)	
		A007	A-SMA-3.5	39-006(a)	South Ancho Canyon
		A008	A-SMA-4	33-010(d)	South Ancho Canyon
		A009	A-SMA-6	33-004(k)	South Ancho Canyon
				33-007(a)	
				33-010(a)	
Chaquehui	Chaquehui Canyon	Q001	CHQ-SMA-0.5	33-004(g)	Chaquehui Canyon
				33-007(c)	
				33-009	
		Q002	CHQ-SMA-1.01	33-002(d)	Chaquehui Canyon
		Q002A	CHQ-SMA-1.02	33-004(h)	Chaquehui Canyon
				33-008(c)	

APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Chaquehui	Chaquehui Canyon	Q002A	CHQ-SMA-1.02	33-011(d)	Chaquehui Canyon
				33-015	
		Q002B	CHQ-SMA-1.03	33-008(c)	Chaquehui Canyon
				33-012(a)	
				33-017	
				C-33-001	
				C-33-003	
		Q003	CHQ-SMA-2	33-004(d)	Chaquehui Canyon
				33-007(c)	
				C-33-003	
		Q004	CHQ-SMA-3.05	33-010(f)	Chaquehui Canyon
		Q005	CHQ-SMA-4	33-011(e)	Chaquehui Canyon
		Q006	CHQ-SMA-4.1	33-016	Chaquehui Canyon
		Q007	CHQ-SMA-4.5	33-011(b)	Chaquehui Canyon
		Q008	CHQ-SMA-5.05	33-007(b)	Chaquehui Canyon
		Q009	CHQ-SMA-6	33-004(j)	Chaquehui Canyon
				33-006(a)	
				33-007(b)	
				33-010(c)	
				33-010(g)	
				33-010(h)	
				33-014	
		Q010	CHQ-SMA-7.1	33-010(g)	Chaquehui Canyon

APPENDIX B
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Pollutant of Concern	Sample Preparation[1]	Landscape	Data Subset Description	SSC-Normalized?	Units	90th Percentile BTV
Aluminum	F	Developed	All locations	Yes	mg/kg SSC	2100
Aluminum	F	Undeveloped	SEP Reference[2]	No	µg/L	3200
Aluminum	F	Undeveloped	Locations other than SEP Reference and E240 gage	No	µg/L	1200
Aluminum	F	Undeveloped	E240 gage	No	µg/L	2200
Aluminum	UF	Developed	All locations	Yes	mg/kg SSC	34,000
Aluminum	UF	Undeveloped	SEP and Western Reference	Yes	mg/kg SSC	36,000
Aluminum	UF	Undeveloped	Northern and Bandelier Reference	Yes	mg/kg SSC	12,000
Arsenic	F	Developed	All locations	No	µg/L	NR[3]
Arsenic	F	Undeveloped	All locations	No	µg/L	6.0
Boron	F	Developed	Lab Developed	No	µg/L	NR
Boron	F	Developed	Town Developed	No	µg/L	NR
Boron	F	Undeveloped	Western and Northern Reference	No	µg/L	23
Boron	F	Undeveloped	SEP and Bandelier Reference	No	µg/L	21
Benzo(a)pyrene	UF	Developed	All locations	No	µg/L	0.067
Cadmium	F	Developed	All locations	No	µg/L	NR
Cadmium	F	Undeveloped	All locations	No	µg/L	NR
Cobalt	F	Developed	All locations	No	µg/L	5.0
Cobalt	F	Undeveloped	Western and Northern Reference	No	µg/L	4.3
Cobalt	F	Undeveloped	SEP and Bandelier Reference	No	µg/L	1.9
Chromium	F	Developed	All locations	No	µg/L	NR
Chromium	F	Undeveloped	All locations	No	µg/L	NR
Copper	F	Developed	Lab Developed	No	µg/L	11
Copper	F	Developed	Town Developed	No	µg/L	8.0
Copper	F	Undeveloped	All Reference except Bandelier	No	µg/L	3.3
Gross alpha	UF	Developed	All locations	Yes	pCi/g SSC	47
Gross alpha	UF	Undeveloped	All locations	Yes	pCi/g SSC	66
Mercury	UF	Developed	All locations	No	µg/L	NR
Mercury	UF	Undeveloped	Western and Northern Reference, excluding E240 gage	No	µg/L	0.21
Mercury	UF	Undeveloped	SEP and Bandelier Reference	No	µg/L	0.10
Nickel	F	Developed	All locations	No	µg/L	3.1
Nickel	F	Undeveloped	Chupaderos, Garcia, and Mortandad Watersheds	No	µg/L	3.1

APPENDIX B
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Pollutant of Concern	Sample Preparation[1]	Landscape	Data Subset Description	SSC-Normalized?	Units	90th Percentile BTV
Nickel	F	Undeveloped	Watersheds other than Chupaderos, Garcia, and Mortandad	No	µg/L	1.7
Lead	F	Developed	All locations	No	µg/L	2.0
Lead	F	Undeveloped	All Reference except Bandelier	No	µg/L	1.5
Total PCBs	UF	Developed	All watersheds except South Fork Acid	No	µg/L	0.028
Total PCBs	UF	Developed	South Fork Acid watershed	No	µg/L	NR
Total PCBs	UF	Undeveloped	Northern and Western Reference	No	µg/L	0.012
Total PCBs	UF	Undeveloped	SEP Reference	No	µg/L	NR
Radium-226 and radium-228	UF	Developed	All locations	Yes	pCi/g SSC	10
Radium-226 and radium-228	UF	Undeveloped	All locations	Yes	pCi/g SSC	7.5
Antimony	F	Developed	All locations	No	µg/L	NR
Selenium	UF	Developed	All locations	No	µg/L	5.6
Selenium	UF	Undeveloped	Watersheds other than Mortandad	No	µg/L	4.8
Thallium	F	Developed	All locations	No	µg/L	NR
Vanadium	F	Developed	All locations	No	µg/L	5.5
Vanadium	F	Undeveloped	Watersheds other than Mortandad	No	µg/L	4.3
Zinc	F	Developed	All locations	No	µg/L	77
Zinc	F	Undeveloped	Watersheds other than Garcia	No	µg/L	10

[1] Sample preparation: F = filtered using a 0.45 µm filter (i.e., dissolved), UF = not filtered (i.e., total).

[2] SEP = Supplemental Environmental Project.

[3] NR = not recommended.

APPENDIX C
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Total, unless indicated	CAS No.		MQL (µg/l)(*1)	ATAL (µg/l)(*2)	MTAL (µg/l)(*3)
RADIOACTIVITIES					
Ra-226 and Ra-228 (pCi/l)				30	—
METALS					
Aluminum, total recoverable	7429-90-5		2.5	—	(*4)
Antimony, dissolved (P)	7440-36-0		60	640	—
Arsenic, dissolved (P)	7440-38-2		0.5	9	340
Boron, dissolved	7440-42-8		100	5000	—
Cadmium, dissolved	7440-43-9		1	—	(*4)
Chromium, dissolved	18540-29-9		10	—	(*4)(*5)
Cobalt, dissolved	7440-48-4		50	1000	—
Copper, dissolved	7440-50-8		0.5	—	(*4)
Lead, dissolved	7439-92-1		0.5	—	(*4)
Mercury, total	7439-97-6		0.005	0.77	—
Nickel, dissolved (P)	7440-02-0		0.5	—	(*4)
Selenium, total recoverable	7782-49-2		5	5	20
Silver, dissolved	7440-22-4		0.5	—	(*4)
Thallium, dissolved (P)	7440-28-0		0.5	0.47	—
Vanadium, dissolved	7440-62-2		50	100	—
Zinc, dissolved	7440-66-6		20	—	(*4)
CYANIDE					
Cyanide, total recoverable	57-12-5		10	5.2	22
DIOXIN					
2,3,7,8-TCDD (P)	1746-01-6		0.00001	5.1E-08	—
SEMIVOLATILE COMPOUNDS					
Pentachlorophenol	87-86-5		5	—	19
Benzo(a)pyrene (P)	50-32-8		5	0.18	—
Hexachlorobenzene (P)	118-74-1		5	0.0029	—
PESTICIDES					
Aldrin (P)	309-00-2		0.01	0.0005	3

APPENDIX C
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Total, unless indicated	CAS No.		MQL (µg/l)(*1)	ATAL (µg/l)(*2)	MTAL (µg/l)(*3)
Gamma-BHC	58-89-9		0.05	---	0.95
Chlordane (P)	57-74-9		0.2	0.0081	2.4
4,4'-DDT and derivatives (P)	50-29-3		0.02	0.001	1.1
Dieldrin (P)	60-57-1		0.02	0.00054	0.24
Alpha-Endosulfan	959-98-8		0.01	---	0.22
Beta-Endosulfan	33213-65-9		0.02	---	0.22
Endrin	72-20-8		0.02	---	0.086
Heptachlor	76-44-8		0.01	---	0.52
Heptachlor Epoxide	1024-57-3		0.01	---	0.52
Toxaphene	8001-35-2		0.3	---	0.73
PCBS					
PCBs (P)	1336-36-3		(*6)	(*7)	---
HIGH EXPLOSIVES					
RDX	121-82-4		---	200	---
2,4,6-Trinitrotoluene (TNT)	118-96-7		---	20	---

Note: The 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.

Footnotes:

(*1) MQL is the minimum quantification level. EPA approved analytical methods with the same or more sensitive detectable level (DL) than MQL shall be used. If an individual analytical test result is smaller than the MQL or the more sensitive DL, a value of zero (0) or "ND" may be used for reporting and action purpose. A Table of MQLs is attached as Appendix D.

The Permittees shall use sufficiently sensitive EPA-approved analytical methods (under 40 CFR part 136 and 40 CFR chapter I, subchapters N and O) when quantifying the presence of POCs in a discharge for analyses of POCs or pollutant parameters under the permit. In case the minimum quantification levels (MQLs) are not sufficiently sensitive to the limits, the actual detected values, instead of zeros, need to be reported. If there is a sensitive method with MDL (method detection limit) below the TAL/BTV, but the MQL is above the TAL/BTV, they cannot report zero based on MQL but must report actual value. If any individual analytical test result is less than the MQL listed in Appendix C, or the more sensitive MDL, a value of zero (0) may be used for that individual result for reporting purpose.

The Permittees may develop an effluent specific method detection limit (MDL) in accordance with the monitoring requirements in the SIP and 40 CFR 136. For any POC for which the Permittees determine an effluent specific MDL, the Permittees shall send to the EPA Region 6 Permitting & Water Quality Branch (6WD-P) a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation: MQL = 3.3 x MDL. Upon written approval by the EPA Region 6 Permitting & Water Quality Branch (6WD-P), the effluent specific MQL may be utilized by the Permittees for all future Compliance Status Report (CSR) reporting requirements. The PCB congener-specific MQLs are listed in footnote (*7) below.

(*2) ATAL stands for Average Target Action Level. The average is the geometric mean of applicable monitoring results at the SMA. If all analytical results are below analytical method detect level, a value of "zero" may be reported. If one or more data are above detect level, a value of ½ detect level shall be assigned to those below detect level data for calculation purpose. If the average value of a specific POC is below its MQL, a value of "zero" may be reported for the average. If a new or an enhanced best management practice (BMP) is installed, the average is calculated based on analytical results from samples taken after installation of the BMP.

APPENDIX C
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

(*3) MTAL stands for Maximum Target Action Level.

(*4) Hardness-dependent metals target action levels. See Table C-1 below.

(*5) While the 20.6.4 New Mexico Administrative Code (NMAC) aquatic life standard is for chromium III, analyzing this in storm water is operationally infeasible because of the 24-hr preservation requirement. Therefore, for the purposes of this Permit, total dissolved chromium will be analyzed and compared to the hardness-dependent criteria (see Table C-1 below).

(*6) Method 1668 Revision C or the most current revision of the Congener Method shall be used for PCB analysis. Per Appendix C of 2010 Permit, the MQLs for PCB congeners 4/10, 5/8, 6, 7/9, 11, 12/13, 14, and 15 will be 50 pg/l, and the MQLs for all other PCB Congeners will be 25 pg/l. If adjusted Reporting Limits (RL) are used to adjust MQLs due to laboratory's contemporary ambient background, such adjusted RL shall be updated no less than once per 6 mo. If laboratory method blank, field blank, or trip blank subtraction are used in calculation of sample analytical result, supporting document shall be submitted with the Annual Report.

(*7) If the stream reach that an SMA drains to is classified as ephemeral (per the Clean Water Act 303(d)/305(b) Integrated Report), the total PCB wildlife habitat surface water quality criterion (0.014 µg/l from 20.6.4 NMAC) will be used as the ATAL; if the stream reach that an SMA drains to is classified as intermittent or perennial, the total PCB human health-organism aquatic life criterion (0.00064 µg/l) will be used as the ATAL.

APPENDIX C
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Table C-1
Proposed Metals MTALs (*1)

Major Canyon	Hardness (*2) (mg/L)	Aluminum	Cadmium (dissolved)	Chromium (dissolved)	Copper (dissolved)	Lead (dissolved)	Nickel (dissolved)	Silver (dissolved)	Zinc (dissolved)
Ancho	35.7	830	0.69	250	5.1	20.7	200	0.55	63
Chaquehui	30.0	660	0.59	210	4.3	17.0	170	0.41	54
Los Alamos/Pueblo	34.5	800	0.67	240	4.9	19.9	190	0.52	61
Mortandad	29.4	640	0.58	210	4.2	16.7	170	0.39	43
Pajarito	30.2	660	0.59	210	4.3	17.2	170	0.41	54
Sandia	44.8	1140	0.83	300	6.3	26.7	240	0.81	77
Water/Cañon de Valle	47.7	1240	0.88	310	6.7	28.6	250	0.90	82

(*1) MTALs are based on acute aquatic life criteria contained in New Mexico Water Quality Standards in 20.6.4.900 NMAC, computed at the hardness values listed.

(*2) Geometric mean receiving water hardness for each major canyon, based on calculated hardness using dissolved (0.45-µm filtered) calcium and magnesium results (SM 2340B).

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE AND CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thalllium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury *1	0.0005 0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Clorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		

ACID COMPOUNDS

2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

BASE/NEUTRAL

Acenaphthene	10	Dimethyl Phthalate	10
Anthracene	10	Di-n-Butyl Phthalate	10
Benzidine	50	2,4-Dinitrotoluene	10
Benzo(a)anthracene	5	1,2-Diphenylhydrazine	20
Benzo(a)pyrene	5	Fluoranthene	10
3,4-Benzofluoranthene	10	Fluorene	10
Benzo(k)fluoranthene	5	Hexachlorobenzene	5
Bis(2-chloroethyl)Ether	10	Hexachlorobutadiene	10
Bis(2-chloroisopropyl)Ether	10	Hexachlorocyclopentadiene	10
Bis(2-ethylhexyl)Phthalate	10	Hexachloroethane	20
Butyl Benzyl Phthalate	10	Indeno(1,2,3-cd)Pyrene	5
2-Chloronapthalene	10	Isophorone	10
Chrysene	5	Nitrobenzene	10
Dibenzo(a,h)anthracene	5	n-Nitrosodimethylamine	50
1,2-Dichlorobenzene	10	n-Nitrosodi-n-Propylamine	20
1,3-Dichlorobenzene	10	n-Nitrosodiphenylamine	20
1,4-Dichlorobenzene	10	Pyrene	10
3,3'-Dichlorobenzidine	5	1,2,4-Trichlorobenzene	10
Diethyl Phthalate	10		

PESTICIDES AND CBS

Aldrin	0.01	Beta-Endosulfan	0.02
Alpha-BHC	0.05	Endosulfan sulfate	0.02
Beta-BHC	0.05	Endrin	0.02
Gamma-BHC	0.05	Endrin Aldehyde	0.1
Chlordane	0.2	Heptachlor	0.01
4,4'-DDT and derivatives	0.02	Heptachlor Epoxide	0.01
Dieldrin	0.02	PCBs	0.2
Alpha-Endosulfan	0.01	Toxaphene	0.3

Footnotes:

*1 Default MQL for Mercury is 0.005 unless Part I of your permit requires the more sensitive Method 1631 (Oxidation / Purge and Trap / Cold vapor Atomic Fluorescence Spectrometry), then the MQL shall be 0.0005.

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
NPDES/WETLANDS REVIEW SECTION (6WD-PN)
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

CERTIFIED MAIL™

7014 0150 0000 2406 3889

neopost
11/27/2019
US POSTAGE $008.99⁰

FIRST-CLASS MAIL

ZIP 75202
041M12250608

http://www.epa.gov/region6
1-800-887-6063

REPLY TO MAIL CODE:_____.

Official Business
Penalty for Private Use $300
An Equal Opportunity Employer

Glenn Morgan
Newport News Nuclear BWXT-Los Alamos, LLC
1200 Trinity Drive, Suite 150
Los Alamos, New Mexico 87544