# NPDES PERMIT NO. NM0031054 FACT SHEET

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

# APPLICANT

Los Alamos National Security, LLC Management Contractor for Operations and Los Alamos, New Mexico 87545 U.S. Department of Energy Los Alamos Area Office Los Alamos, NM 87544

# **ISSUING OFFICE**

U.S. Environmental Protection Agency Region 6 1445 Ross Avenue Dallas, Texas 75202-2733

# PREPARED BY

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#### **DATE PREPARED**

August 12, 2011

#### **PERMIT ACTION**

Issuance of a first time permit.

#### **RECEIVING WATER – BASIN**

Water Canyon - Rio Grande Basin

# **DOCUMENT ABBREVIATIONS**

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
F&WS	United States Fish and Wildlife Service
FCB	Fecal coliform bacteria
HE	High Explosives
mg/l	Milligrams per liter
ug/l	Micrograms per liter
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
POTW	Publically Owned Treatment Works
RDX	Royal Demolition Explosive (hexahydro-1, 3, 5-trinitro-1, 3, 5-triazine)
RP	Reasonable potential
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

# I. CHANGES FROM THE PREVIOUS PERMIT

This is a first time permit.

#### II. APPLICANT LOCATION and ACTIVITY

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

The 40-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 formed by predominantly ephemeral and intermittent streams. LANL has 37 active technical areas (TAs) spread over 40 square miles. This permit is for remediation activities located in TA-16 in the southwestern corner of the LANL property and was established to develop explosive formulations, cast and machine explosive charges, and assemble and test explosive components for the nuclear weapons program.

TA-16 has three springs that are contaminated with high explosives (HE), particularly RDX; SWSC Spring, Burning Ground Spring and Martin Spring. NMED entered into a Compliance Order on Consent (the Consent Order) with LANL in 2005 pursuant to the New Mexico Hazardous Waste Act and the Consent Order required LANL to take investigation and remediation actions to address contamination in environmental media, including contamination in the springs, as a result of past operations at Building 16-260. Spring waters from SWSC and Burning Ground Springs flow to Canon de Valle and water from Martin Spring flows to S-Site Canyon. The activity being considered in this permit is designed to implement an environmental remediation consistent with that agreement. The agreement includes timelines to implement the project. Without treatment these springs will continue the discharge of HE/RDX pollutants to the environment and waters of the United States will continue unabated.

This permit only addresses the discharge of pollutants largely resulting from historical activities at the laboratory that are entrained in ground water and discharged to waters of the US.

The draft permit will designate each spring as a separate outfall as follows: Outfall 001 (Martin Spring): Latitude 35° 50' 33" North, Longitude 106° 20' 11" West, Outfall 002 (SWSG Spring): Latitude 35° 50' 33" North, Longitude 106° 20' 12" West, and Outfall 003 (Burning Ground Spring): Latitude 35° 50' 60" North, Longitude 106° 20' 18" West.

# III. EFFLUENT CHARACTERISTICS

Pollutant data from each spring was provided as part of the NPDES application. Some of the pollutant data was analyzed at levels higher than current EPA MQL's. The data from this testing is shown on Appendices 1, 2 and 3 (attached).

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# IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technologybased or end-of-pipe control mechanisms and an interim goal to achieve "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water," more commonly known as the "swimmable, fishable" goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

LANL submitted a complete permit application September 9, 2009. It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR §122.46(a).

#### V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

#### A. OVERVIEW OF TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 require that NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the proposed draft permit for RDX. Water quality-based effluent limitations are established in the proposed draft permit for pH, copper, silver, thallium, bis(2-chloroethyl)ether, hexachlorobenzene, and 3,3'-dichlorobenzidine. Monitor and report requirements are proposed for aluminum, PCB's, copper and adjusted gross alpha. Copper may be limited or report only but not both. Aluminum is not initially limited but maybe after completion of a site specific pollutant study.

#### B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

#### 1. General Comments

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT - The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and O&G.

BAT - The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

2. Effluent Limitation Guidelines

There are no ELG's established at 40 CFR for this type of facility. Permit limits addressing technology-based pollutants will be based on BPJ. Treating groundwater using carbon filtration to remove hydrocarbons will be considered BPT/BCT and is established in the draft permit using BPJ. Based on the applicant's studies, carbon filter technology is capable of removing RDX to 6.1 ug/l or lower. EPA proposes a monthly effluent limit of 6.1 ug/l of RDX as the BPJ based BAT for each Outfall; 001 thru 003. In addition, the draft permit will propose monitoring and reporting requirements for total organic carbon (TOC). TOC is an excellent parameter for detecting the broad range of organic pollutants associated with discharges of organic substances. The draft permit will propose monitoring only for TOC sampling and reporting before and after carbon filter technology treatment. The draft permit will not propose a limit for TOC at this time but does not preclude the Agency from adopting a TOC limit at a later time.

Since the discharge is not based on a measure of production but of naturally flowing springs, loading limits are not proposed for the permit. Concentration limits will be protective of the environment.

EFFLUENT	DISCHARGE LIMITATIONS			
CHARACTERISTICS				
	lbs/Day		mg/l (unl	ess noted)
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	Daily Max.
Flow	N/A	N/A	Measure MGD	Measure MGD
RDX	Report	Report	6.1 ug/l	Report
TOC (*1)	Report	Report	Report	Report
TOC (*2)	Report	Report	Report	Report

Technology-Based Effluent Limits Outfall's 001, 002 and 003:

Footnotes:

\*1 Prior to carbon filter treatment.

\*2 After carbon filter treatment.

# C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained.

#### 2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC amended through January 14, 2011).

Martin Spring flows into S-Site Canyon, thence to Water Canyon thence to the Rio Grande. Both Burning Ground Spring and SWSC Spring flows into Canon de Ville, thence to Water Canyon thence to the Rio Grande. Portions of both Canon de Valle and S-Site Canyon are intermittent streams and both are tributaries of Water Canyon. A small segment of Canon de Valle is perennial because of the flow of Burning Ground Spring. Water Canyon is also an intermittent stream at the confluent points with either Canon de Valle or S-Site Canyon and beyond until it reaches the Rio Grande. Martin Spring (Outfall 001) flows into the Rio Grande Segment No. 20.6.4.128 (NMAC). Martin Spring flows immediately into an unassessed tributary and thence to the Rio Grande. SWSC Spring (Outfall 002) also flows into the Rio Grande Segment No. 20.6.4.128 (NMAC) less than 500' above Burning Ground Spring. The designated uses for Rio Grande Basin Segment No. 20.6.5.128; Martin Spring - Outfall 001 and SWSC Spring - Outfall 002, are limited aquatic life, livestock watering, wildlife habitat and secondary contact. General criteria are applicable as specified in 20.6.4.13 NMAC. Human health-organism only criteria for toxic pollutants, as identified in Subsection J of 20.6.4.900 NMAC are applicable as specified in Subsection G of 20.6.4.11 NMAC (i.e., only human health criteria for persistent pollutants are applicable). Burning Ground Spring (Outfall 003) flows into the Rio Grande Segment No. 20.6.4.126 (NMAC). The designated uses for the Rio Grande Basin Segment No. 20.6.5.126 are coldwater aquatic life, livestock watering, wildlife habitat and secondary contact. General criteria of 20.6.4.13 NMAC apply. All human health criteria of 20.6.4.900 (whether persistent or not) apply to 20.6.4.126 (see Subsection G of 20.6.4.11 NMAC).

4. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. pH

Criteria for pH is not listed in stream specific 20.6.4.128 NMAC and designated uses for limited aquatic uses also does not have pH criteria. The pollutant pH will be limited in the permit based on the WQMP, Work Element 2, which states "NMED will use the effluent limitation of 6.0-9.0

for pH for state certifications of NPDES permits except when: a. more stringent limitations are needed to meet the antidegradation policy and implementation plan of the New Mexico Water Quality Standards, (20.6.4 NMAC); b. the WQCC has adopted more stringent limitation in a point source load allocation. In all cases, state-certified effluent limitations for pH shall be stringent enough so that receiving waters meet water quality standards." The draft permit will establish limitations for pH of 6 to 9 su for Outfalls 001 and 002 based on the WQMP. For Outfall 003, pH shall be limited to 6.6-8.8 su for the protection of coldwater aquatic uses.

#### b. TOXICS

i. General Comments

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

#### ii. Reasonable Potential - Toxics

Pollutant testing from each outfall was provided by the applicant. The springs each have zero low flow and nominal flow rates of 100 gallons per day. For purposes of evaluating human health pollutants, the long term harmonic mean flow was also established at 100 gallons per day. The RP determinations based on the pollutant testing provided are in attached Appendices 1, 2 and 3. Based on the results seen in the Appendices, there appears to be RP for several pollutants; aluminum, cadmium, copper, lead, silver, thallium, bis(2-chloroethyl)ether, hexachlorobenzene, and 3,3'-dichlorobenzidine. Previously it was noted above in Section III of the Fact Sheet that several of the pollutants were reported using higher MQL's than the MQL EPA uses. If the pollutant value was reported as less than the MQL but that MQL was higher than the EPA's MQL, then for purposes of RP screening, the analysis was run at the higher MQL value. The applicant will be allowed to retest those pollutants using the correct MQL for those pollutants that show RP exceedances and present the results prior to issuance of the final permit. However the draft permit will propose limits for the pollutants based on the analysis presented in the permit application. Except for aluminum (see discussion below), the permit will establish limits for the protection of water quality criteria as follows:

EFFLUENT	DISCHARGE LIMITATIONS				
CHARACTERISTICS					
	lbs/Day		lbs/Day mg/l (unless noted)		ess noted)
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	Daily Max.	
Cadmium	Report	Report	0.28 ug/l	0.42 ug/l	
Copper	Report	Report	6.42 ug/l	9.63 ug/l	
Silver	Report	Report	0.13 ug/l	0.20 ug/l	
Hexachlorobenzene	Report	Report	0.0032 ug/l	0.0048 ug/l	

Outfall 001 – Martin Spring

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			
	lbs/Day		mg/l (unless noted)	
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	Daily Max.
Copper	Report	Report	6.42 ug/l	9.63 ug/l
Silver	Report	Report	0.13 ug/l	0.20 ug/l
Thallium	Report	Report	0.52 ug/l	0.77 ug/l
Hexachlorobenzene	Report	Report	0.0032 ug/l	0.0048 ug/l

#### Outfall 002 – SWSC Spring

#### Outfall 003 – Burning Ground Springs

EFFLUENT	DISCHARGE LIMITATIONS			
CHARACTERISTICS				
	lbs/Day		mg/l (unless noted)	
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	Daily Max.
Copper	Report	Report	4.93 ug/l	7.39 ug/l
Lead	Report	Report	1.71 ug/l	2.56 ug/l
Silver	Report	Report	0.13 ug/l	0.20 ug/l
Thallium	Report	Report	0.52 ug/l	0.77 ug/l
Bis (2-chloroethyl) Ether	Report	Report	5.81 ug/l	8.72 ug/l
3,3 Dichlorobenzidine	Report	Report	0.31 ug/l	0.46 ug/l
Hexachlorobenzene	Report	Report	0.0032 ug/l	0.0048 ug/l

Water quality samples from the springs indicate elevated concentrations of aluminum that are clearly not related to the MQL issue above. The levels of aluminum when compared to aluminum's criteria are sufficient to cause concern. The source of the aluminum is at this time not fully known. Given the nature of the source water being discharged and of the geology of the region, which is high in aluminum rich material, the conclusions regarding whether the source is "natural" or anthropogenic cannot be reached at this time. EPA in consultation with the State believes that delays to resolve the issue prior to issuance of this permit would not be environmentally beneficial because of the previously described situation that the discharge of the RDX (and the aluminum) will continue unabated due to the natural pressure/flow of the water emanating from the springs.

If the source of the aluminum could be determined to be of "natural origin" the involved stream segments could be eligible for segment specific water quality standards through rulemaking as provided in Subsection D of 20.6.4.10 NMAC. EPA and the State agree that such investigation may be appropriate but understand that such determination would be difficult, time consuming and subject to intense scrutiny by the public and EPA. EPA is therefore requiring monitoring of aluminum as well as a requirement for completion of a study on this issue. Both total and dissolved aluminum forms are required to be reported. The facility will be required to submit for appropriate State and Federal approval within thirty (30) months from the permit effective date a Site-Specific Numeric Criteria Study (Study) for those pollutants such as but not limited to aluminum. Aluminum will not be limited in the draft permit as long as the 30-month Study submittal is met. Since the permittee has no control over the time for the State and EPA to approve or make other recommendations contained in the Study, permit requirements for site specific pollutants will be sample and report until such recommendations and/or conclusions are made. Upon the conclusions and/or recommendations of the State and EPA on the Study, terms and conditions of site specific pollutants may be placed in this or future permits in accordance with standard permit reopener conditions contained in this permit.

Previously in the Fact Sheet, a technology-based limit for RDX of 6.1 ug/l using BPJ, based on carbon filtration technology as representing BAT was proposed. The use-specific numerical criteria set forth in 20.6.4.126, 20.6.4.128 and 20.6.4.900 (NMAC) of the WQS is applicable to receiving streams. The technology-based effluent of 6.1  $\mu$ g/L is protective of the numeric human health water quality criterion of 100  $\mu$ g/L. The technology-based effluent also appears likely to be protective of the aquatic life designated uses of the receiving waters. Therefore, there is no further need for a more stringent water quality based limit for RDX. While there is no numeric criterion for RDX in 20.6.4.900 NMAC, the NM WQS at Paragraph 2 of Subsection F of 20.6.4.13 NMAC provides a calculation method to derive a quantifiable criterion. Utilizing the method specified, NMED has evaluated RDX and the pertinent findings are that RDX is not a "persistent" pollutant and that the non-persistent human health criterion is 100  $\mu$ g/L. Thus there is a numeric criterion applicable to Segment No. 20.6.4.126

The State is in the process of evaluating RDX aquatic life criterion through the above calculation method. Preliminary information indicated a "ballpark" chronic aquatic life criterion in the range of 9  $\mu$ g/l.

5. Monitoring Frequency for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1). Sample frequency is based on the May 2011, NMIP.

All three outfalls will have identical monitoring frequency requirements. Since the flow is not continuous and there are no mass based limits proposed in the draft permit, flow is proposed to be estimated twice per month when discharging and reported. Flow may be estimated, when discharging, using sound analytical methods. Grab samples shall be used for pH with twice per month frequency. All other pollutants in the draft permit; RDX, TOC, aluminum, cadmium, copper, lead, silver, thallium, bis(2-chloroethyl)ether, 3,3'-dichlorobenzidine, and hexachlorobenzene are proposed to be monitored and reporting twice per month when discharging using grab samples.

#### D. WHOLE EFFLUENT TOXICITY LIMITATIONS

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP, May, 2011. Table 11 of Section V of the NMIP outlines the type of WET testing for different types of discharges. The discharge however is not typical in that the springs are now and have always been part of the native environment from before activities started at LANL. The WET section of EPA does not believe that WET testing is appropriate for the activity.

#### VI.303(d) LIST

Martin Spring (Outfall 001) flows into Water Canyon, Rio Grande Segment No. 20.6.4.128 (the spring flows immediately into an unassessed tributary and thence to Assessment Unit ID: NM-128\_13). The assessment unit is listed in 2010-2012 State of New Mexico Integrated List as not supporting the limited aquatic life, the livestock watering and the wildlife habitat designated uses. The probable causes are aluminum, PCBs and gross alpha. The probable sources of

impairment are unknown. SWSC Spring (Outfall 002) flows into Cañon de Valle, Rio Grande Segment 20.6.4.128 (Assessment Unit ID: NM-128.A\_02) less than 500' above Burning Ground Spring. The assessment unit has not been assessed according to the 2010-2012 State of New Mexico Integrated List. Burning Ground Spring (Outfall 003) flows into Cañon de Valle, Rio Grande Segment 20.6.4.126 (Assessment Unit ID: NM-126.A\_00). The assessment unit is listed in the 2010-2012 Integrated List as not supporting the coldwater aquatic life, the livestock watering and the wildlife habitat designated uses. The probable causes are aluminum, copper, gross alpha and PCBs. The probable sources of impairment are unknown. Neither of the stream segments has had TMDLs completed. Consistent with the NMIP, May, 2011, monitoring and reporting for the pollutants that are probable in preventing impairments that are in the discharge are required until such time as a TMDL is completed.

The draft permit will propose monitoring and reporting for the discharges consistent with the impairments. Outfall 001 - Martin Springs will have monitor and reporting proposed for PCB's and adjusted gross alpha using grab samples. PCB's shall be monitored annually using EPA Method 1668; also referred to as the Congener Method. Adjusted gross alpha is proposed to be monitored and reported once per quarter when discharging. Outfall 003 – Burning Ground Spring will have monitor and reporting proposed for PCB's and adjusted gross alpha using grab samples. PCB's shall be monitored annually using EPA Method 1668; also referred to as the Congener Method. Outfall 002 – SWSC Spring, even though that specific segment has not been evaluated, since it is only 500 feet upstream of Burning Ground Spring, it too will have monitoring for PCB's and adjusted gross alpha identical to Outfall 003. Copper limits are proposed in all three outfalls. However, if new pollutant testing shows copper to not demonstrate RP to exceed criteria, the copper monitoring will be added to any outfall where the limit is removed. This determination would be made after the draft public notice and final permit issuance. The changing from a copper limit to report only would not require additional public notice as it is being addressed here as a possibility. The standard reopener language in the permit allows additional permit conditions if warranted by future changes and/or new TMDLs or any new 303(d) listings for the receiving waters.

#### VII. ANTIDEGRADATION

The 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 limitations and monitoring requirements set forth in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limits are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

#### VIII. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, Southwest Region 2 website, <u>http://ifw2es.fws.gov/EndangeredSpecies/lists/</u>, three species in Los Alamos County are listed as endangered (E) or threatened (T). They are the Black-footed ferret (E) (*Mustela nigripes*), the Southwestern willow flycatcher (E) (*Empidonax traillii extimus*) and the Mexican spotted owl (T) (*Strix occidentalis lucida*). The American bald eagle (*Haliaeetus leucocephalus*) was previously listed as endangered; however, the USFWS removed the American bald eagle in the

lower 48 states from the Federal List of Endangered and Threatened Wildlife Federal Register, July 9, 2007, (Volume 72, Number 130).

EPA determines that the permitting action will improve the water quality of receiving stream and therefore benefits the designated uses of receiving streams. Because the receiving streams are intermittent streams and the discharge volume is so low as to only impact downstream waters under precipitation or snow melt and there is no information available how these springs affect federally listed species in the Los Alamos County, EPA determines that this permitting action has no effect on the listed species: southwestern willow flycatcher, black-footed ferret, and Mexican spotted owl.

# IX. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The issuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the issuance.

# X. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards are promulgated or revised. In addition, if the State amends a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

# XI. VARIANCE REQUESTS

No variance requests have been received.

#### XII. 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 prior to the publication of that notice.

#### XIII. FINAL DETERMINATION

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

# XIV. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

#### A. APPLICATION(s)

EPA Application Form 2D received September 9, 2009.

#### B. 40 CFR CITATIONS

Citations to 40 CFR are as of August 5, 2011.

Sections 122, 124, 125, 133, 136

#### C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through January 14, 2011.

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, May 2011.

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2010 - 2012.