



Kieling, John, NMENV

From: Rael, George [grael@doeal.gov]
Sent: Friday, November 12, 2010 7:54 AM
To: Bearzi, James, NMENV; Cobrain, Dave, NMENV; Kieling, John, NMENV
Cc: George, Victoria A; mjgraham@lanl.gov; Powers, Kenneth W (HQ); Snyder, Roger; Smith, Kevin W.; Mark Turnbough; Marcinowski, Frank (HQ)
Subject: FW: Revised Risk Proposal to NMED
Attachments: Risk Proposal to NMED - 11 Nov 10.docx

James:

I am forwarding on behalf of Kevin. Have a nice weekend.

GR

James:

We appreciate the opportunity to work with you and your staff on the details of the Risk Based Approach to clean up and associated LANL environmental stewardship activities we proposed to you in our recent meeting. Since then our teams have had some detailed and pretty far reaching discussions that has now enabled us to make this revised offer of scope adjustment and re-sequencing. Attached is our revised proposal for your consideration.

As you know we are well into our federal Fiscal Year and currently operating under a continuing resolution. Therefore, it is important that we hear back from you within the next two weeks to ensure we can complete our planning for FY11 to revise and redirect our activities. If you have any questions, please don't hesitate to contact George at (505) 606-0397.

Regards,
Kevin

Kevin W. Smith
Manager
Los Alamos Site Office

(505) 667-5105



**Proposal – Revision A
LANL Risk Reduction**

November 10, 2010

Introduction/Executive Summary

This proposal is being made as a risk based approach to completing the Order on Consent (Consent Order). The basic concept of the proposal is to realign and reschedule lower risk environmental investigation and remediation work scope to allow for accelerated execution of transuranic waste disposition over the next two years. In addition to significant risk reduction through disposition of existing Material-at-Risk, this acceleration is essential for closure of Material Disposal Areas (MDA) G, H, and L in Technical Area 54 (TA-54) by 2015.

The environmental work elements that LANL is proposing to be rescheduled are a group of Phase II site investigations that have FY11 and FY12 deliverables currently specified in the Consent Order. The sites associated with these investigations either have data that have not exceeded a regulatory screening level or are in locations that have canyon watershed investigations continuing in FY11 and FY12. Additionally, LANL is proposing to reschedule a limited number of Phase I investigations that have FY11 deliverables currently specified in the Consent Order. These are located in the upper portions of watersheds and have limited to no public access. Further, the canyon watershed investigations for these areas are completed (Pajarito) or are nearing completion (Water/Cannon de Valle). (Phase I investigations for aggregate areas that are

near the downgradient boundary of the Laboratory would remain on their current schedule.)

LANL also proposes that this approach and commitment of TRU shipments of legacy waste be an annual recurring process. That is, prior to the federal FY13, the parties will meet to agree upon commitments for FY13.

LANL believes this risk-based approach to completion of the Consent Order will more effectively protect the public and the environment.

Proposal

The proposal has four primary elements as described below:

1. Continue the compliance, higher risk, and protective work elements under the current schedule defined in the Consent Order.

Compliance

- Stipulated Penalty Milestones
- CMEs and CMIs
 - MDA-AB
 - MDA-C
 - MDA-G
 - MDA-H
 - MDA-L
 - MDA-T
- NPDES Individual Permit – Implementation of the Individual Permit at each Solid Waste Management Unit will ensure actions are taken or controls are established to mitigate migration of hazardous material off the unit. It is expected that this implementation will provide confidence in issuance of Certificates of Closure.

Higher Risk

- Sandia Canyon Chromium Investigation
- Properties not owned by DOE
- Waste line and tank remediations at TA-21

Protective

- Canyon investigations
- Site-wide ground water and surface water monitoring

2. Re-sequence the remaining Consent Order work to enable more efficient execution. This element of the proposal has three primary objectives.

a. Move lower risk scope elements from FY11 and FY12 into FY13-15.

This scope of work is shown by aggregate area in the table below. By shifting this lower risk work, more high risk waste disposition may occur in the FY11-12 timeframe. Protective measures such as watershed canyon investigations and an intensive groundwater and surface water monitoring program, provide a means to shift the scope to the out-years. (See Attachment 1)

b. Compress the investigation schedule (and reduce cost) by “streamlining” investigations. This includes the use of sound field decisions – including step out (additional incremental) samples as appropriate to delineate nature and extent. Additionally, where appropriate optimizing will also make use of more efficient administrative documentation approaches such as letter work plans.

The candidate aggregate areas for this proposal are identified below. Please note that only 2 aggregate areas have specific dates identified for Investigation Reports (IR) that would require any adjustment to the administrative record. All other areas have Investigative Work Plans (IWP) to be developed where future IR dates would be identified. This proposal requests any new dates being developed for these aggregate areas to be established such that start dates would be beyond September 30, 2012.

Area	# of SWMUs awaiting investigation	# of SWMUs awaiting Certificate of Completion	Watershed	TAs	Current Schedule Due Date
FY11 – Phase I					
Cañon de Valle Aggregate Area TA-14	13	0	Water/Cañon de Valle	14	1/15/12 ¹
Chaquehui Canyon Aggregate Area	43	0	Chaquehui	33	TBD (revised IWP due 11/1/10)
Cañon de Valle Aggregate Area TA-15	16	0 ¹	Water/Cañon de Valle	15	6/15/12
Twomile Canyon Aggregate Area	63		Pajarito	3, 6, 22, 40, 69	8/15/12
Cañon de Valle Aggregate Area TA-16	98	0	Water/Cañon de Valle	16	12/15/12 ¹
Upper Water Canyon Aggregate Area	127	0	Water/Cañon de Valle	11, 16	TBD (IWP submitted 8/31/10)
Starmer/Upper Pajarito Canyon Aggregate Area	75	0	Pajarito	8, 9, 22, 40	TBD (IWP submitted 9/30/10)
FY11 – Phase II					
Upper Mortandad Canyon Aggregate Area	29	0	Mortandad	3, 48, 50, 55, 60	TBD (Phase II IWP due 12/6/10)
Upper Sandia Canyon Aggregate Area	39	25	Sandia	3, 60, 61	TBD (Revised Phase I IR submitted 10/1/10)

¹ This schedule for the Cañon de Valle Aggregate Area Investigation Reports is based on the March 9, 2007 meeting with NMED, as documented in the March 16, 2007 LANL *Response to the Approval with Modifications for the Investigation Work Plan for Cañon de Valle Aggregate Area* (EP2007-0155).

Area	# of SWMUs awaiting investigation	# of SWMUs awaiting Certificate of Completion	Watershed	TAs	Current Schedule Due Date
Lower Sandia Canyon Aggregate Area	19	0	Sandia	53, 72	TBD (Phase I IR due 3/31/11)
North Ancho Canyon Aggregate Area	6	0	Ancho	39	TBD (Phase II IWP due 12/31/10)
Threemile Canyon Aggregate Area	26	0	Pajarito	12, 14, 15, 36	TBD (Phase I IR submitted 6/30/10)
S-Site Aggregate Area	61	7	Water/Cañon de Valle	11, 16	TBD (Phase I IR submitted 8/31/10)
FY12 – Phase I					
Lower Water and Indio Canyons Aggregate Area	5	0	Water/Cañon de Valle	15	TBD (Phase I IWP due 9/30/12)
South Ancho Canyon Aggregate Area	11	0	Ancho	33	TBD (Phase I IWP due 3/31/13)
FY12 – Phase II					
Upper Cañada del Buey Aggregate Area	48	6	Mortandad	4, 46, 52	TBD (Phase I IR due 11/30/10)

3. Continue to emphasize the disposition of TA-54 legacy TRU waste at LANL. For purposes of this proposal, “disposed” is defined as certified for shipment to WIPP as TRU waste or reclassified TRU waste to low level waste or mixed low level waste. The proposed milestones would be to 500 cubic meters legacy TRU disposed in FY11 and 600 cubic meters of legacy TRU disposed in FY12. New Consent Order scope will allow offsets to these disposition milestones in the year that scope is required to be executed.

4. LANL also proposes that this approach and commitment of TRU shipments of legacy waste be an annual recurring process. That is, prior to the beginning of each federal fiscal year after FY12, the parties will meet to agree upon commitments for a volume of legacy TRU waste to be disposed within the upcoming fiscal year. This volume will be proposed to the NMED as an annual pacing milestone for Legacy TRU Waste disposed.

Assumptions

1. An MDA-B Extension Request is approved by NMED that shifts the December 2010 completion date to an appropriate time in CY2011
2. An MDA-A Extension Request is approved by NMED that shifts the 2012 completion by 1.5 years to 2013.
3. NMED concurrence on the deviation from the Potrillo / Fence Work Plan that allows for additional characterization of MDA AA. This deviation de-mobilizes the excavation / remediation work and provides a path forward for additional necessary characterization work. A letter documenting this deviation will be submitted to NMED in the very near future.
4. The MDA-L CME is used as a template for future CMEs developed by LANL. This will provide consistency in meeting NMED expectations.
5. RCRA Permit is approved allowing regulated storage in Dome 375.
6. No fines or penalties are incurred due to differing requirements for hazardous code labeling between LANL RCRA permit storage requirements and WIPP RCRA disposal requirements.
7. No additional scope is directed by NMED during FY11 and FY12 without equivalent off-sets.
8. No emergent scope associated with the Buckman water project is realized.

Benefits of the Proposal

1. Accelerated Risk Reduction at TA-54.
2. Significant progress in waste disposition needed for TA-54 closure will be realized.

3. Provides path for compliance in FY12
4. Data obtained under the EPA Individual Permit will be available to integrate into Certificates of Completion for Solid Waste Management Units (SWMU).
5. Maintains visible progress in LANL cleanup.

Attachment 1

Rationale for Delaying Phase I Investigations

The potential for adverse environmental impacts from SWMUs and AOCs is assessed through several means including aggregate area investigations under the Consent Order, Canyons investigations under the Consent Order, and stormwater monitoring under the NPDES individual permit and at watershed gages. Aggregate area investigations are directed toward characterizing the nature and extent of contaminant sources at individual sites and assessing whether these sites pose an unacceptable risk to human health and the environment. Canyons investigations are directed toward assessing cumulative impacts due to releases from all sites in a watershed and evaluating the potential for contaminant migration off the Laboratory. Sediment data are collected as part of the Canyons Investigations. These data are very useful at helping determine whether SWMUs (particularly those with outfall/mesa slope aspects) have contamination or release histories that manifest in the canyon floor. Applicable surface water sample locations, alluvial wells, springs, and deeper groundwater monitoring are all in place and part of ongoing monitoring under the Interim Facility-wide Groundwater Monitoring Plan. Monitoring under the Individual Permit is directed toward characterizing potential contaminant migration from individual sites. Watershed gages also monitor potential migration within the watershed.

Delaying Phase I aggregate area investigations while maintaining Canyons investigations and storm water monitoring would result in relatively little increase in current risk and the ability to actively monitor for changes. The Consent Order schedule for completing

aggregate area investigations was prioritized based on completing those aggregate areas off Laboratory property first, as these have the highest potential for exposure of the public. These aggregate area investigations have either been completed, or are being completed, and would not be affected by the delay. Characterization of source areas on Laboratory property is less critical as exposure is limited to Laboratory workers and is currently controlled through work control processes. The Canyons investigations and storm water monitoring would also still provide the information needed to assess potential impacts off Laboratory property and to direct necessary corrective actions.

The reports that present the results of the Canyons sediment investigations data are listed below. The bullets list the aggregate areas that are supported by the Canyons data.

Pajarito Canyon Investigation Report, Rev. 1 - August 2009 (NMED-approved)

- Twomile Canyon Aggregate Area
- Starmer/Upper Pajarito Canyon Aggregate Area

Water/Canon de Valle Investigation Report - August 2011

- Canon de Valle Aggregate, TA-14
- Canon de Valle Aggregate, TA-15
- Canon de Valle Aggregate, TA-16
- Upper Water Canyon Aggregate Area
- Lower Water and Indio Canyons Aggregate Area

(Note that for the Canon de Valle Aggregates, significant sediment investigation work has already been presented in reports related to the TA-16, 260 outfall.

Known groundwater contaminant issues associated with the 260 outfall area are being actively monitored and are part of CMEs currently underway.)

Ancho and Chaquehui Canyons Investigation Report - February 2011

- Chaquehui Canyon Aggregate Area
- South Ancho Canyon Aggregate Area

Corrective Actions						Gantt Chart																				
Activity ID	Activity Name	St. Project Start	EC. Project Finish	Start	Finish	FY2011			FY2012			FY2013			FY2014			FY2015			FY2016			FY2017		
						FG1	FG2	FG3	FG4	FG1	FG2	FG3	FG4	FG1	FG2	FG3	FG4	FG1	FG2	FG3	FG4	FG1	FG2	FG3	FG4	FG1
WATERSHED 10 MORTADAD CANYONS																										
1J	UPPER MORT CYN AGG AREA PHASE II INVESTIGATION	01-Mar-11	29-Feb-14	01-Oct-12	18-Dec-14																					
BU	LOWER MORTCEDRO CYN AGG AREA PHASE II INVESTIGATION	01-Aug-12	28-Feb-14	01-Oct-13	18-Dec-14																					
1P	UPPER MORTCDB AGG AREA PHASE II INVESTIGATION	01-Mar-12	31-Oct-13	01-Jul-13	21-Oct-14																					
WATERSHED 30 WATER VALLE CANYONS																										
WW	CAÑON DE VALLE AGG AREA TA-14 FIELDWORK	01-Feb-11	30-Nov-11	01-Oct-12	08-Aug-13																					
WW	CAÑON DE VALLE AGG AREA TA-14 IR & PHASE II IWP	09-Jun-11	30-Apr-13	21-Feb-13	14-Jan-15																					
WX	CAÑON DE VALLE AGG AREA TA-14 PHASE II INVESTIGATION	01-May-13	13-Feb-15	15-Jan-15	13-Jun-16																					
--	CAÑON DE VALLE AGG AREA TA-14 INVESTIGATION (Proposed)	01-Oct-12	26-Jun-14	01-Oct-12	26-Jun-14																					
WY	CAÑON DE VALLE AGG AREA TA-15 FIELDWORK, IR & PHASE II IWP	15-Jun-11	30-Oct-13	01-Oct-12	04-Mar-15																					
XT	CAÑON DE VALLE AGG AREA TA-15 PHASE II INVESTIGATION	01-Nov-13	31-Jul-15	06-Mar-15	18-Jul-16																					
--	CAÑON DE VALLE AGG AREA TA-15 INVESTIGATION (Proposed)	02-Jan-13	12-Nov-14	02-Jan-13	12-Nov-14																					
WN	CAÑON DE VALLE AGG AREA TA-16 FIELDWORK, IR & PHASE II IWP	14-Nov-11	30-Apr-14	01-Oct-12	23-Mar-15																					
UV	CAÑON DE VALLE AGG AREA TA-16 PHASE II INVESTIGATION	01-May-14	05-Jan-16	24-Mar-15	13-Jul-16																					
--	CAÑON DE VALLE AGG AREA TA-16 INVESTIGATION (Proposed)	01-Apr-13	23-Mar-15	01-Apr-13	23-Mar-15																					
VC	S-SITE AGG AREA PHASE II INVESTIGATION	03-Jan-12	30-Sep-13	01-Oct-13	17-Mar-15																					
VG	UPPER WATER CYN AGG AREA FIELD WORK	03-Oct-11	31-Oct-12	01-Oct-12	31-Oct-13																					
VH	UPPER WATER CYN AGG AREA IR & PHASE II IWP	26-Mar-12	30-Apr-14	26-Mar-13	30-Apr-15																					
VF	UPPER WATER CYN AGG AREA PHASE II INVESTIGATION	01-May-14	10-Feb-16	01-May-15	27-Sep-16																					
--	UPPER WATER CYN AGG AREA INVESTIGATION (Proposed)	02-Jan-13	23-Dec-14	02-Jan-13	23-Dec-14																					
VJ	LOWER WATER CYN AGG AREA INVESTIGATION WORKPLAN	01-Oct-12	02-Jan-13	01-Oct-12	02-Jan-13																					
VN	LOWER WATER CYN AGG AREA FIELDWORK	20-May-13	30-Apr-14	20-May-13	30-Apr-14																					
VW	LOWER WATER CYN AGG AREA IR & PHASE II IWP	08-Oct-13	30-Sep-15	08-Oct-13	30-Sep-15																					
6L	LOWER WATER CYN AGG AREA PHASE II INVESTIGATION	01-Oct-15	11-Jul-17	01-Oct-15	11-Jul-17																					
WATERSHED 40 SANDIA CANYONS																										
1Z	LOWER SANDIA CYN AGG AREA PHASE II INVESTIGATION	01-Aug-12	31-Mar-14	01-Apr-14	14-Jul-15																					
2R	UPPER SANDIA CYN AGG AREA PHASE II INVESTIGATION	03-Oct-11	28-Jun-13	01-Apr-13	15-Aug-14																					
WATERSHED 50 PAJARITO CANYONS																										
9G	THREEMILE CYN AGG AREA PHASE II INVESTIGATION	01-Nov-11	31-Jul-13	01-Apr-13	15-Aug-14																					
7Y	TWOMILE CYN AGG AREA FIELDWORK	18-Jul-11	16-Jul-12	01-Oct-12	01-Oct-13																					
7R	TWOMILE CYN AGG AREA IR & PHASE II IWP	28-Nov-11	16-Dec-13	21-Feb-13	16-Mar-15																					
8A	TWOMILE CYN AGG AREA PHASE II INVESTIGATION	17-Dec-13	30-Sep-15	17-Mar-15	12-Aug-16																					
--	TWOMILE CYN AGG AREA INVESTIGATION (Proposed)	01-Oct-12	18-Aug-14	01-Oct-12	18-Aug-14																					
8C	STARMER/UPPER PAJARITO CYN AGG AREA FIELDWORK	15-Nov-11	29-Oct-12	01-Oct-12	17-Sep-13																					
8D	STARMER/UPPER PAJARITO CYN AGG AREA IR & PHASE II IWP	03-Apr-12	30-Apr-14	21-Feb-13	20-Mar-15																					
8H	STARMER/UPPER PAJARITO CYN AGG AREA PHASE II INVESTIGATION	01-May-14	10-Feb-16	23-Mar-15	16-Aug-16																					
--	STARMER/UPPER PAJARITO CYN AGG AREA INVESTIGATION (Proposed)	01-Jul-13	19-May-15	01-Jul-13	19-May-15																					
WATERSHED 60 ANCHO CANYONS																										
D3	NORTH ANCHO CYN AGG AREA PHASE II INVESTIGATION	01-Oct-12	19-Jan-16	01-Oct-12	11-Aug-15																					
CF	SOUTH ANCHO CYN AGG AREA INVESTIGATION WORK PLAN	02-May-11	15-Oct-12	02-May-11	15-Oct-12																					
E7	SOUTH ANCHO CYN AGG AREA INVESTIGATION	01-Oct-12	31-Jul-13	01-Oct-12	31-Jul-13																					
WATERSHED 70 CHAQUEHUI CANYONS																										
H7	CHAQUEHUI CYN AGG AREA FIELDWORK	15-Sep-11	28-Sep-12	15-Sep-11	28-Sep-12																					
H8	CHAQUEHUI CYN AGG AREA IR & PHASE II IWP	08-Mar-12	14-Mar-14	08-Mar-12	14-Mar-14																					
H9	CHAQUEHUI CYN AGG AREA PHASE II INVESTIGATION	17-Mar-14	30-Nov-15	17-Mar-14	30-Nov-15																					

Projed Baseline Bar
 Proposed Baseline Bar
 Current Bar Labels

Corrective Actions						Fiscal Year																					
Activity ID	Activity Name	BL Project Start	BL Project Finish	Start	Finish	FY2011			FY2012			FY2013			FY2014			FY2015			FY2016			FY2017			
						FG1	FG2	FG3	FG1	FG2	FG3	FG1	FG2	FG3	FG1	FG2	FG3	FG1	FG2	FG3	FG1	FG2	FG3	FG1	FG2	FG3	FG1
WATERSHED: 10 MORTADAD CANYONS																											
1J	UPPER MORT CYN AGG AREA PHASE II INVESTIGATION	01-Mar-11	28-Feb-14	01-Oct-13	13-Dec-14																						
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1P	UPPER MORT/CDB AGG AREA PHASE II INVESTIGATION	01-Mar-12	31-Oct-13	01-Jul-13	21-Oct-14																						
WATERSHED: 30 WATER VALLE CANYONS																											
WV	CAÑON DE VALLE AGG AREA TA-14 FIELDWORK	01-Feb-11	30-Nov-11	01-Oct-12	08-Aug-13																						
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WY	CAÑON DE VALLE AGG AREA TA-15 FIELDWORK IR & PHASE II IWP	15-Jun-11	30-Oct-13	01-Oct-12	04-Mar-15																						
XT	CAÑON DE VALLE AGG AREA TA-15 PHASE II INVESTIGATION	01-Nov-13	31-Jul-15	06-Mar-15	18-Jul-16																						
	CAÑON DE VALLE AGG AREA TA-15 INVESTIGATION (Proposed)																										
WN	CAÑON DE VALLE AGG AREA TA-16 FIELDWORK IR & PHASE II IWP	02-Jan-13	12-Nov-14	02-Jan-13	12-Nov-14																						
UV	CAÑON DE VALLE AGG AREA TA-16 PHASE II INVESTIGATION	14-Nov-11	30-Apr-14	01-Oct-12	23-Mar-15																						
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VI	UPPER WATER CYN AGG AREA PHASE II INVESTIGATION	03-Oct-11	31-Oct-12	01-Oct-12	31-Oct-13																						
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5L	LOWER WATER CYN AGG AREA PHASE II INVESTIGATION	01-Oct-15	11-Jul-17	01-Oct-15	11-Jul-17																						
WATERSHED: 40 SANDIA CANYONS																											
1Z	LOWER SANDIA CYN AGG AREA PHASE II INVESTIGATION	07-Oct-11	31-Mar-14	04-Oct-12	13-Apr-14																						
2R	UPPER SANDIA CYN AGG AREA PHASE II INVESTIGATION	01-Aug-12	31-Mar-14	01-Apr-14	14-Jul-15																						
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Project Baseline Bar
 Proposed Baseline Bar
 Current Bar Labels