From: Owens, Kirk W.

Sent: Wednesday, December 14, 2005 7:16 PM

To: Antizzo, Karen B. **Cc:** Roles, Gary W.

Subject: FW: 2ND DRAFT OF SWEIS FOR REVIEW

Attachments: Review comments 12-14-05 JE.doc

Karen

Please incorporate in the spreadsheet.

Kirk Owens

SAIC (301) 601-5611 (voice) (301) 428-0145 (fax)

----Original Message----

From: cenglish@lanl.gov [mailto:cenglish@lanl.gov] Sent: Wednesday, December 14, 2005 3:38 PM

To: Withers, Elizabeth

Cc: 'John Isaacson'; Susan Radzinski (Susan D. Radzinski); Todd Haagenstad; KIRK.W.OWENS@saic.com

Subject: RE: 2ND DRAFT OF SWEIS FOR REVIEW

Elizabeth,

Attached are my comments on the latest version of the SWEIS. My comments are primarily directed at the Consent Order and ER project.

Joe English 667-9641

From: John Isaacson [mailto:isaacson@lanl.gov] Sent: Monday, November 28, 2005 1:23 PM

To: Allan Anderson; Ardyth Simmons; Bart Olinger; Ben Poff; Benito Salazar; Betsy Grindstaff; Bill Gillison; Bill Jones; Bob Beers; Bob Romero; Brain Carlson; Brain Colby; bruce massey (E-mail); Carla Breiner; charlie nylander; Chris Del SIgnore: Chris James: Chuck Hathcock: Claudia Lewis: Dan Rusthoi: Darrell Holt: Dave Fuehne: Dave McInrov: dave padilla (E-mail); David Alberstein; Davis Christensen (E-mail); Debbie Baca; Denny Armstrong; Dina Sassone; Don Hickmott; Farnco Sisneros; Rick Alexander; Gabriela Lopez Escobedo; Jack Nyhan; Jackie Hurtle; James Bland; Jamie Gardner; Joe English; Joel Leeman (E-mail); John Breiner; Joyce Roberts; Julie Minton-Hughes; Kari Garcia; Kathy Smith; Marjorie Stockton; Marjorie Wright; Mary Hockaday; Matt Nuckols; Melanee Shurter (E-mail); Mike McNaughton; Nancy Jo Nicholas (E-mail); Nathan Schwade (E-mail); Paul Gilna; Paul Lisowski; peggy powers (E-mail); phil fresquez (E-mail); phil noll (E-mail); Raeanna Sharp-Geiger; Randy Johnson; Ron Wieneke; Roy Bohn; Sandy Wagner; Scotty Jones (E-mail); Steve Black; Steve McKee; Steve McLin; Steve Schreiber; Steve Yarbro; Terry Rudell; Tom Starke; Tony Grieggs; Val Rhodes; Ann Sherrard (E-mail); Bill Criswell; brad vierra (E-mail); carey bare (E-mail); Chris Webster; Craig Bachmeier (Email); dan pava (E-mail); Diane Wilburn (E-mail); Doug Stavert (E-mail); Gian Bacigalupa (E-mail); gil gonzales (E-mail); Gilbert Montoya (E-mail); harvey decker; Jackie Little (E-mail); Jean Dewart (E-mail); Jeff Johnson (E-mail); John Erickson; john hopkins (E-mail); john isaacson (E-mail); kirt anderson (E-mail); Kurt Schoenberg; Leslie Hansen (E-mail); Mark Gulley; mark harris (E-mail); Marty Price (E-mail); Mary Jo Keys (E-mail); Mike Pearson; Nick Nagy (E-mail); Pam French; Paul Schumann (E-mail); Pete Worland (E-mail); Phil Sena (E-mail); Randy Parks (E-mail); Ron Rager; Sam Loftin (E-mail); Stephanie Archuleta; susan (E-mail); Tori George (E-mail); Nancy Jo Nicholas; Ron Wieneke; Roy Bohn; Mitch Goldberg; Todd Haagenstad; Ken Hargis

Subject: 2ND DRAFT OF SWEIS FOR REVIEW

The revised, 2nd draft of the SWEIS is available for review at http://em.lanl.gov/sweis.htm. As before, LASO

is requesting a 2-week review period ending **December 12, 2005**, on which day there will be an all day meeting to discuss comments and changes you think necessary. The meeting will be held again at TA-21-210 rm 142 (Eco conference room) from 9:30 AM until we finish in the afternoon.

As was the case before, it is not necessary for everyone to review the whole draft, but do so if you wish. It is important, however, for you to review your subject matter area, the descriptions of the Key Facilities, and the project-specific analyses that can be found in the appendices. It is especially important that the project descriptions for the project-specific analyses are accurately updated and that any changes that you suggested in the first draft have been correctly incorporated. Please look these over carefully and send your corrections, comments and additions to Elizabeth Withers at ewithers@doeal.gov with a CC to Kirk Owens at SAIC, KIRK.W.OWENS@saic.com, John Isaacson at isaacson@lanl.gov, and Susan Radzinski at sradz@lanl.gov. Also please attend the meeting on December 12 to discuss substantive changes to your sections if you prefer.

It may help to print out the Table of Contents and use this to find your subject areas requiring review.

Thanks for your efforts on the review. The more tailored this document is to the anticipated operations at your facilities, the more useful it will be in providing NEPA coverage for your activities over the next 5 years.

John Isaacson Ph.D. SWEIS and C&T Project Leader ENV Division M887 (505) 667-2276 (phone) (505) 667-0731 (fax) Review Comments on November 2005 Working Draft SWEIS

Reviewer: Joe English (505-667-9641)

Chapter 2

- 2-1. Pg. 2-9, lines 307-309. Separate suits were filed by UC and DOE. Revise this sentence as follows: "The U.S. Justice Department (on behalf of DOE) and the University of California (the LANL management and operating contractor) filed lawsuits challenging the final order.
- 2-2. Pg. 2-9, line 309. NNSA is not a party to the Consent Order; it is DOE. Change "NNSA" to "DOE".
- 2-3. Pg. 2-9, line 311. The reference to the Consent Order should be changed as this is not a NNSA document.
- 2-4. Pg. 2-10, lines 332-334. Change "1,099 PRSs administered by the New Mexico Environment Department and 1,025 PRSs administered by DOE" to "1,099 PRSs listed in Module VIII of LANL's Hazardous Waste Facility Permit and 1,025 PRSs not listed in Module VIII."

Chapter 3

- 3-1. Pg. 3-3, Table 3-1. In Expanded Operations Alternative for MDAs, change "Appendix H" to "Appendix I".
- 3-2. Pg. 3-10, lines 305-306. The parties to the Consent Order are NMED, DOE, and UC. Change "NNSA" to "DOE" and "the State of New Mexico" to "NMED".
- 3-3. Pg. 3-59, lines 1446-1447. The parties to the Consent Order are NMED, DOE, and UC. Change "NNSA" to "DOE" and "the State of New Mexico" to "NMED".
- 3-4. Pg. 3-60, line 1471. Suggest inserting the following at the end of the paragraph: "These alternatives are intended to bound the range of possible corrective measures that may be selected by NMED and do not represent DOE's preferred actions."
- 3-5. Pg. 3-104, lines 2375-2408. The section is titled "Major Material Disposal Areas Remediation, Canyon Cleanups, and Other Consent Order Actions," but the text and subsequent tables only address MDAs, not canyons and other actions.

Chapter 4

- 4-1. Pg. 4-149, line 3928. Change "surface improvements" to "surface impoundments".
- 4-2. Pg. 3-10, lines 305-306. The parties to the Consent Order are NMED, DOE, and UC. Change "NNSA" to "DOE" and "the State of New Mexico" to "NMED".

Appendix H

H-1. Pg. H-86, lines 3017-3018. The parties to the Consent Order are NMED, DOE, and UC. Change "NNSA" to "DOE" and "the State of New Mexico" to "NMED".

- H-2. Pg. H-88, lines 3097-3119. The wastes in the units listed in this section are not known to meet the current definition of TRU waste. When these wastes are retrieved from storage they will be characterized to determine whether they meet the definition of TRU and, if so, will be processed for shipment to WIPP. All references to "transuranic waste" in this section should be changed to "transuranic-contaminated waste".
- H-3. Pg. H-89, line 3138. Change "Zone 4 of Area G" to "Zone 4 of TA-54". For regulatory reasons, it is important not to identify Zone 4 as part of Area G.
- H-4. Pg. H-90, lines 3166-3167. The text states that all disposal units at Areas L and G must be closed per the requirements of DOE Order 435.1. This is not correct. The disposal units at Area L (MDA L) did not receive low-level radioactive waste and are not subject to 435.1. In addition, the disposal requirements in 435.1 only apply to low-level radioactive wastes disposed of after September 26, 1988. Much of the waste at Area G was disposed of before September 26, 1988.
- H-5. Pg. H-90, lines 3168-3175. The statement "Because it is not practical to address closure requirements under separate regulatory programs, the New Mexico Environment Department, DOE, and the University of California entered into a Consent Order ..." is not exactly correct. In fact, the Consent Order requires closure under separate regulatory programs for corrective action units and RCRA disposal units. Because Areas L and G each have both kinds of units, LANL has been attempting to integrate RCRA closure and corrective action requirements through use of RCRA alternate closure requirements under 40 CFR 264.110(c). So far, NMED has not accepted this approach and units at Areas L and G are still subject to multiple closure requirements.
- H-6. Pg. H-96, line 3407. Change "(and the rest of Area G)" to "(and Area G)". For regulatory reasons, it is important not to identify Zone 4 as part of Area G.
- H-7. Pg. H-97, line 3421. Change "and the rest of Area G" to "and Area G".
- H-8. Pg. H-98, line 3477. Delete "(except Zone 4)".

Appendix I

- I-1. Cover and Title. Change "Compliance Order Actions" to "Consent Order Actions".
- I-2. Pg I-1, line 20. Insert "and radioactive" after "hazardous".
- I-3. Pg I-1, line 22 and Global. Change "Remediation Services (RS) Project" to "environmental restoration project" or "environmental remediation project".
- I-4. Pg. I-1, lines 23-24. Change "1,099 PRSs administered by the New Mexico Environment Department (NMED) and 1,025 PRSs administered by DOE" to "1,099 PRSs listed in Module VIII of LANL's Hazardous Waste Facility Permit and 1,025 PRSs not listed in Module VIII."
- I-5. Pg. I-4, Table I-2. Table needs to be updated as follows to reflect current schedule adjusted for delays in NMED approvals.

Review Comments on November 2005 Working Draft SWEIS

Reviewer: Joe English (505-667-9641)

MDA	Investigation	Investigation	CME Work	CME Report	Remedy
	Work Plan	Report	Plan		Completion
					Report
MDA A	Submitted	11/9/06	TBD	TBD	3/11/11
MDA B	Submitted	3/26/06	TBD	TBD	6/23/11
MDA T	Submitted	9/18/06	TBD	TBD	12/19/10
MDA U	Submitted	2/6/06	TBD	TBD	11/6/11
MDA C	Submitted	12/6/06	TBD	TBD	9/5/10
MDA L	Submitted	Submitted	TBD	7/31/07	6/30/11
MDA G	Submitted	Submitted	6/5/06	8/5/07	12/6/15
MDA AB	Submitted	5/31/10	TBD	TBD	1/31/15

- I-6. Pg. I-6, Table I-4. The correct PRS number for the 260 Outfall is 16-021(c)-99, not 21-014.
- I-7. Pg. I-7, lines 152-153. Change "in place contingent upon an analysis performed pursuant to 40 CFR 191." To "in place. This option may require performance of an analysis pursuant to 40 CFR 191."
- I-8. Pg. I-7, lines 186-189. Revise text concerning 40 CFR 191 as follows: "If some transuranic waste is left in place, a performance assessment pursuant to 40 CFR 191 may be required. If such an analysis is required, the results of the analysis may indicate additional stabilization of the waste or modification of the final design of the MDA cover."
- I-9. Pg. I-12, line 315. Change "followed by a" to "followed, if necessary, by a".
- I-10. Pg. I-12. Suggest deleting footnote 2 as it is no longer accurate. Under the Consent Order, NMED's authority is not limited to RCRA hazardous wastes and hazardous constituents, but includes additional chemicals as well, including PCBs.
- I-11. Pg. I-14, line 392. Change "DOE" to "NMED".
- I-12. Pgs. I-14 I-33. Delete Table I-5. This information is not necessary to support the analyses and many of the descriptions need to be updated.
- I-13. Pgs. I-35 I-41. Delete Table I-6. This information is not necessary to support the analyses and many of the descriptions need to be updated.
- I-14. Pg. I-42, lines 407-424. Section I.2.4 on Canyons Investigations needs to be expanded to include the possibility of implementing groundwater cleanup activities. Based on the results of ongoing investigations, the potential exists for groundwater cleanup activities in Mortandad and Los Alamos/Pueblo Canyons and Cañon de Valle. The capping and removal alternatives considered in Appendix I should also include groundwater remediation activities so that groundwater remediation would be included in the NEPA coverage if NMED determines that it is required.
- I-15. Pg. I-43, lines 441-445 and Global. LANL's nomenclature for describing consolidated sites has been revised. Change "Consolidated SWMU" to "Consolidated Unit". In descriptions of consolidated units, change "former SWMU" and/or "former AOC" to "SWMU" and/or "AOC".

- I-16. Pg. I-45, lines 524-525. Delete the last sentence referring to MDA V. The remedial activities at MDA V are ongoing and have not been completed.
- I-17. Pg. I-79, line 1385. Change "TA-35" to "TA-3".
- I-18. Pg. I-87. In waste description for Pit 29, change "transuranic cement paste (recoverable)" to "retrievable transuranic-contaminated cement paste^c".
- I-19. Pg. I-92, line 1625. Change "A locked steel plate covers shaft nine" to "Shaft nine is capped with a 6-foot (2-meter) layer of concrete".
- I-20. Pg. I-96, line 1724. SWMU 54-001(a) is a hazardous and mixed waste storage area, not a low-level radioactive waste storage area.
- I-21. Pg. I-98, line 1768. Change "LANL must submit to NMED" to "LANL submitted to NMED".
- I-22. Pg. I-98, lines 1769-1770. Delete "If further investigation is deemed needed for these SWMUs and AOCs,".
- I-23. Pg. I-99, lines 1788-1790. The investigation work plan for the Bayo Canyon Aggregate Area has also been submitted to NMED, in addition to those listed. Also, one aggregate area investigation report (Middle Mortandad/Ten Site Aggregate Area) has been submitted to NMED so far.
- I-24. Pg. I-99, line 1793. Insert the following sentence after the first sentence: "Investigations at these sites were planned or ongoing at the time the Compliance Order was originally issued in November 2002."
- I-25. Pg. I-100, lines 1807-1809. The groundwater investigation report for SWMU 03-010(a) was submitted to NMED on August 31, 2005.
- I-26. Pg. I-101, line 1836-1838. The investigation work plan for SWMU 16-008(a) and associated sites was submitted to NMED on March 31, 2004 and approved by NMED on June 28, 2004.
- I-27. Pg. I-102, lines 1865-1866. The MDA P closure certification report was approved by NMED on November 10, 2005 and no additional actions at the site are required.
- I-28. Pg. I-105, lines 1943-1949. The Voluntary Corrective Measure Report for SWMU 21-011(k) was submitted to NMED on October 31, 2003 and approved by NMED on August 9, 2005.
- I-29. Pg. I-108, line 1981. Insert the following after the first sentence: "A supplemental sampling and analysis plan addressing the remaining sites in Middle Mortandad/Ten Site Aggregate Area was submitted to NMED on March 31, 2004 and approved on June 29, 2004."
- I-30. Pg. I-108, line 1982. Insert "and supplement" after "sampling and analysis plan".

- I-31. Pg. I-110, lines 2047-2049. The investigation and corrective action work plan for SWMU 73-002 was submitted to NMED in May 2005 and approved in September 2005. The investigation and corrective action is currently ongoing.
- I-32. Pg. I-114, lines 2201-2231. SWMUs 33-002(a-e), which are part of MDA K, were remediated in 2005 as part of an accelerated corrective action (ACA) at TA-33. A remedy completion report for this ACA will be submitted to NMED by March 13, 2006.
- I-33. Pg. I-115, lines 2251-2252. Delete "consistent with an analysis to be performed under 40 CFR 191".
- I-34. Pg. I-116, lines 2283-2287. Revise text concerning 40 CFR 191 as follows: "If some transuranic waste is left in place, a performance assessment pursuant to 40 CFR 191 may be required. If such an analysis is required, the results of the analysis may indicate additional stabilization of the waste or modification of the final design of the MDA cover."
- I-35. Pg. I-116, line 2291. Need to add statement that the remediation process may extend beyond FY 2016 only if a revised schedule is approved by NMED.
- I-36. Pg. I-117, Tables I-25 and I-26. Suggest presenting the chemical/hazardous waste data in tonnes rather than kilograms so that the numbers are more comparable to cubic meters.
- I-37. Pg. I-118, Table I-27. Suggest presenting the chemical/hazardous waste data in tonnes instead of kilograms so that the numbers are more comparable to cubic meters.
- I-38. Pg. I 126, line 2581. Delete MDA C from this list of sites. None of the waste disposal units at MDA C is covered with asphalt.
- I-39. Pg. I-141, line 3019. Change "A locked steel plate covers shaft nine" to "Shaft nine is capped with a 6-foot (2-meter) layer of concrete".
- I-40. Pg. I-148, Table I-36. The transuranic waste CMPs stored atop Pit 29 should be listed in the column for Corrective Action Storage and Disposal Units, Transuranic Waste Storage, not as RCRA Storage and Disposal Units. The author of the cited reference has also been notified of this error.
- I-41. Pg. I-163, lines 3602-3616. The corrective measure for MDA H was already addressed in an EA. Is it necessary to discuss this again in the SWEIS?
- I-42. Pg. I-164, line 3619. Statement is made that most of these small MDAs are specifically identified in the Consent Order. Most of the small MDAs are part of aggregate areas and are not specifically identified in the Order.
- I-43. Pg. I-164, Table I-50. Most of MDA K in TA-33 (SWMUs 33-002[a,b,c,d,e]) has already been remediated as part of an ACA.
- I-44. Pg. I-167, line 3708. Reference is made to soil vapor concentrations above regulatory limits. There are no regulatory limits under the Consent Order for soil vapors.

- I-45. Pg. I-169, lines 3782-3783. Three grams per cubic meter does not seem correct for concrete density. This should probably be three grams per cubic centimeter.
- I-46. Pg. I-182, lines 4065-4066. The assumption that wastes in the Central Pit have the same distribution as MDA Z may not be valid. MDA Z received wastes from firing site activities, which would be different than the laboratory wastes received by MDA B.
- I-47. Pgs. I-193 I-195, Tables I-60, I-61, I-62. Most of MDA K in TA-33 (SWMUs 33-002[a,b,c,d,e]) has already been remediated as part of an ACA.
- I-48. Pg. I-204, lines 4692-4694. The ACA for the Security Perimeter Road has been completed.
- I-49. Pg. I-276-I-279. The human health impact assessment should also address chemical exposure for some of the MDAs. There are significant chemical inventories at MDAs C and L that could be released during the removal alternative.