



Cobrain, Dave, NMENV

From: Cobrain, Dave, NMENV
Sent: Monday, November 22, 2010 11:45 AM
To: Cobrain, Dave, NMENV
Subject: FW: Risk Proposal to NMED rev 3
Attachments: Risk Proposal to NMED rev 3.docx

From: Rael, George [mailto:grael@doeal.gov]
Sent: Friday, October 29, 2010 5:12 PM
To: Bearzi, James, NMENV; Cobrain, Dave, NMENV; Kieling, John, NMENV
Cc: Powers, Kenneth W (HQ); Smith, Kevin W.; Snyder, Roger; Graham, Michael J; Cox, Daniel R; Marcinowski, Frank (HQ); Mark Turnbough
Subject: Risk Proposal to NMED rev 3

James:

We look forward to discussing the attached proposal with you on Nov 3 (8:30am to 10:30am) in your office. If you have any questions don't hesitate to call me at 606-0397.

Regards,
George

Proposal

LANL Risk Reduction

October, 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 recommending are rescheduled are a group of Phase I and Phase II site investigations and two landfill removal actions 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 an action limits or are in locations that have canyon watershed investigations continuing in FY11 and FY12. 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 three 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-A
 - 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

- Watershed 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 is 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 support this shift of scope. (attachment 1)

- b. Compress the investigation schedule (and reduce cost) by eliminating multiple phases of investigation. Field work would be performed in multiple iterations as needed – but only reported when nature and extent is established. (attachment 2)

- c. Defer the decision to remove landfills at MDA-AA and MDA-N until characterization has been completed. If removal actions are necessary this proposal would defer those actions to start no sooner than October, 2012.

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	12/15/12
Chaquehui Canyon Aggregate Area	43	0	Chaquehui	33	TBD (revised IWP due 11/1/10)
Cañon de Valle Aggregate Area TA-15	16	0	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	1/15/12
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)
Lower Sandia Canyon Aggregate Area	19	0	Sandia	53, 72	TBD (Phase I IR due 3/31/11)

Area	# of SWMUs awaiting investigation	# of SWMUs awaiting Certificate of Completion	Watershed	TAs	Current Schedule Due Date
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 submitted 6/30/10)

3. Continue to increase the rate of TRU shipments from LANL to WIPP. The proposed increase would be to 150 shipments in FY11 and 175 shipments in FY12. LANL has created a production model that indicates the major capabilities needed in FY11 and FY12 as follows.

FY11

1. Maximize the operational capabilities of WCRRF, 231, and 412 production lines.

2. Complete operational readiness and commission the Drum Venting System as soon as possible.
3. Complete installation and testing of the HE RTR and Super HENC systems to allow EPA certification in early summer.
4. Install, complete operational readiness, and commission new box line capabilities in Dome 375 and 412.
5. Invest in preparation for retrieval actions needed to commence in October, 2011.

FY12

1. Continue to maximize the operational capabilities of WCRRF, 231, and 412 production lines.
2. Commence retrieval actions at Trenches A-D in October, 2011, to be followed by actions at Pit 9.
3. Invest in preparation for CMP retrieval actions needed to commence in April, 2012.

Assumptions

1. An MDA-A Extension Request is approved by NMED that shifts the 2012 completion by 1.5 years to 2013. This request will be submitted upon approval of the MDA-B extension request currently in progress.
2. The MDA-L CME is used as a template for future CMEs developed by LANL. This will provide consistency in meeting NMED expectations.
3. RCRA Permit is approved allowing regulated storage in Dome 375.
4. NMED agrees with integration of the EPA Individual Permit into issuance of Certificates of Completion for Solid Waste Management Units (SWMU).
5. EPA certification of the HE RTR and Super HENC is received prior to June 30, 2011 to allow shipment of standard waste boxes currently awaiting certification.
6. Plant availability is set at 83% in the production models.
7. 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.
8. No additional scope is directed by NMED during FY11 and FY12.
9. No emergent scope associated with the Buckman water project is realized.

Benefits of the Proposal

- Accelerated Risk Reduction at TA-54. This supports the DOE TRU Waste Acceleration Plan, DOE/WIPP 10-3457, rev 0.
- Significant progress in waste disposition needed for TA-54 closure will be realized.
- Provides path for compliance in FY12.

- 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, canyon watershed investigations under the Consent Order, and stormwater monitoring under the NPDES individual permit. 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. Canyon watershed 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. Monitoring under the Individual Permit is directed toward characterizing potential contaminant migration from individual sites. Delaying Phase I aggregate area investigations while maintaining canyon watershed investigations and Individual Permit monitoring would result in relatively little increase in current risk. 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 canyon watershed investigations and IP monitoring would also still provide the information needed to assess potential impacts off Laboratory property and to direct necessary corrective actions.

Attachment 2

Investigation Reporting Proposed Change

Historically, LANL has had to execute multiple phases of investigation and each of these phases requires a separate work Plan that is followed by a separate Investigation Report.

The separate Work Plan and Investigation Report add about 5 to 8 months to each investigatory iteration.

Proposed approach is to compress investigation schedules by eliminating multiple phases of investigation. The remaining aggregate area investigations would be completed in single investigation reports. Field work would be performed in multiple iterations as needed – but only reported when completed.

LANL proposes that during investigation, if sample results show that we do not have nature and extent and that additional sampling may be required, we would notify and meet with NMED by a set date. During the meeting, we would present data and discuss the need for additional data. If NMED concurs, LANL would then document our proposed additional sampling in a letter to NMED. This letter would also request an appropriate extension for the Investigation Report. Alternatively, NMED could determine that additional data is not needed and LANL would submit the Investigation Report as scheduled.

Therefore, LANL proposes that the following dates be established for each aggregate investigation:

Date to commence field work;

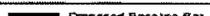
Date by which LANL would notify NMED if we believe that additional sampling is required; and

Investigation Report due date (based on the assumption that no additional field work is needed).

Propose that work execution and reporting be scheduled by watershed to obtain project efficiencies in service activities such as contracting, waste management, and reporting.

Note that we may also propose to consolidate certain Investigation Reports if NMED is open to this concept.

Corrective Actions		EC Project Start	EC Project Finish	Start	Finish	FY2011				FY2012			FY2013			FY2014			FY2015			FY2016			FY2017		
Activity ID	Activity Name					FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2
WATERSHED: 10 MORTANDAD CANYONS						01-Mar-11	28-Feb-14	D1-Oct-13	18-Dec-14																		
1J	UPPER MORT CYN AGG AREA PHASE II INVESTIGATION	01-Mar-11	15-Nov-12	02-Jan-13	22-May-14																						
BU	LOWER MORT/CEDRO CYN AGG AREA PHASE II INVESTIGATION	01-Aug-12	28-Feb-14	01-Oct-13	19-Dec-14																						
1P	UPPER MORT/CDB AGG AREA PHASE II INVESTIGATION	31-Mar-12	31-Oct-13	01-Jul-13	21-Oct-14																						
WATERSHED: 30 WATERVALLE CANYONS						01-Feb-11	11-Jul-17	D1-Oct-12	21-Aug-15																		
WV	CAÑON DE VALLE AGG AREA TA-14 FIELDWORK	01-Feb-11	30-Nov-11	D1-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	D1-Oct-12	26-Jun-14																						
WY	CAÑON DE VALLE AGG AREA TA-15 FIELDWORK, IR & PHASE II IWP	15-Jun-11	30-Oct-13	D1-Oct-12	04-Mar-15																						
XT	CAÑON DE VALLE AGG AREA TA-15 PHASE II INVESTIGATION	01-Nov-13	31-Jul-15	05-Mar-15	19-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	D1-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	D1-Apr-13	23-Mar-16																						
VC	S-SITE AGG AREA PHASE II INVESTIGATION	03-Jan-12	30-Sep-13	D1-Oct-13	17-Mar-15																						
VG	UPPER WATER CYN AGG AREA FIELDWORK	03-Oct-11	31-Oct-12	D1-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																						
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VJ	LOWER WATER CYN AGG AREA INVESTIGATION WORKPLAN	01-Oct-12	02-Jan-13	D1-Oct-12	02-Jan-13																						
VN	LOWER WATER CYN AGG AREA FIELDWORK	20-May-13	30-Apr-14	03-Jan-13	04-Dec-13																						
VW	LOWER WATER CYN AGG AREA IR & PHASE II IWP	09-Oct-13	30-Sep-15	23-May-13	15-May-15																						
5L	LOWER WATER CYN AGG AREA PHASE II INVESTIGATION	01-Oct-15	11-Jul-17	16-May-15	13-Oct-16																						
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1Z	LOWER SANDIA CYN AGG AREA PHASE II INVESTIGATION	01-Aug-12	31-Mar-14	D1-Apr-14	14-Jul-15																						
2R	UPPER SANDIA CYN AGG AREA PHASE II INVESTIGATION	03-Oct-11	28-Jun-13	D1-Apr-13	15-Aug-14																						
WATERSHED: 50 PAJARITO CANYONS						18-Jul-11	10-Feb-16	D1-Oct-12	19-May-15																		
6G	THREEMILE CYN AGG AREA PHASE II INVESTIGATION	01-Nov-11	31-Jul-13	D1-Apr-13	15-Aug-14																						
7Y	TWOMILE CYN AGG AREA FIELDWORK	18-Jul-11	16-Jul-12	D1-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																						
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8C	STARMER/UPPER PAJARITO CYN AGG AREA FIELDWORK	15-Nov-11	25-Oct-12	D1-Oct-12	17-Sep-13																						
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WATERSHED: 60 ANCHO CANYONS						01-Oct-12	19-Jan-16	D1-Oct-12	11-Aug-15																		
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 Project Baseline Bar
  Proposed Baseline Bar
 Current Bar Labels

Corrective Actions																																	
Activity ID	Activity Name	SI Project Start	SI Project Finish	Start	Finish	FY2011				FY2012				FY2013				FY2014				FY2015				FY2016				FY2017			
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