Roles, Gary W.

From: hth@lanl.gov on behalf of Todd Haagenstad [hth@lanl.gov]

Sent: Wednesday, December 14, 2005 4:21 PM

To: Owens, Kirk W.; roles@saic.com

Cc: ewithers@doeal.gov; 'Ron Rager'; goldberg@lanl.gov; rhull@lata.com; isaacson@lanl.gov; sradz@lanl.gov

Subject: SWEIS Action Item Deliverables -- 12/13 Conference Call

Attachments: Draft NEPA SWEIS facility descriptions (2).doc; Land Bridge TA-21.pdf; Draft NEPA SWEIS facility descriptions.doc; S&M DSA Implemention.doc

Kirk/Gary,

Thanks again for the time and effort during yesterday's conference call. This email provides the majority of deliverables associated with the conference call action items assigned to LANL. The following is included via attachment:

1) Thumbnail descriptions of the MDA-B facilities
2) Data that can be used to project impacts associates with the proposed TA-21 land bridge
3) A description of the Surveillance and Maintenance DSA activities for site-wide NESs

Regarding MDA chemical inventories:
We looked into MDA chemical inventory data that is both available and quantifiable. We suggest the best strategy is to talk with Pam Bell (her number was provided yesterday during the call) regarding MDA-B, or run with what was previously provided in the MDA-specific work plans.

Regarding the reference to completion of MDA-K:
I have confirmed that, although the physical work at MDA-K is complete, the administrative/regulatory compliance work (i.e., the submittal and NMED approval of the MDA-K completion report) is still in the works.

TA-21 Land cover disturbance projections (industrialized and non-industrialized)
These data should be provided by COB today (12/14/05).

Finally, I have compiled and I am poised to transmit SME-specific comments (i.e., Project Leaders) on the SWEIS by COB today (12/14/05).

Let me know if you have any questions.

Todd Haagenstad
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NOTE: none of the following described facilities or capabilities will intrude on habitat or buffer areas of protected wildlife.

1. **DIF Storage Area –**

The Definitive Identification Facility (DIF) Storage Area is to be used in conjunction with the investigation and remediation of MDA-B. It will encompass an area of a few acres located on previously disturbed land behind the currently occupied LANL Ecology Building. This storage area will be enclosed within chain-link fencing with a central temporary "Sprung" type dome structure as the major feature. The dome will enclose several other temporary buildings, such as, a Permacon-type building that will house the DIF itself. Staging areas within the DIF Storage Area will consist of pre-staging of preliminarily hazard-categorized materials awaiting sampling or re-packaging by DIF personnel. Post-DIF staging areas will temporarily hold materials until verified analytical results determine waste disposition. In all staging areas hazardous materials will be segregated according to known incompatibilities (e.g., oxidizers, flammables, explosives). The DIF will be used for the inspection and evaluation of containers to determine their contents for waste disposition. Activities could include removal of a "bung" from a drum in order to sample its contents up to "hot-tapping" of compressed gas cylinders that requires drilling into the side of the container. Depending upon the regulatory controls some contents of these cylinders may be released to the environment (e.g., hydrogen) whereas other contents may need to be treated or transferred to another container. Exhaust air from the DIF along with its enclosing dome structure will be HEPA filtered and pass through an activated carbon absorption system. Fire protection systems will be utilized as necessary and required to reduce or otherwise mitigate accidental releases of hazardous materials to the environment.

2. **Waste Processing Facility –**

The Waste Processing Facility is intended as a capability to support all MDA and DD&D activities on DP Mesa. This facility is predominantly a chain-link enclosed "yard" or lay-down area for the accumulation of waste materials prior to shipment off-site. Some temporary buildings will be on-site to house administrative activities associated with this function. Various other structures may be necessary to protect RCRA and radioactive materials prior to shipment. The WPF will be located at the end of DP East and comprise an area of less than 10 acres of previously disturbed land. The facility will be used to bulk package or re-package waste materials for trucking off-site. The WPF will require areas for truck parking, turnaround, and loading by use of cranes, boom-trucks, fork-lifts or other suitable heavy equipment. Incompatible materials will be segregated as required and stipulated by regulation. This facility will comply with all RCRA regulations as it functions as a TSD facility. The WPF will likely include a truck decontamination pad along with a hazardous materials screening area for screening prior to off-site transport. Radioactive materials will similarly be removed as required and shipped to on-site or off-site locations for disposal as appropriate. Roads will have to improved or constructed to allow for the extensive truck traffic.

Assume 50 foot wide roadway

station	2:1 slope avg width	1:4 slope avg width	avg depth	length	CY
0	64	59	7	100	1,659
1	126	97.5	38	100	17,733
2	170	125	60	100	37,778
3	194	140	72	100	51,733
4	190	137.5	70	100	49,259
5	106	85	28	100	10,993
6	68	61.25	9	100	2,267
7	56	53.75	3	100	622
8	50	50	0	100	0
					172,044
Culvert: 30' x 30' x 350'					-11,667 1555.556
Culvert 20x20x350					-5,185 1037.037
Total fill =					160,378 CY

1:4 slope avg width	avg depth	length	
51.75	7	100	1,342
59.5	38	100	8,374
65	60	100	14,444
68	72	100	18,133
67.5	70	100	17,500
57	28	100	5,911
52.25	9	100	1,742
50.75	3	100	564
50	0	100	0
	287		
			68,010
Walls =	57,400 sf		708.64198
			-11,667
			-5,185
			57,052

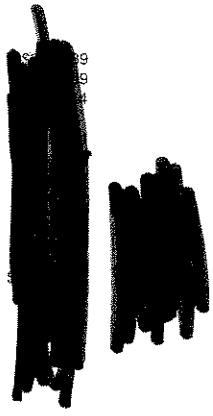
Paved roadway costs for 34' roadway, 12"
Design & Engineering costs @ 10%

GRT at 6.7%

Contingency @ 30%

G&A costs

Intersection costs (traffic signal @ airport)



NOTE: none of the following described facilities or capabilities ~~will~~ may intrude on habitat or buffer areas of protected wildlife.

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1. Background

Los Alamos National Laboratory implements specific activities at Nuclear Environmental Sites (NES) to maintain compliance with 10 CFR 830. These activities include routine inspections and appropriate maintenance of individual NESs. The Laboratory has developed a Detailed Safety Analysis (DSA) for surveillance and maintenance (S&M) of NES sites.

As per the S&M DSA Implementation Plan, all NES have undergone initial inspections. Results of those inspections indicated that a number of actions need to take place. The work elements required to address these findings fall into several distinct categories of similar actions, they are:

- General Maintenance
- Boundary Marking
- Baseline Rad Survey
- Erosion Control Studies and Maintenance Efforts
- New Fencing

Each section of the plans includes adequate description of activities so that an IWD can be prepared.

2. S&M DSA Implementation Actions

This section discusses each of these activities on a site-by-site basis. The information provided herein is designed to allow for scheduling, costing, and preparation of IWDs to perform these work functions.

2.1. General Maintenance

This is a set of activities that include mowing, debris clearing, foliage removal, and fence repair. The paragraphs below describe these activities and outline associated hazards.

Vegetation at many NES requires maintenance. This activity involves tasks such as mowing, clearing brush, removing debris, and removing small trees to maintain site surface characteristics and to limit combustible materials. Maintenance involves cutting or removing vegetation at the surface. If small trees must be removed, they will be cut and the stump will be ground down to grade level (if necessary). Clearing brush and mowing involves cutting or trimming grass by hand or by using a mower, trimming trees and removing trimmed debris, cutting and removing brush, and removing trees at the surface (not removing roots). Personnel performing these tasks use a variety of equipment, which can include miscellaneous hand tools and cutters, chain saws, tractors with fixed or adjustable cutting attachments, weed-line or blade trimmers, push mowers, tractors with fixed or adjustable (hydraulic) mower decks, and trucks and transport vehicles, including cherry picker hydraulic lifts. Personnel

clearing debris use small hand- or power-operated tools for light clearing. Repairing existing fences will involve minor site preparation, such as light scraping and removal of vegetation. Use of small hand and power tools will also be involved in fencing repair.

2.2. Boundary Marking

The actual disposal units that comprise the inventory driving the Nuclear Facility Categorization will be demarcated at the sites as appropriate. Activities that will encompass this activities are general surveying, placement of posts, and placement of a temporary barrier such as orange construction fencing. The paragraph below describes the activity and associated hazards.

A surveyor and assistant or qualified individual trained in the use of a Global Positioning System usually conduct general surveying. Some surveying equipment (e.g., tripod, survey rod) slightly intrudes into the subsurface to provide a firm base for instruments when in use. The depth of penetration in typical local soils is less than 7.6 cm (3 in.). Personnel use pin flags, flagging, and wooden or metal stakes to mark locations and may pound stakes 0.3 m (1 ft) or deeper into the subsurface for use as temporary markers, benchmarks, or turning points. General surveying can require installing permanent benchmarks by using a hand- or battery-operated rock drill to make a small hole in bedrock and cementing the benchmark in the drilled hole. To provide a clean line of sight for instrument readings, personnel may use small saws, axes, or clippers to clear brush and thin branches in areas of vegetation.

2.3. *Baseline Radiological Survey*

Baseline radiological surveys will be performed at a number of sites as specifically discussed below. The goal of the baseline survey is to establish surface radiological conditions at a specific point in time with specific and documented conditions with respect to the IIS. If future inspections indicate significant physical changes to the IIS from sources such as bio-degradation, erosion, or burrowing animals, the impact from these sources can be specifically evaluated by performing radiological surveys in the areas of changed condition. The paragraph below describes the activity and associated hazards.

Survey equipment includes a wide array of devices that are generally small, hand-held self-contained units. To properly conduct a survey, personnel may require access to radioactive storage areas; waste lagoons; areas downwind of stack release points or exhaust vents; areas near storm, septic, sanitary, or drainage systems; and areas where runoff may collect. These areas may be within or outside of NES boundaries. Survey personnel may have to work in areas of dense vegetation or rough terrain and along parking lots and roadways near traffic. Survey instruments may be mounted on ATVs to efficiently complete work scope. For all NES at which surveys are to be conducted, the following general protocol will be used:

A surface radiological survey will consist of monitoring surface soils for gamma emitting radionuclides via a 3x3 NaI probe. Pu monitoring will be accomplished via a FIDLER probe. Minimum Detectable Activity (MDA) will be documented. Survey scan speed will be determined based on the desired MDA. To the extent practical, MDAs at or below Screening Action Levels will be sought.

The survey data will be collected in concert with GPS data to facilitate uploading survey information into the GIS system. In this way, the baseline survey can be documented and pulled into the next annual inspection planning. Specifics regarding schedule and cost are presented in the sections below. Maps indicating survey boundaries are presented in Attachment A.

2.4. Erosion Control Studies and Maintenance

The annual inspection reports called for additional, detailed studies specific to erosion control issues at individual sites. Based on results of individual studies, the following erosion control measures are implemented:

- Installation and maintenance of check dams
- Installation and maintenance of straw wattles
- Installation and maintenance fo surface basecoarse and/or earthen berms

2.5. New Fencing

New fence construction can include digging holes, placing concrete, setting posts, and using a “come along” or other suitable light equipment to stretch fencing materials. Personnel performing these tasks may use trucks and transport vehicles with mounted hydraulic lifts and pole drivers to install posts and lift materials; vehicle-mounted, power, or manual augers to excavate post holes; hand tools to support post and fence placement; cutting torches to cut fencing or signage materials; radiological and industrial-hygiene survey equipment; oxy-acetylene or arc welding units; and electric or pneumatic cutting drills and saws.