UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



February 3, 2005

REPLY TO: 6EN-WC

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7003 0500 0003 0870 7121)

Mr. Edwin L. Wilmot Manager Los Almos Site Office National Nuclear Security Administration U.S. Department of Energy c/o Mr. Gene Turner 528 35th St. Los Alamos, NM 87544-2201

Re: Administrative Order Docket No. CWA-06-2005-1701

NPDES Nos. NMR05A735, NM0028355

Dear Mr. Wilmot:

Enclosed is the final version of the Federal Facilities Compliance Agreement (FFCA) between the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) regarding storm water discharges from Solid Waste Management Units (SWMUs) at the Los Alamos National Laboratories. This compliance agreement will guide you through the monitoring and Best Management Practices to be performed while you go through the application process for an individual National Pollutant Discharge Elimination System (NPDES) permit. The FFCA is an interim tool to direct protection of the environment and it will automatically terminate upon issuance of the individual permit covering the SWMUs.

The FFCA is a compilation of much work by your staff, the New Mexico Environment Department, and public input from environmental groups and tribes. We appreciate your cooperation on this very important issue and look forward to working with you as you implement the FFCA. You and your staff are encouraged to work expeditiously with EPA Region 6's Water Quality Protection Division in the development of the individual permit. It is the goal of the Clean Water Act that all waters of the United States should be fishable and swimmable, and that the NPDES permitting program will restore and maintain the chemical, physical, and biological integrity of our nation's waters.

Thank you for your cooperation. If you have any technical questions, please contact Mr. Taylor Sharpe of my staff at (214) 665-7112. If you have any legal questions, please contact Mr. John Emerson of EPA Region 6's Regional Counsel at (214) 665-3137.

Sincerely yours,

John Blevins

Director

Compliance Assurance and Enforcement Division

Enclosure

cc: Mr. Nathaniel Wardwell
Office of Laboratory Council
Mail Stop A187
Los Alamos, NM 87545

Ms. Marcy Leavitt Chief Surface Water Quality Bureau New Mexico Environment Department P.O. Box 26110 Santa Fe, NM 87502

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 6

In the Matter of:	§	
	§	
UNITED STATES	§	
DEPARTMENT OF ENERGY	§	
	§	Docket No. CWA-06-2005-1701
and the	§	
LOS ALAMOS NATIONAL LABORATORY	§	
	§	
NPDES Nos. NMR05A735, NMR05A734,	§	
and NM0028355	§	

FEDERAL FACILITY COMPLIANCE AGREEMENT

I. PURPOSE AND SCOPE

1. The United States Environmental Protection Agency (EPA) and the United States
Department of Energy (DOE) enter into this Federal Facility Compliance Agreement
(Agreement) pursuant to the Clean Water Act, 33 U.S.C. §§ 1251-1387 (CWA). The purpose of
the Agreement is to establish a compliance program for the regulation of storm water discharges
from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) point sources at
the Los Alamos National Laboratory (Laboratory) until such time as those sources are regulated
by an individual storm water permit issued by EPA pursuant to the National Pollutant Discharge
Elimination System (NPDES). The purpose of the compliance program is to provide a schedule
to ensure compliance with the NPDES storm water permitting program. The scope of this
Agreement is limited to providing a compliance program for the regulation of storm water
discharges from SWMUs and AOCs at the Laboratory in lieu of the Laboratory's Storm Water
Multi-Sector General Permit.

II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

- 2. The Laboratory is a federal facility comprising approximately 40 square miles located in Los Alamos County, in north-central New Mexico. The facility is owned by DOE and is managed by the University of California for DOE's National Nuclear Security Administration.
- 3. A number of conventional industrial facilities are located at the Laboratory, some of which have associated SWMUs and AOCs that discharge storm water. All SWMUs and AOCs that discharge storm water (collectively, Sites) are covered by this Agreement, with the following exceptions: (a) new releases from operating units at the facility; (b) closure and post-closure care activities under 40 CFR Part 264 subpart G; (c) implementation of controls, including long-term monitoring, for any SWMU or AOC on the Laboratory's Resource Conservation and Recovery Act (RCRA) permit Corrective Action Complete With Controls list; and (d) any release that occurs after the date that the Order on Consent entered into by DOE, the University of California, and the New Mexico Environment Department (NMED), governing corrective action at the Laboratory, terminates.
- 4. The discharge of storm water at the Laboratory is regulated by NPDES Storm Water Multi-Sector General Permit Nos. NMR05A734 (University of California) and NMR05A735 (DOE), herein the "General Permit," which both became effective on December 23, 2000, pursuant to 65 FR 64746 (October 30, 2000). The point sources discharges of storm water regulated by the General Permit include the SWMUs.

5. DOE has initiated discussions with EPA to apply for an individual permit for the Sites, which will replace existing coverage under the General Permit. Other industrial activities will continue to be regulated by the General Permit.

III. PARTIES

- 6. The Parties to this FFCA are EPA and DOE.
- 7. The undersigned representatives of the Parties to this Agreement certify that they are fully authorized by the Party whom they represent to enter into the terms and conditions of the Agreement and to execute and legally bind that Party hereto.

IV. COMPLIANCE PROGRAM

- 8. DOE shall submit by December 31, 2004, a signed application to EPA Region 6 for an individual storm water discharge permit for the Sites, and any additional required materials and information to make the application administratively complete by March 31, 2005. The signed application for individual storm water discharge coverage was dated December 20, 2004, and received by EPA before December 31, 2004.
- 9. Until EPA issues an individual permit, the Laboratory shall comply with the schedule established by this Agreement for monitoring and reporting of storm water discharges from the Sites. This schedule is intended to foster management of the Sites to prevent or minimize erosion and the transport of pollutants or contaminants from the Sites by storm water runoff. During the period this Agreement is in effect, DOE must comply with all requirements of the current General Permit. This Agreement does not constitute a waiver or modification of

the terms or conditions of any NPDES permit. Compliance with the terms and conditions of this Agreement does not relieve DOE of its obligations to comply with any applicable federal, state, or local law or regulation (see paragraph 31).

- 10. Under this Agreement there shall be two kinds of monitoring, pursuant to two monitoring and management plans, namely: (a) sampling on a watershed basis at approximately 60 automated monitoring stations at various locations within the Laboratory canyons pursuant to a Storm Water Monitoring Plan (see paragraphs 13 through 16 for more details) as listed in attached Table 1 (watershed monitoring); and (b) sampling near specific Sites on a rotating basis (Site-specific monitoring pursuant to a SWMU Storm Water Pollution Prevention Plan (SWMU/SWPPP)) (see paragraphs 18 through 23 for more details).
- 11. For purposes of this Agreement, "pollutants or contaminants" shall be defined to include: (a) "contaminants" in Section III.B. of the Order on Consent entered into by DOE, the University of California, and NMED, governing corrective action at the Laboratory; (b) "water contaminants" under the State of New Mexico Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC); and (c) "pollutants" under the CWA. The purpose of storm water monitoring under this Agreement is to determine if there is a release or transport of a pollutant or contaminant from a Site into surface water that could cause or contribute to a violation of applicable surface water quality standards, including the antidegradation policy, or an applicable waste load allocation. If a release or transport has occurred, it may be necessary to implement best management practices (BMPs) to reduce or prevent erosion or to reexamine, repair, or modify existing BMPs to reduce or prevent erosion.

- 12. The chemical analytical methods used shall be those set forth in 40 CFR Part 136 or the New Mexico Water Quality Control Commission (WQCC) regulations. The use of alternative methods shall be detailed in Monitoring Plans as needed, and the Plans must be approved by EPA prior to use by DOE.
- 13. By November 1, 2004, DOE shall submit to EPA Region 6 a Storm Water Monitoring Plan (SWMP) for FY04 that shall include watershed-specific storm water monitoring, sampling and reporting requirements for watershed monitoring stations (approximately 60 stations). A copy shall also be provided to NMED at the same time.
- 14. DOE shall submit annual updates of the SWMP to EPA for review and approval, with copies provided to NMED, by March 31st of each year, beginning in 2005. Storm water monitoring and sampling addressed in the SWMP refers to the monitoring and sampling at watershed monitoring stations. EPA's review and approval of the SWMP and updates of the plan shall be coordinated with input from NMED.
- 15. Upon approval of the first SWMP submitted pursuant to this Agreement, DOE shall conduct storm water monitoring at the Laboratory stations designated in the attached Table 1, following precipitation events that produce a discharge in volumes large enough to allow for sample collection. If new information warrants, DOE shall also conduct storm water monitoring at other locations. These other locations must be submitted to EPA for approval as part of the annual updates to the SWMP as discussed in paragraph 14.
- 16. Storm water monitoring shall consist of water levels, precipitation measurements from existing regional rain gages or supplemental rain gages and analysis of the parameters

specified in the SWMP. These parameters shall initially include the specific analytical suites specified in attached Table 1, as well as any other parameters specified in the SWMP and updates of the plan.

- 17. After four samples are collected at a particular station, DOE shall evaluate the data and propose changes, as appropriate, in the SWMP to EPA for approval in the annual update to the SWMP.
- 18. DOE shall submit a Site-specific storm water monitoring plan for fiscal year 2005, known as a SWMU Storm Water Pollution Prevention Plan (SWMU/SWPPP), to EPA for review and approval (with a copy provided to NMED), by March 31, 2005. EPA's review and approval of the SWMU/SWPPP shall be coordinated with input from NMED.
- 19. The SWMU/SWPPP shall describe a monitoring and erosion control program to control and limit contamination migration and transport from Sites within the Laboratory and within individual or combined site boundaries and to monitor the effectiveness of controls at the sites.
- 20. DOE shall continue to evaluate all Sites for erosion potential, using the Laboratory's Standard Operating Procedure *Surface Water Site Assessment* (SOP 2.01). DOE shall monitor all Sites scoring above the erosion matrix score of 40 (on a scale of 0-100) (see Table 2) during the next four (4) years. DOE will attach a table to the SWMU/SWPPP and each update showing the Sites scoring above 40 and the year in which the Sites will be sampled according to the SWMU/SWPPP. Monitoring shall be required to continue until the absence of pollutants or contaminants in runoff exceeding water screening action levels has been verified.

- 21. The initial SWMU/SWPPP for the Sites, due on March 31, 2005, shall contain:

 (a) a description of the approach employed to identify and prioritize the Sites by watershed where there is the greatest potential for erosion and contamination to impact surface water(s) of the state; (b) a description of the types of erosion control measures implemented;

 (c) a description of the process for determining the specific erosion control measures and monitoring program to be implemented at each Site; (d) the criteria for evaluating which Sites may be grouped as substantially identical outfalls or storm water management areas;

 (e) a description of post sampling activities, including data assessment and contingency measures to address releases that may be identified during sampling; and (f) an inspection and maintenance schedule. The initial SWMU/SWPPP will also identify the initial group of Sites that were individually monitored during 2004, and the group of Sites to be individually monitored in 2005.
- 22. DOE shall submit annual updates of the SWMU/SWPPP to EPA for review and approval, with a copy provided to NMED, by March 31st of each year, beginning in 2006. The annual updates to the SWMU/SWPPP shall include: (a) any proposed changes to the Site-specific erosion control and monitoring program; (b) the tabular results of Site-specific monitoring and sampling conducted at the Laboratory during the previous year; (c) any proposed changes to the inspection and maintenance schedule for existing or proposed erosion controls at designated Sites; (d) the criteria used to determine the need for erosion control measures maintenance and/or upgrades; and (e) the group of Sites that shall be individually monitored during the coming year.

- 23. Site-specific monitoring stations shall be generally located upstream of the confluence with other surface water(s) and in a location that allows for the collection of representative samples. Constituents to be monitored at each Site shall at a minimum include the pollutants or contaminants identified in Table 1 or in the applicable SWMU/SWPPP.
- 24. DOE shall comply with the applicable surface water quality standards pursuant to the CWA (33 U.S.C. §§ 1251-1387), the New Mexico Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC) and this Agreement. Pollutant or contaminant concentrations shall be compared to the appropriate water screening action level (wSAL) to determine whether pollutant or contaminant transport has occurred. The wSALs shall be established in the SWMP and the SWMU/SWPPP. If there are pollutants or contaminants detected above an established wSAL, DOE shall conduct an investigation to determine the source within 30 days of receipt of the data, and evaluate BMPs in accordance with subparagraphs A through D of this paragraph. Where an analytical result is higher than a wSAL, DOE shall take appropriate and timely corrective actions. For the purposes of this agreement, corrective action may include: install, re-examine, repair, modify BMPs, or source identification to control or eliminate the source or migration of pollutants or contaminants. Corrective actions taken to address exceedances of wSALs shall be reported to EPA Region 6 and NMED with the quarterly status report pursuant to paragraph 27, and shall be included in the annual modification of the SWMU/SWPPP. Failure to take corrective action in accordance with this paragraph shall be a violation of this Agreement. Each exceedance shall require additional corrective actions in accordance with this paragraph. Exceedances of wSALs are not necessarily violations of water quality standards and

the purpose of wSALs is to determine the level of BMPs necessary to protect water quality standards. DOE shall identify the contaminants that are present in soil and sediment at concentrations greater than NMED approved background concentrations (Ryti, et al., 1998) at each SWMU or AOC upstream from all watershed monitoring stations. DOE must monitor for the identified contaminants and implement corrective action as follows:

- A. If only one unfiltered grab sample is collected in a three-month period and the analytical result is greater than the wSAL, then DOE will identify the source and implement corrective actions.
- B. If more than one, but less than four unfiltered grab samples are collected in a three month period, and the analytical results of any one sample exceeds the wSAL, then DOE will identify the source and implement corrective actions.
- C. If four or more unfiltered samples are collected during a three-month period, and the analytical result of only one sample is greater than the wSAL, then DOE will, at a minimum, examine the site, and make repairs if necessary. No additional corrective action is required at that time.
- D. If corrective actions are required at any SWMU or AOC, then monitoring shall continue for a minimum of one additional year.

V. REPORTING

25. For watershed monitoring, the monitoring period shall be the calendar year. All results for watershed monitoring shall be submitted to EPA and NMED by March 31st of each

year following the monitoring period (e.g., DOE shall submit the results for calendar year 2004 by March 31, 2005). Exceedances of wSALs shall be reported in writing to EPA and NMED monthly by the 28th day of the following month in which analytical results are received.

26. All results for Site-specific monitoring according to the SWMU/SWPPP shall be reported to EPA and NMED by March 31st of each year following the monitoring period (e.g., monitoring results for calendar year 2004 shall be reported by March 31, 2005). Exceedances of wSALs shall be reported in writing to EPA and NMED monthly, by the 28th day of the following month.

- 27. DOE shall submit a written status report to EPA Region 6 and NMED Surface Water Quality Bureau no later than sixty (60) days after the end of each quarter. The status report shall be submitted in addition to any other reporting or certification required under this Agreement or pursuant to law or regulation. The status report shall state and describe the cause of any failure to comply with this Agreement and at a minimum shall include: (a) the deadlines and other milestones which DOE was required to meet during the reporting period; (b) the progress made toward meeting the deadlines and other milestones; (c) the reasons for any noncompliance; and (d) corrective actions taken to address exceedances of wSALs, and (e) a description of any matters relevant to the status of its compliance with this Agreement.
- 28. Notification to EPA of any noncompliance with any provision of the Agreement or anticipated delay in performing any obligation under the Agreement shall not excuse DOE's noncompliance or anticipated delay.

- 29. Unless specified otherwise, when written notification to, or communication with EPA is required by the terms of the Agreement, it shall be addressed to Ms. Waudelle Strickley, U.S. EPA Region 6, 1445 Ross Avenue, Suite 1200 (6EN-WC), Dallas, Texas 75202-2733. Correspondence to NMED shall be addressed to New Mexico Environment Department, Surface Water Quality Bureau Chief, Harold Runnels Building, 1190 St. Francis Dr., P.O. Box 26110, Santa Fe, New Mexico 87502-6110.
- 30. Each notification or communication to EPA or NMED shall be deemed submitted on the date it is postmarked and shall be sent by certified mail, return receipt requested. DOE shall maintain records of each notification or communication to EPA for the duration of the Agreement.
- 31. All reports submitted to EPA or NMED pursuant to this Agreement shall be signed by a duly authorized representative of DOE in accordance with 40 C.F.R. § 122.22(b). Each submission shall be admissible as evidence in any proceeding to enforce this Agreement. Each submission shall include the following certification pursuant to 40 C.F.R. § 122.22(d):

I certify under penalty of law that this document and all accompanying attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

VI. COMPLIANCE WITH OTHER LAWS AND REGULATIONS

32. Compliance with the terms of this Agreement shall not affect or relieve DOE of its obligations to comply with all applicable requirements of the CWA and regulations promulgated thereunder or other applicable requirements of federal, state, tribal or local law.

VII. ENTRY AND INSPECTION

33. DOE shall allow EPA or NMED representatives, including an authorized contractor acting as a representative of EPA, upon presentation of credentials and other documents as may be required by law or institutional safety/security requirements, to: (a) enter the premises of the Laboratory to conduct inspections for the purpose of determining whether DOE is in compliance with the Agreement; (b) have access to, and copy at reasonable times any records which relate to the activities regulated under the Agreement; (c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under the Agreement; and (d) sample or monitor at reasonable times for the purpose of assuring compliance with the Agreement. Nothing herein shall be construed to limit or expand EPA's or NMED's entry and inspection authority under the CWA, or other applicable laws.

VIII. DISPUTE RESOLUTION

34. In the event of a dispute relating to an interpretation or alleged violation of this Agreement, EPA and DOE shall meet promptly and work in good faith in an effort to reach a mutually agreeable resolution of the dispute.

- 35. The procedures set forth in this Agreement for the resolution of disputes relating to this Agreement shall govern the resolution of such disputes, unless otherwise specifically provided for in the Agreement. During the pendency of any dispute, DOE shall continue to abide by those provisions of the Agreement, which are not in dispute.
- 36. The pendency of any dispute relating to this Agreement shall not affect DOE's responsibility to perform the work required by this Agreement in a timely manner, except that the time period for completion of work affected by such dispute may, at EPA's sole discretion, be extended for a period of time not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of work required by this Agreement, which are not affected by the dispute, shall continue and be completed in accordance with applicable schedule.
- 37. The parties to this Agreement shall make all reasonable efforts to informally resolve disputes with the project manager or immediate supervisor level. The EPA official, with respect to this Agreement, is Mr. Taylor Sharpe, Enforcement Officer, EPA Region 6. The DOE Project Manager, with respect to this Agreement, means the LASO Environmental Permit Manager. If a resolution cannot be achieved informally, the procedures of this section shall be implemented to resolve a dispute.
- 38. Within fourteen days following an event which gives rise to a dispute DOE shall submit to EPA a written statement setting forth the nature of the dispute, DOE's position with respect to the dispute and the factual and other information DOE is relying upon to support its position. NMED shall be provided a copy of the written statement at the same time. If DOE

does not provide such written statement to EPA within the fourteen-day period, DOE shall be deemed to have agreed with EPA's position with respect to the dispute.

- 39. Upon EPA's receipt of DOE's written statement the Project Managers and/or their immediate managers shall engage in discussions to resolve the dispute. The parties shall resolve the dispute within fourteen days of EPA's receipt of DOE's written statement. During the fourteen-day period, the Project Managers shall confer as many times as necessary to discuss and attempt to resolve the dispute. If an agreement is not reached on any issue within the fourteen-day period, DOE may within ten days thereafter submit a written notice to EPA elevating the dispute to the Dispute Resolution Committee (DRC) for resolution. If DOE does not elevate the dispute to the DRC within the ten-day period, DOE shall be deemed to have agreed with EPA's position with respect to the dispute.
- 40. The DRC will serve as a forum for resolution of disputes for which agreement has not been reached pursuant to the foregoing paragraphs in this section. Following elevation of a dispute to the DRC, the DRC shall have thirty days to unanimously resolve the dispute. The EPA representative on the DRC is Mr. John Emerson, EPA Region 6. The DOE representative on the DRC is the LASO Assistant Manager for Environmental Management. Notice of the delegation of the authority from a party's representative on the DRC to an alternate shall be provided to the other party in writing within seven days of the delegation.
- 41. If unanimous resolution by the DRC is not achieved within the thirty-day period,
 DOE may, within twenty-one days thereafter, submit a written notice of dispute to the Regional
 Administrator of EPA Region 6 for final resolution of the dispute. In the event that the dispute

is not elevated to the Regional Administrator of EPA Region 6 within the twenty-one day period, DOE shall be deemed to have agreed with the original EPA position with respect to the dispute.

- 42. Within twenty-one days of the resolution of a dispute, pursuant to the procedures specified in this section, DOE shall incorporate the resolution and final determination into the appropriate statement of work, plan, schedule or procedures and proceed to implement this Agreement according to the amended statement of work, plan, schedule or procedures.
- 43. Resolution of a dispute pursuant to this section of the Agreement constitutes a final resolution of any dispute arising under this Agreement. The parties shall abide by all the terms and conditions of any final resolution of dispute obtained pursuant to this section of the Agreement.

IX. MODIFICATIONS

44. The requirements, timetables and deadlines under this Agreement may be modified upon DOE's request for modification and upon a showing of good cause for the modification. A request for modification shall be submitted in writing to EPA Region 6 within ten days of the event or circumstances giving rise to the request and shall specify the requirement, timetable or deadline for which a modification is sought; the circumstances constituting good cause and any related requirement, timetable, deadline or schedule that would be affected if the request were granted. NMED shall be provided a copy of the request at the same time as EPA.

- 45. Good cause exists for a modification when sought with respect to: (a) a force majeure event; (b) a delay caused, or which is likely to be caused, by the granting of a modification with regard to another timetable, deadline or schedule; (c) a delay caused by failure of a regulatory agency to perform its duties in a timely manner, where regulatory action is necessary to proceed with performance of an obligation in a timely manner and DOE has made a timely and complete request for action from the regulatory agency; (d) a scientific basis exists which demonstrates that another requirement, deadline or timetable would be adequate to achieve the wSALs set forth in this Agreement, protect water quality and achieve the goals of the CWA; or (e) any other event or series of events mutually agreed to by the parties as constituting good cause.
- 46. For the purposes of this Agreement, force majeure means any event arising from causes beyond the control of DOE or of entities controlled by DOE, including, but not limited to, contractors and subcontractors, which could not be overcome by the due diligence of DOE or the entities controlled by DOE, which event delays or prevents the performance of any obligation under this Agreement, including acts of God or war, labor unrest, civil disturbance or any judicial order which prevents compliance with the provisions of this Agreement. Force majeure shall not include increased costs of the performance of any activity required by this Agreement, the failure of contractors, employees or agents of DOE to perform or the avoidable malfunction of equipment.

47. Within twenty-one days of receipt of a request for a modification EPA shall advise DOE and NMED of its position on the request. If EPA does not concur in the modification, it shall so advise DOE in writing and include an explanation of the basis for its position.

X. FUNDING

- 48. It is the expectation of the parties that all obligations of DOE under the Agreement will be fully funded. DOE agrees to use every legally available mechanism to seek sufficient funding to fulfill its obligations under the Agreement.
- 49. No provision herein shall be interpreted to require obligations or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341. Where a payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established for the payment or obligation shall be appropriately adjusted within the terms set forth in this Agreement.
- 50. If funds are not available to fulfill DOE's obligations under this Agreement, EPA reserves the right to initiate an action against any other person or to take any action which would be appropriate absent this Agreement.

XI. GENERAL PROVISIONS

- 51. The parties agree that the terms and conditions of this Agreement are enforceable as appropriate by any person pursuant to Section 505 of the CWA, 33 U.S.C. § 1365. Terms and conditions of this Agreement which are changed by an agreed upon modification shall be enforceable as changed. Nothing in this Agreement shall be deemed to waive the sovereign immunity of the United States beyond what is already accomplished in the CWA.
- 52. This Agreement has been negotiated and executed by the parties in good faith to ensure compliance with the law. No part of this Agreement constitutes or should be interpreted or construed as an admission of fact or of liability under federal, state or local laws, regulations, ordinances or common law or as an admission of a violation of any law, regulation, ordinance or common law. By entering into this Agreement DOE does not waive any claim, right or defense that it might raise in any other proceeding or action.
- 53. If any provision or authority of this Agreement or the application of this Agreement to any party or circumstance is determined by any judicial or administrative authority to be invalid, the application of such provisions to other parties or circumstances and the other provisions of the Agreement shall remain in full force and effect and shall not be affected thereby.
- 54. The effective date of this Agreement shall be the date on which it is signed by the last signatory. This Agreement shall be effective if signed in counterparts.

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55. All references to "days" herein are references to calendar days. The last day of a time period shall be included, unless it is a Saturday, a Sunday or a legal holiday in which event the period runs until the end of the next day that is not a Saturday, a Sunday or a legal holiday.

56. This Agreement shall terminate upon the issuance of an individual permit, which regulates discharges of storm water governed by this Agreement.

2/3/05

Date

John Blevins

Director

Compliance Assurance and Enforcement Division

U. S. EPA Region 6

1/31/65 Date

Edwin L. Wilmot

Manager

Los Alamos Site Office

National Nuclear Security Administration

U. S. Department of Energy

Table 1
Surface Water Monitoring and Sampling Stations

Canyon and Location	Current Monitoring Station Los Alamos/Puebl	Sources Monitored o Canyon Watershe	Proposed SWMU Monitoring Station d Gage Stations	Order Requested Analytical Suite
Los Alamos Canyon (Reservoir, or	E026	Watershed (ESR		Metals, PCBs, Flow
above Ice Rink, or below Ice Rink)		Support)		
Los Alamos Canyon above DP Canyon	E030	SWMUs		Metals, PCBs, Flow
DP Canyon above TA-21	E038	SWMUs		Metals, PCBs, Flow
DP Canyon below meadow at TA-21	E039	SWMUs		Metals, PCBs, Flow
DP Canyon above Los Alamos	E040	Watershed (ESR		Metals, Flow
Canyon		Support)		
Los Alamos above SR-4	E042	SWMUs		Metals, Flow
Los Alamos below LA Weir	E050	Watershed (ESR		Metals, PCBs, Flow
(Downstream Facility Boundary)		Support)		
Pueblo Canyon above Acid Canyon	E055	SWMUs		Metals, PCBs, Flow
South Fork of Acid Canyon	E055.5	Watershed (ESR Support)		Metals, PCBs, Flow
Acid Canyon above Pueblo Canyon	E056	SWMUs		Metals, PCBs, Flow
Pueblo above SR 502 (Downstream Facility Boundary)	E060	SWMUs		Metals, PCBs, Dioxins/Furans, Flow
Guaje Canyon at SR 502	E099	Watershed (ESR Support)		Metals, PCBs, Flow
Los Alamos at Rio Grande	E110	Watershed (ESR Support)		Metals, PCBs, Dioxins/Furans, Flow

Canyon and Location	Current Monitoring Station	Sources Monitored	Proposed SWMU Monitoring Station	Order Requested Analytical Suite
Sandia Canyon, right fork at Power	E121	Power Plant and		Metals, Molybdenum, PCBs, Flow
Plant (South Fork)		SWMUs		
Sandia Canyon, left fork at Asphalt	E122	3-38 Metals		Metals, PCBs, Flow
Plant (North Fork)		Shop and		
		SWMUs		
Sandia Canyon below Wetlands	E123	Watershed (ESR		Metals, Molybdenum, PCBs, Flow
		Support)		
Sandia Canyon above Firing Range	E124	SWMUs		Metals, HE, PCBs, Flow
Sandia Canyon above SR 4	E125	Watershed (ESR		Metals, HE, PCBs, Flow
(Downstream Facility Boundary)		Support)		
	Mortandad Car	nyon Watershed (Gage Stations	
Mortandad Canyon below Effluent	E200	SWMUs		Metals, Perchlorate, PCBs, Flow
Canyon				
Mortandad Canyon above Ten Site	E201	SWMUs		Metals, Perchlorate, PCBs,
TA-50 South (MDA C)	E201.3	TSDFs and	201.5	Metals, Flow
		SWMUs		
Ten Site Canyon above Mortandad	E201.5	SWMUs		Metals, Flow
Mortandad above Sediment Traps	E202	Watershed (ESR		Metals, Flow
		Support)		
Mortandad below Sediment Traps	E203	Watershed (ESR		Metals, Flow
		Support)		
Mortandad at Facility Boundary	E204	SWMUs		Metals, Perchlorate, Flow
(Downstream Facility Boundary)				
Upper Cañada del Buey	E218	SWMUs		SCC, Rad, Metals, PCB, Flow
46-004(a)	Wasteline	SWMUs		"
46-004(a2)	Outfall	SWMUs		"
46-004(c2)	Outfall	SWMUs		"

	Current Monitoring	Sources	Proposed SWMU Monitoring	
Canyon and Location	Station	Monitored	Station	Order Requested Analytical Suite
46-004(d2)	Stack emissions	SWMUs		"
46-004(g)	Outfall/Stack	SWMUs		"
	Emissions			
46-004(h)	Outfall/Stack	SWMUs		"
	Emissions			
46-004(m)	Outfall	SWMUs		"
46-004(s)	Outfall	SWMUs		"
Cañada del Buey near MDA G	E225	SWMUs		Metals, PCBs, Flow
Cañada del Buey above SR 4	E230	Watershed (ESR		Metals, PCBs, Flow
(Downstream Facility Boundary)		Support)		
	Pajarito Cany	on Watershed Ga	age Stations	
Pajarito Canyon below SR 501	E240	Watershed (ESR		Metals, Flow
		Support)		
Pajarito above Starmers	E241	Watershed (ESR		Metals, Flow
		Support)		
Starmers above Pajarito	E242	SWMUs		Metals, Flow
La Delfe above Pajarito	E242.5	SWMUs		Metals, HE, Flow
Pajarito above Two-Mile Confluence	E243	SWMUs		Metals, HE, Flow
Two Mile Tributary at TA-3	E243.5	3-38 Metals	E244	Metals, Dioxin/Furans, Flow
<u> </u>		Shop and		
		SWMUs		
Two Mile above Pajarito Confluence	E244	SWMUs		Metals, Dioxin/Furan, HE, PCBs,
Ĭ				Flow
Three Mile above Pajarito Confluence	E246	SWMUs		Metals, HE, PCBs, Flow

Canyon and Location	Current Monitoring Station	Sources Monitored	Proposed SWMU Monitoring Station	Order Requested Analytical Suite
Pajarito above TA-18	E245	Watershed (ESR Support)		Metals, HE, PCBs, Flow
Pajarito above Three Mile	E245.5	Watershed (ESR Support)		Metals, HE, PCBs, Flow
Pajarito (TA-54-MDA G)	E247	Watershed (ESR Support)		Metals, PCBs, Flow
Pajarito (TA-54-MDA G)	E227	TSDF and Landfill	E230	Metals, PCBs, Flow
Pajarito (TA-54-MDA G)	E248.5	TSDF and Landfill	E250	Metals, PCBs, Flow
Pajarito (TA-54-MDA G)	E249	TSDF and Landfill	E250	Metals, PCBs, Flow
Pajarito above SR 4 (Downstream Facility Boundary)	E250	TSDF and Landfill		Metals, HE, Dioxins/Furans, PCBs, Flow
	Water Cany	on Watershed Gag	ge Stations	
Water Canyon above SR 502	E252	Watershed (ESR Support)		Metals, Flow
Cañon de Valle	E253	Watershed (ESR Support)		Metals, Flow
Cañon de Valle below MDA P	E256	TSDFs and SWMUs		Metals, HE, Flow
Cañon de Valle tributary at Burning Grounds	E257	TSDF	E261	Metals, HE, Flow
Water Canyon above S-Site Canyon	E260	SWMUs		Metals, HE, Flow
S-Site Canyon above Water Canyon	E261	SWMUs		Metals, HE, Flow

Canyon and Location	Current Monitoring Station	Sources Monitored	Proposed SWMU Monitoring Station	Order Requested Analytical Suite
Cañon de Valle above Water Canyon	E262	TSDFs and SWMUs		Metals, HE, Flow
Water Canyon below MDA AB	E262.5	SWMUs		Metals, HE, Flow
Water Canyon at SR 4	E263	Watershed (ESR Support)		Metals, HE, Flow
Indio Canyon at SR 4	E264	Watershed (ESR Support)		Metals, HE, Flow
Water below SR 4 (Downstream Facility Boundary)	E265	Watershed (ESR Support)		Metals, PCBs, Flow
Potrillo Canyon at Lower Slobovia	E266	SWMUs		Metals, HE, Flow
Potrillo above SR 4 (Downstream Facility Boundary)	E267	SWMUs		Metals, Flow
	Ancho Canyo	on Watershed Ga	ge Stations	
Ancho Canyon, north fork below SR 4 (TA-39)	E274	TSDFs and SWMUs		Metals, HE, PCBs, Flow
Ancho Canyon, below SR 4 (Downstream Facility Boundary)	E275	Watershed (ESR Support)		Metals, HE, PCBs, Flow
	Chaquehui Car	yon Watershed C	Gage Stations	
Chaquehui at TA-33 (South Site)	E338	SWMUs		Metals, Flow
Chaquehui tributary at TA-33 (Main Site)	E340	SWMUs		Metals, Flow

	Erosion						
PRS	Matrix Score	Site Description			HSWA	Canyon Name	Comments
00-010(a)	51.5	Surface disposal site	Yes	No	No	Pueblo Canyon	
00-011(d)	73.8	Mortar impact area	Yes	No	Yes	Rendija Canyon	
00-017	67.5	Waste lines	Yes	No	Yes	Los Alamos Canyon	
		Sludge bed Wastewater treatment plant					
00-018(a)	42.8	Pueblo (decommissioned)	Yes	No	Yes	Pueblo Canyon	
00-019	51.5	Wastewater treatment plant, Central	Yes	Yes	Yes	Graduation Canyon	
00-029(b)	42.8	Transformer	No	No	No	Pueblo Canyon	
		Septic system (near old Catholic Church					
00-030(g)	47.2	parking lot)	Yes	No	Yes	Acid Canyon	
00-030(i)	54.5	Septic system	Yes	Yes	No	Los Alamos Canyon	
01-001(c)	76.5	Septic tank 137	Yes	No	Yes	Los Alamos Canyon	
01-001(d)	74.5	Septic tank 138 (hillside)	Yes	Yes	Yes	Los Alamos Canyon	
01-001(f)	56.7	Septic tank 140 (hillside)	Yes	Yes	Yes	Los Alamos Canyon	
` '		Former Outfall TA-45 (PRS listed as TA-				,	
01-002	71.5	1) `	Yes	Yes	Yes	Acid Canyon	
01-003(a)	79.0	Landfill	Yes	No	Yes	Los Alamos Canyon	
01-003(d)	49.5	Surface disposal site (Can dump)	Yes	Yes	Yes	Los Alamos Canyon	
01-003(e)	83.0	Surface disposal site	Yes	Yes	Yes	Los Alamos Canyon	
01-006(b)	76.5	Drain lines and outfall	Yes	No	Yes	Los Alamos Canyon	
01-006(c)	76.5	Drain lines and outfall	Yes	No	Yes	Los Alamos Canyon	
01-006(d)	76.5	Drain lines and outfall	Yes	No	Yes	Los Alamos Canyon	
01-006(n)	76.5	Drain lines and outfall	Yes	No	Yes	Los Alamos Canyon	
02-003(a)	57.6	Reactor facility	Yes	No	No	Los Alamos Canyon	
· /		,				,	
02-003(e)	40.5	Holding tank (near reactor water boiler)	Yes	No	No	Los Alamos Canyon	
02-006(b)	51.8	Ind. or san. waste water treat.	Yes	Yes	Yes	Los Alamos Canyon	
02-007	44.8	Septic system	Yes	Yes	Yes	Los Alamos Canyon	
02-008(a)	55.8	Outfall	Yes	Yes	Yes	Los Alamos Canyon	
02-009(a)	57.0	Non-intentional release	Yes	Yes	Yes	Los Alamos Canyon	
02-009(b)	44.8	Non-intentional release	Yes	Yes	Yes	Los Alamos Canyon	
02-009(c)	51.3	Non-intentional release	Yes	Yes	Yes	Los Alamos Canyon	
02-011(a)	57.0	Storm drain and outfall	Yes	No	No	Los Alamos Canyon	
03-003(m)	46.3	Storage area (Capacitor banks)	Yes	No	No	Sandia Canyon	
03-009(a)	61.3	Surface disposal (soil fill)	No	No	Yes	Sandia Canyon	

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	Erosion						
PRS	Matrix Score	Site Description			HSWA	Canyon Name	Comments
03-009(c)	42.0	Surface disposal	No	No	No	Mortandad Canyon	Approved NFA
03-009(d)	42.8	Surface disposal site	Yes	Yes	Yes	Two Mile Canyon	
		vacuum repair shop (former location)					
03-010(a)	69.0	Systematic release site	Yes	Yes	Yes	Two Mile Canyon	
03-012(a)	43.3	One-time spill	Yes	No	No	Mortandad Canyon	Approved NFA
03-012(b)	65.0	Operational release and outfall	Yes	Yes	Yes	Sandia Canyon	
03-013(a)	45.0	Operational release	Yes	Yes	Yes	Sandia Canyon	
03-013(b)	45.0	Operational release	Yes	Yes	No	Sandia Canyon	
03-014(b2)	46.3	Outfall	Yes	No	No	Sandia Canyon	
03-014(c2)	72.0	Outfall	Yes	Yes	No	Sandia Canyon	
03-029	44.3	Landfill	Yes	Yes	Yes	Sandia Canyon	
03-045(b)	65.0	Ind. or san. waste water treatment	Yes	Yes	Yes	Sandia Canyon	
03-045(c)	57.7	Outfall	Yes	Yes	Yes	Sandia Canyon	
		Outfall (Ind. or san. waste water					
03-045(i)	46.5	treatment)	Yes	No	No	Sandia Canyon	Approved NFA
03-052(f)	45.0	Storm drainage	Yes	Yes	Yes	Sandia Canyon	
03-054(b)	65.8	Outfall	Yes	Yes	Yes	Two Mile Canyon	
03-054(e)	89.0	Outfall	Yes	Yes	Yes	Mortandad Canyon	
03-055(a)	61.0	Outfall	Yes	No	Yes	Two Mile Canyon	
03-055(b)	73.5	Outfall	Yes	Yes	No	Two Mile Canyon	
		Transformer storage area - PCB only					
03-056(c)	45.0	site	Yes	Yes	Yes	Sandia Canyon	
04-001	45.0	Firing Site	Yes	Yes	Yes	Ten Site Canyon	
04-002	51.5	Surface disposal	Yes	Yes	Yes	Ten Site Canyon	
04-003(a)	57.3	Outfall	Yes	No	Yes	Canada del Buey	
04-003(b)	51.5	Outfall	Yes	Yes	Yes	Ten Site Canyon	
04-004	57.3	Soil contamination beneath bldgs.	Yes	No	No	Canada del Buey	
05-001(a)	45.0	Former Firing Site	Yes	Yes	Yes	Mortandad Canyon	
05-001(b)	45.0	Former Firing Site	Yes	Yes	Yes	Mortandad Canyon	
05-001(c)	73.5	Former Firing Site	Yes	Yes	No	Mortandad Canyon	
05-004	49.7	Former Septic system	Yes	Yes	Yes	Mortandad Canyon	
05-005(a)	45.0	Former French drain	Yes	Yes	Yes	Mortandad Canyon	
05-005(b)	53.7	Outfall	Yes	Yes	Yes	Mortandad Canyon	
		Soil contamination beneath former					
05-006(b)	45.0	bldgs.	Yes	Yes	Yes	Mortandad Canyon	

	Erosion						
PRS	Matrix Score	Site Description	SWAT	BMPs	HSWA	Canyon Name	Comments
		Soil contamination beneath former					
05-006(c)	53.7	bldgs.	Yes	Yes	Yes	Mortandad Canyon	
		Soil contamination beneath former					
05-006(e)	45.0	bldgs.	Yes	Yes	Yes	Mortandad Canyon	
		Soil contamination beneath former					
05-006(h)	45.0	bldgs.	Yes	Yes	Yes	Mortandad Canyon	
06-007(g)	50.8	Building & surface disposal	Yes	Yes	Yes	Two Mile Canyon	
07-001(b)	55.5	Firing site (inactive)	Yes	Yes	Yes	Pajarito Canyon	
07-001(c)	46.7	Firing site (inactive)	No	No	Yes	Two Mile Canyon	
07-001(d)	55.5	Firing site (inactive)	Yes	Yes	Yes	Two Mile Canyon	
08-005	51.0	Container storage area	No	No	Yes	Pajarito Canyon	
08-006(a)	55.5	Material disposal area (MDA Q) Land fill	Yes	No	Yes	Pajarito Canyon	
08-009(d)	40.2	Ind. or san. wastewater treat.	No	No	Yes	Pajarito Canyon	
08-009(f)	42.0	Outfall	Yes	No	No	Pajarito Canyon	
09-004(g)	61.8	Settling tank	No	No	Yes	Pajarito Canyon	
09-004(o)	43.8	Settling tank	Yes	Yes	Yes	Pajarito Canyon	
09-005(a)	51.0	Septic system	No	No	Yes	Pajarito Canyon	
09-005(g)	51.0	Septic system	No	No	Yes	Pajarito Canyon	
09-009	58.8	Surface impoundment	Yes	Yes	Yes	Pajarito Canyon	
09-013	56.0	Material disposal area (MDA M)	Yes	Yes	Yes	Pajarito Canyon	
11-001(c)	56.2	Firing site (inactive)	Yes	Yes	Yes	Water Canyon	
11-003(a)	81.0	Mortar impact area	Yes	Yes	No	Water Canyon	
11-003(b)	55.5	Air Gun	Yes	No	No	Water Canyon	
11-004(a)	56.0	Drop tower - Firing Site (active)	Yes	Yes	Yes	Water Canyon	
11-004(b)	56.0	Drop tower - Firing Site (active)	Yes	Yes	Yes	Water Canyon	
11-004(c)	56.0	Drop tower - Firing Site (active)	Yes	Yes	Yes	Water Canyon	
11-004(d)	56.0	Drop tower - Firing Site (active)	Yes	Yes	Yes	Water Canyon	
11-004(e)	56.0	Drop tower - Firing Site (active)	Yes	Yes	Yes	Water Canyon	
11-004(f)	56.0	Drop tower - Firing Site (active)	Yes	Yes	No	Water Canyon	
11-005(c)	59.0	Ind. or san. wastewater treat.	No	No	Yes	Water Canyon	
11-006(b)	52.0	Tank and/or assoc. equip.	Yes	Yes	Yes	Water Canyon	
11-006(c)	68.8	Tank and/or assoc. equip.	Yes	Yes	Yes	Water Canyon	
11-006(d)	74.0	Tank and/or assoc. equip.	Yes	Yes	Yes	Water Canyon	

	Erosion	21. 2. 1.1					
PRS	Matrix Score	Site Description	SWAT	BMPs	HSWA	Canyon Name	Comments
		Firing site - active Open Burn/Open		١			
14-001(g)	53.3	Detonation	Yes	No	No	Canon de Valle	
14-002(a)	46.3	Firing site (inactive)	Yes	Yes	Yes	Canon de Valle	
14-002(d)	40.8	Firing site (inactive)	Yes	Yes	Yes	Canon de Valle	
14-002(e)	47.8	Firing site (inactive)	Yes	Yes	Yes	Canon de Valle	
14-005	57.3	Incinerator (active)	Yes	No	Yes	Canon de Valle	
14-006	47.1	Tank and/or assoc. equip.	Yes	Yes	Yes	Canon de Valle	
14-009	53.7	Surface disposal site	Yes	Yes	Yes	Canon de Valle	
14-010	51.5	Sump	Yes	Yes	Yes	Canon de Valle	
15-006(c)	64.5	Firing site R-44 (inactive)	Yes	Yes	Yes	Three Mile Canyon	
15-007(b)	40.2	Material disposal area (MDA Z) Landfill	Yes	Yes	Yes	Canon de Valle	
15-008(a)	72.0	Surface disposal E/F site	Yes	Yes	Yes	Potrillo Canyon	
15-008(b)	67.2	Surface disposal	Yes	Yes	Yes	Three Mile Canyon	
15-008(d)	69.0	Surface disposal (still active)	Yes	No	Yes	Canon de Valle	
15-008(f)	57.3	I-J Firing site mounds @ TA-36 - active	Yes	No	No	Potrillo Canyon	
15-009(c)	71.5	Septic tank	Yes	Yes	Yes	Three Mile Canyon	
15-009(e)	44.7	Septic system E/F site	Yes	Yes	Yes	Potrillo Canyon	
15-010(c)	51.5	Operational release (still active)	Yes	Yes	Yes	Water Canyon	
15-011(b)	87.0	Dry well	Yes	Yes	Yes	Canon de Valle	
15-011(c)	87.0	Sump	Yes	Yes	Yes	Canon de Valle	
15-014(g)	55.5	Ind. or san. wastewater treat.	Yes	No	No	Canon de Valle	
15-014(j)	61.3	Outfall	Yes	Yes	Yes	Canon de Valle	
16-001(a)	67.0	Tank	No	No	Yes	Canon de Valle	
16-001(b)	45.0	Dry wells	No	No	Yes	Canon de Valle	
16-001(c)	45.0	Tank	No	No	Yes	Canon de Valle	
16-001(d)	45.6	Dry well	No	No	Yes	Water Canyon	
16-003(a)	55.5	Sump	Yes	Yes	Yes	Water Canyon	
16-003(f)	56.0	Sump	Yes	Yes	Yes	Water Canyon	
16-006(c)	49.5	Septic system	Yes	Yes	Yes	Water Canyon	
16-006(g)	46.0	Septic tank	No	No	Yes	Water Canyon	
16-010(b)	55.5	Burn site - RCRA Unit	Yes	Yes	Yes	Canon de Valle	
16-010(c)	47.2	Burn site - RCRA Unit	Yes	Yes	Yes	Canon de Valle	
16-010(d)	50.3	Burn site - RCRA Unit	Yes	Yes	Yes	Canon de Valle	

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PRS	Erosion Matrix Score	Site Description	S/W A T	DMDe	HSWA	Canyon Name	Comments
16-010(g)	46.0	Waste water treatment facility	Yes	Yes	No	Canon de Valle	Approved NFA
16-016(c)	72.0	Landfill	Yes	Yes	Yes	Canon de Valle	Approved IVI A
16-016(d)	44.5	Surface disposal site	No	No	Yes	Canon de Valle	
16-016(g)	46.1	Surface disposal site	No	No	Yes	Water Canyon	
10 010(9)	70.1	Material disposal area MDA P RCRA	140	140	103	Water Garryon	
16-018	69.3	(closure)	Yes	Yes	Yes	Canon de Valle	
16-019	82.5	Material disposal area (MDA R)	Yes	Yes	Yes	Canon de Valle	
16-020	61.3	Silver recovery unit	Yes	Yes	Yes	Canon de Valle	
16-021(c)	73.3	Ind. or san. waste water treatment	Yes	Yes	Yes	Canon de Valle	
16-026(a)	73.5	Outfall	Yes	Yes	Yes	Water Canyon	
16-026(c2)	61.8	Outfall TA-16-462	Yes	Yes	Yes	Water Canyon	
16-026(h2)	61.0	Outfall TA-16-360	Yes	Yes	Yes	Water Canyon	
16-026(j)	40.2	Outfall TA-16-226	Yes	No	Yes	Canon de Valle	
16-026(v)	65.8	Outfall	Yes	Yes	Yes	Water Canyon	
16-026(z)	49.6	Outfall	Yes	No	Yes	Water Canyon	
16-028(a)	51.5	South Drainage	Yes	Yes	Yes	Water Canyon	
10 020(a)	01.0	Ind. or san. waste water treatment TA-	100	100	100	water darryon	
16-028(b)	83.0	16-370	Yes	Yes	Yes	Water Canyon	
16-028(e)	47.2	Ind. or san. waste water treatment	No	No	Yes	Water Canyon	
16-029(s)	45.5	Sump	No	No	Yes	Canon de Valle	
16-029(t)	41.5	Sump	No	No	Yes	Canon de Valle	
16-030(g)	71.0	Outfall	Yes	Yes	No	Water Canyon	
18-003(c)	62.3	Septic system	Yes	Yes	Yes	Three Mile Canyon	
18-010(d)	46.2	Outfall	Yes	No	No	Pajarito Canyon	
18-010(f)	62.3	Outfall	Yes	No	No	Three Mile Canyon	
18-012(a)	59.2	Outfall	Yes	No	Yes	Pajarito Canyon	
18-012(b)	46.6	Outfall	Yes	No	Yes	Pajarito Canyon	
20-002(a)	48.6	Firing site	No	No	Yes	Sandia Canyon	
20-002(c)	73.8	Firing site	Yes	No	Yes	Sandia Canyon	
20-003(c)	57.4	Firing site	Yes	No	No	Sandia Canyon	
21-011(c)	54.0	Tank and Sump	Yes	Yes	Yes	DP Canyon	
21-011(k)	72.0	Outfall	Yes	Yes	Yes	DP Canyon	
21-013(b)	67.0	Surface disposal site	Yes	Yes	Yes	Los Alamos Canyon	
21-013(g)	67.0	Surface disposal site	Yes	Yes	No	BV Canyon	
21-016(a)	54.0	Material disposal area (MDA T)	Yes	Yes	Yes	DP Canyon	

PRS	Erosion Matrix Score	Site Description	SWAT	BMPs	HSWA	Canyon Name	Comments
21-016(b)	54.0	Material disposal area (MDA T)	Yes	Yes	Yes	DP Canyon	
21-016(c)	54.0	Material disposal area (MDA T)	Yes	Yes	Yes	DP Canyon	
21-024(e)	56.0	Septic system	Yes	Yes	Yes	Los Alamos Canyon	
21-024(h)	54.0	Septic system	Yes	Yes	Yes	DP Canyon	
21-024(i)	53.7	Septic system	Yes	Yes	Yes	Los Alamos Canyon	
21-027(a)	52.0	Ind. or san. waste water treat.	Yes	No	Yes	Los Alamos Canyon	
21-027(b)	46.8	Outfalls	Yes	No	No	Los Alamos Canyon	Approved NFA
21-027(d)	45.0	Drain line	Yes	No	Yes	Los Alamos Canyon	• •
21-029	56.6	Soil contamination area	Yes	No	Yes	DP Canyon	
22-014(b)	56.0	Sump	Yes	No	Yes	Two Mile Canyon	
22-015(c)	51.5	Outfall	Yes	Yes	Yes	Pajarito Canyon	
26-001	65.0	Surface disposal site	Yes	Yes	Yes	Los Alamos Canyon	
32-004	42.0	Drain line and outfall - new AOC	Yes	Yes	No	Los Alamos Canyon	
33-004(d)	56.0	Septic system	No	No	Yes	Chaquehui Canyon	
33-004(h)	56.6	Outfall	Yes	No	Yes	Chaquehui Canyon	
33-004(j)	85.0	Outfall	Yes	Yes	Yes	Chaquehui Canyon	
33-005(a)	49.0	Septic system	No	No	Yes	Chaquehui Canyon	
33-005(b)	49.0	Septic system	No	No	Yes	Chaquehui Canyon	
33-005(c)	49.0	Septic system	No	No	Yes	Chaquehui Canyon	
33-006(a)	56.0	Firing site (inactive)	Yes	Yes	Yes	Chaquehui Canyon	
33-007(b)	59.3	Firing range (inactive)	Yes	Yes	Yes	Chaquehui Canyon	
33-008(c)	56.0	landfill	Yes	Yes	No	Chaquehui Canyon	
33-010(a)	53.2	Surface disposal	Yes	Yes	Yes	Chaquehui Canyon	
33-010(b)	45.0	Surface disposal	Yes	Yes	Yes	Rio Grande Valley	
33-010(c)	60.5	Surface disposal	Yes	Yes	Yes	Chaquehui Canyon	
33-010(d)	45.0	Surface disposal	Yes	Yes	Yes	Ancho Canyon	
33-010(e)	47.2	Surface disposal (Area 6)	Yes	No	No	Chaquehui Canyon	
33-010(f)	47.2	Surface disposal	No	No	Yes	Chaquehui Canyon	
33-010(g)	47.8	Surface disposal	No	No	Yes	Chaquehui Canyon	
33-011(b)	49.0	Storage area	Yes	Yes	No	Chaquehui Canyon	
33-015	50.8	Incinerator	Yes	No	Yes	Chaquehui Canyon	
33-016	54.5	Sump	Yes	No	Yes	Chaquehui Canyon	
35-003(d)	59.0	Waste water treatment facility	Yes	Yes	Yes	Pratt Canyon	
35-003(h)	44.2	Waste water treatment facility	No	No	Yes	Mortandad Canyon	
35-003(I)	59.0	Waste water treatment facility	Yes	Yes	Yes	Pratt Canyon	

	Erosion						
PRS	Matrix Score	Site Description		BMPs	HSWA	Canyon Name	Comments
35-003(p)	50.8	Waste water treatment facility	Yes	Yes	Yes	Pratt Canyon	
35-003(q)	59.0	Waste water treatment facility	Yes	Yes	Yes	Pratt Canyon	
35-003(r)	87.0	Outfall	Yes	Yes	No	Ten Site Canyon	
35-004(h)	50.8	Container storage area	Yes	Yes	Yes	Pratt Canyon	
		Surface impoundment (closure) Bldg 85					
35-005(a)	45.6	duplicate of 35-006	Yes	No	No	Mortandad Canyon	
		Surface impoundment (closure) Bldg					
35-006	45.6	85 duplicate of 35-005(a)	Yes	No	No	Mortandad Canyon	Approved NFA
35-008	61.0	Surface disposal and landfil	Yes	Yes	Yes	Mortandad Canyon	
35-014(e)	61.0	Oil Spill	Yes	Yes	Yes	Mortandad Canyon	
35-014(e2)	45.6	Oil Spill	Yes	No	No	Mortandad Canyon	
35-016(a)	92.0	Drains and outfalls	Yes	Yes	Yes	Ten Site Canyon	
35-016(b)	96.0	Outfall	Yes	Yes	No	Ten Site Canyon	
35-016(c)	47.2	Outfall	Yes	Yes	Yes	Ten Site Canyon	
35-016(d)	76.5	Outfall	Yes	Yes	Yes	Ten Site Canyon	
35-016(e)	72.0	Outfall	Yes	Yes	No	Mortandad Canyon	
35-016(f)	76.5	Storm drain	Yes	Yes	No	Mortandad Canyon	
35-016(g)	68.3	Outfall	Yes	Yes	No	Mortandad Canyon	
35-016(h)	76.5	Storm drain	Yes	Yes	No	Mortandad Canyon	
35-016(i)	61.0	Drains and outfalls	Yes	Yes	Yes	Mortandad Canyon	
35-016(k)	53.0	Drains and outfalls	Yes	No	Yes	Pratt Canyon	
35-016(I)	64.0	Storm drain	Yes	Yes	No	Pratt Canyon	
35-016(m)	72.0	Drains and outfalls	Yes	Yes	Yes	Pratt Canyon	
35-016(n)	42.8	Storm drain	Yes	No	No	Ten Site Canyon	
35-016(o)	60.3	Drains and outfalls	Yes	Yes	Yes	Mortandad Canyon	
35-016(p)	60.3	Outfall	Yes	No	Yes	Mortandad Canyon	
35-016(q)	92.0	Drains and outfalls	Yes	Yes	Yes	Ten Site Canyon	
36-001	45.7	Material disposal area (MDA AA)	Yes	Yes	Yes	Potrillo Canyon	
36-003(b)	50.2	Septic system, I-J site	Yes	Yes	Yes	Potrillo Canyon	
36-004(a)	48.5	Firing site - active	Yes	Yes	No	Potrillo Canyon	
36-004(b)	57.3	Firing site - active	Yes	Yes	No	Fence Canyon	
36-004(c)	68.3	Firing site - active (Open Detonation)	Yes	Yes	No	Potrillo Canyon	
36-004(e)	57.3	I-J Firing site - active	Yes	Yes	No	Potrillo Canyon	
36-005	45.4	Surface disposal site	Yes	No	Yes	Fence Canyon	

	Erosion						
PRS	Matrix Score	Site Description	SWAT	BMPs	HSWA	Canyon Name	Comments
36-006	78.0	Surface disposal site	Yes	Yes	Yes	Potrillo Canyon	
36-008	52.0	Surface Disposal Area	Yes	Yes	Yes	ThreeMile Canyon	
39-004(a)	74.0	Firing site - active (Open Detonation)	Yes	Yes	Yes	Ancho Canyon North	
39-004(b)	74.5	Firing site - active	Yes	Yes	Yes	Ancho Canyon	
		Firing site - active (Open Detonation) -				-	
39-004(c)	74.5	RCRA Unit	Yes	Yes	Yes	Ancho Canyon North	
		Firing site - active(Open Detonation) -					
39-004(d)	74.0	RCRA Unit	Yes	Yes	Yes	Ancho Canyon North	
39-004(e)	78.5	Firing site - active	Yes	Yes	Yes	Ancho Canyon North	
, ,		Scrap Burn Site - Completed RCRA				•	
40-003(a)	46.3	Closure	No	No	Yes	Pajarito Canyon	
40-003(b)	46.3	Burning area/open detonation (closure)	No	No	No	Pajarito Canyon	
40-006(a)	56.2	Firing site (active)	Yes	Yes	Yes	Pajarito Canyon	
40-006(b)	62.0	Firing site (active)	Yes	Yes	Yes	Pajarito Canyon	
40-006(c)	62.0	Firing site (active)	Yes	Yes	Yes	Pajarito Canyon	
40-009	54.5	Landfill	Yes	Yes	Yes	Pajarito Canyon	
40-010	40.2	Surface disposal site	Yes	Yes	Yes	Pajarito Canyon	
42-001(a)	65.8	incinerator (former location)	Yes	Yes	Yes	Mortandad Canyon	
42-001(b)	65.8	ash storage tank (former location	Yes	Yes	Yes	Mortandad Canyon	
42-001(c)	65.8	ash storage tank (former location	Yes	Yes	Yes	Mortandad Canyon	
42-002(a)	65.8	Decontam. facility (former location)	Yes	Yes	No	Mortandad Canyon	
		Decontam. facilitydriveway (former					
42-002(b)	65.8	location)	Yes	Yes	Yes	Mortandad Canyon	
42-004	93.5	Canyon disposal	Yes	Yes	No	Mortandad Canyon	
45-001	50.3	Waste water treatment facility	No	No	Yes	Pueblo Canyon	
45-004	50.2	Sanitary Sewer Outfall	Yes	No	Yes	Acid Canyon	
46-002	52.8	Surface impoundment	Yes	Yes	Yes	SWSC Canyon	
46-003(a)	44.7	Septic system	No	No	Yes	Canada Del Buey	
46-003(b)	55.5	Septic system	No	No	Yes	Canada Del Buey	
46-003(e)	50.8	Septic system	No	No	Yes	Canada Del Buey	
46-004(a)	49.0	Waste line	Yes	No	Yes	Canada del Buey	
46-004(a2)	49.0	Outfall	Yes	Yes	Yes	Canada del Buey	

PRS	Erosion Matrix Score	Site Description	SWAT	BMPs	HSWA	Canyon Name	Comments
46-004(c2)	49.0	Outfall	Yes	Yes	Yes	Canada del Buey	
46-004(d2)	56.0	Stack emissions	Yes	Yes	Yes	Canada del Buey	
46-004(g)	56.0	Outfall/Stack Emissions	Yes	Yes	Yes	Canada Del Buey	
46-004(h)	56.0	Outfall/Stack Emissions	Yes	Yes	Yes	Canada Del Buey	
46-004(i)	49.0	Outfall	Yes	No	No	Canada del Buey	
46-004(j)	49.0	Outfall	Yes	No	No	Canada del Buey	
46-004(m)	49.0	Outfall	Yes	Yes	Yes	Canada del Buey	
46-004(o)	49.0	Outfall	Yes	No	No	Canada del Buey	
46-004(q)	45.0	Outfall	Yes	Yes	Yes	Canada del Buey	
46-004(s)	49.0	Outfall/	Yes	Yes	Yes	Canada del Buey	
46-004(t)	68.3	Outfall	Yes	Yes	Yes	SWSC Canyon	
46-004(u)	45.0	Outfall	Yes	Yes	Yes	Canada del Buey	
46-004(v)	45.0	Outfall	Yes	Yes	Yes	Canada del Buey	
46-004(x)	49.0	Outfall	Yes	Yes	Yes	Canada del Buey	
46-004(y)	49.0	Outfall	Yes	Yes	Yes	Canada del Buey	
46-004(z)	49.0	Outfall	Yes	Yes	Yes	Canada del Buey	
46-005	52.8	Surface impoundment	Yes	No	Yes	SWSC Canyon	
46-006(d)	49.0	Operational release	Yes	Yes	Yes	Canada del Buey	
46-008(g)	68.3	Storage area	Yes	Yes	Yes	SWSC Canyon	
46-009(a)	57.0	Surface disposal	Yes	Yes	Yes	SWSC Canyon	
46-009(b)	70.0	Surface disposal	Yes	Yes	Yes	SWSC Canyon	
48-003	40.7	Septic system	Yes	Yes	Yes	Mortandad Canyon	
48-007(a)	55.8	Drains and outfalls	Yes	Yes	Yes	Mortandad Canyon	
48-007(b)	49.3	Drains and outfalls	Yes	Yes	Yes	Mortandad Canyon	
48-007(c)	69.5	Drains and outfalls	Yes	Yes	Yes	Mortandad Canyon	
48-007(d)	55.8	Drains and outfalls	Yes	Yes	Yes	Mortandad Canyon	
48-007(f)	76.5	Drains and outfalls	Yes	Yes	Yes	Mortandad Canyon	
48-010	80.3	Surface Impoundment	Yes	Yes	Yes	Mortandad Canyon	
		Material disposal area (MDA AB)				-	
49-001(a)	54.8	(experimental shafts)	No	No	Yes	Water Canyon	
` ,		Material disposal area (MDA AB)				•	
49-001(g)	59.2	(miscellaneous)	Yes	Yes	Yes	Water Canyon	
49-005(a)	73.5	Landfill (east of Area 10)	No	No	Yes	Water Canyon	
50-006(a)	77.8	Operational release	Yes	Yes	Yes	Ten Site Canyon	
50-006(d)	89.0	Effluent discharge	Yes	No	Yes	Mortandad Canyon	

	Erosion						
PRS	Matrix Score	Site Description		BMPs	HSWA	Canyon Name	Comments
50-009	54.8	Material disposal area (MDA C)	Yes	Yes	Yes	Ten Site Canyon	
		Disposal lagoon inactive (NE, NW					
53-002(a)	47.8	impoundments)	Yes	Yes	Yes	Los Alamos Canyon	
53-008	61.8	Storage area, Boneyard	Yes	No	No	Los Alamos Canyon	
53-012(a)	62.0	Outfall	Yes	No	No	Los Alamos Canyon	
53-012(b)	55.0	Outfall	Yes	No	No	Los Alamos Canyon	
53-012(c)	62.0	Outfall	Yes	No	No	Los Alamos Canyon	
53-012(d)	49.3	Outfall	Yes	No	No	Sandia Canyon	
53-014	80.5	Soil Contamination-Lead storage site II	Yes	Yes	No	Sandia Canyon	
54-004	45.6	Material disposal area (MDA H) (except sh. 9)	Yes	No	Yes	Pajarito Canyon	
54-007(c)	56.0	Septic system	Yes	No	Yes	Canada del Buey	Approved NFA
54-014(d)	66.5	Material disposal area (MDA G) Storage trenches A, B, C, D Material disposal area (MDA G)	No	No	Yes	Pajarito Canyon	
54-017	62.0	Disposal pits 16,22 (active before 11/19/80)	No	No	Yes	Canada del Buey	
54-018	52.6	Material disposal area (MDA G)Disposal pits 27-33,35-37 (active after 11/19/80)	No	No	Yes	Canada del Buey	
54-020	53.7	Material disposal area (MDA G) Disposal shafts (active after 11/19/80)	No	No	Yes	Canada del Buey	
55-011(a)	46.3	Storm drain	Yes	No	No	Mortandad Canyon	
55-011(b)	56.6	Storm drain	Yes	Yes	No	Mortandad Canyon	
55-011(c)	50.3	Storm drain	Yes	Yes	No	Mortandad Canyon	
55-011(e)	56.6	Storm drain	Yes	Yes	No	Mortandad Canyon	
60-007(b)	43.8	Systematic or intent. prod. release	No	No	Yes	Sandia Canyon	
		Transformer site - systematic leak -					
61-007	43.8	PCB only site	No	No	Yes	Sandia Canyon	
72-001	84.3	Firing range	Yes	Yes	No	Sandia Canyon	
73-001(a)	85.5	Landfill	Yes	Yes	Yes	Pueblo Canyon	
73-002	56.0	Incinerator surface disposal	Yes	Yes	Yes	Pueblo Canyon	

TABLE - 2 Summary of SOP 2.01 Part B Scores >40

	Erosion						
PRS	Matrix Score	Site Description	SWAT	BMPs	HSWA	Canyon Name	Comments
73-004(d)	46.7	Septic tank (land fill)	Yes	Yes	Yes	Pueblo Canyon	
73-006	56.0	Airport building outfalls	Yes	Yes	Yes	Pueblo Canyon	
73-007	56.0	septic tank and drainlines	Yes	No	No	DP Canyon	
C-00-041	42.8	Asphalt and tar remnant site	Yes	Yes	No	Rendija Canyon	
C-15-004	43.9	Transformers	Yes	No	No	Potrillo Canyon	
C-15-007	51.5	Non-intentional release	Yes	Yes	No	Canon de Valle	
C-33-001	56.0	Transformer	Yes	Yes	No	Chaquehui Canyon	
C-33-003	59.0	Soil contamination area	Yes	No	No	Chaquehui Canyon	
C-35-004	73.5	Operational release	Yes	Yes	No	Ten Site Canyon	
C-35-005	73.5	Operational release	Yes	Yes	No	Ten Site Canyon	
C-36-001	57.3	Containment vessel	Yes	No	No	Potrillo Canyon	
C-36-003	52.0	Storm drainages	Yes	Yes	Yes	Three Mile Canyon	
C-41-004	52.8	Storm drains	Yes	No	No	Los Alamos Canyon	
C-43-001	45.4	Outfall	Yes	No	No	Los Alamos Canyon	
C-46-001	68.3	One-time spill	Yes	No	No	SWSC Canyon	
		excavation (unlined septic					
C-73-005(a)	47.2	tank/outhouse trench)	Yes	No	No	DP Canyon	
, ,		excavation (unlined septic					
C-73-005(b)	47.2	tank/outhouse trench)	Yes	No	No	DP Canyon	

317 Total