

BAS 9130

January 6, 2005

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

January 7, 2005 (3:15pm)

In the Matter of

Docket No. 70-3103

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Louisiana Energy Services, L.P.
National Enrichment Facility

ASLBP No. 04-826-01-ML

HEARING EXHIBITS OFFERED
ON BEHALF OF NUCLEAR INFORMATION AND RESOURCE SERVICE
AND
PUBLIC CITIZEN

The following exhibits will be offered on behalf of Nuclear Information and Resource Service and Public Citizen ("NIRS/PC") at the hearing scheduled for February 7 through 16, 2005. In listing exhibits NIRS/PC have not included as exhibits those portions of the Application itself (i.e., Environmental Report and Safety Analysis Report) that are planned to be referred to by witnesses, since such documents are contained in the record of this proceeding. In addition, conventional textbook references referred to by witnesses are not included as exhibits. All other items relied upon by witnesses are listed here. When an item is readily available from a public Internet location, the location is cited. Items less readily available are provided in paper copy, and lengthy items are provided in electronic form in the enclosed compact disc.

NIRS/PC Exhibits:

1. Barrett, M.E., R.D. Zuber, E.R. Collins, J.F. Malina, Jr., R.J. Charbeneau, and G.H. Ward, 1993, *A Review and Evaluation of Literature Pertaining to the Quality and Control of Pollution from Highway Runoff and Construction*, Technical Report CRWR 239, April 1993 URL (2nd ed., 1995), URL:
<http://www.crwr.utexas.edu/reports/pdf/1995/rpt95-5.pdf>.

Template = SECY-028

SECY-02

2. Cook-Joyce Inc., 2003a, *Hydrogeologic Investigation, Section 32; Township 21 range 38, Eunice New Mexico*, 19 November, 2003, attached to the *Ground Water Discharge Permit Application* (LES, 2004b).
3. Cook-Joyce Inc., 2004a, *Section VI, Geology Report*, August 2004, prepared for Waste Control Specialists LLC, Andrews Texas.
4. DOE, 2000a, *Yucca Mountain Project, Unsaturated PMR and Associated AMRs, Conceptual and Numerical Models of UZ Flow and Transport*, March 2000, MDL-NBS-HS-000005 Rev00, U0030, URL:
<http://www.ocrwm.doe.gov/documents/amr/23353/23353.pdf#search='NBSHS000005%20Rev00,%20U0030'>.
5. Dutton, A. R., and W. W. Simpkins, 1986, *Hydrogeochemistry and Water Resources of the Triassic Lower Dockum Group in the Texas panhandle and eastern New Mexico*, Texas Bureau of Economic Geology, Report of Investigations No. 161.
6. EPA, 1994a, *The Hydrologic Evaluation of Landfill Performance (HELP) Model, User's Guide for Version 3*, EPA/600/R-94/168a, September 1994, URL:
<http://www.wes.army.mil/el/elmodels/> (Note: User's Guide contained in compressed file to be downloaded with model (zhhelp3p.exe)).
7. EPA, 1994b, *Slug Tests*, SOP# 2046, October 3, 1994, URL:
<http://www.westonrst2.com/sop/2046.pdf#search='epa%20slug%20test'>.
8. EPA, 2004a, *Survey of Technologies for Monitoring Containment Liners and Covers*, EPA 542-R-04-013, June 2004, URL:
<http://www.epa.gov/tio/download/char/epa542r04013.pdf>.
9. G.L. Environmental Inc., 2004, *Comments on New Mexico Ground Water Discharge Permit*, attached to an email sent to George Harper, April 6, 2004.
10. Holt, J.H., 1993, *Geotechnical Investigation and Engineering Analysis for Waste Control Specialists Inc. Landfill Project, Andrews County, Texas*, 12 March, 1993.
11. Laine, D.L., and M.P. Miklas, Jr., 1989, *Detection and Location of Leaks in Geomembrane Liners Using an Electrical Method: Case Histories*, Southwest Research Institute, San Antonio, Texas, Proceedings of the 10th National Conference, Superfund '89, Washington, D.C., U.S.A., Nov. 27-29, 1989, URL:
http://www.leaklocationservices.com/pubs/detection_location.pdf.
12. Langman, J. B., F. E. Gebhardt, and S. E. Faulk, 2004, *Ground-Water Hydrology and Water Quality of the Southern High Plains Aquifer, Melrose Air Force Range, Cannon Air Force Base, Curry and Roosevelt Counties, New Mexico, 2002-2003*, USGS Scientific Investigations Report 2004-5158, URL:
<http://water.usgs.gov/pubs/sir/2004/5158/>.

13. Leedshill-Herkenhoff, Inc., John Shoemaker & Associates, Inc., Montgomery & Andrews, P.A., 2000, *Lea County Regional Water Plan*, prepared for Lea County Water Users Association, December 7, 2000.
14. Louisiana Energy Services, 2003c, National Enrichment Facility Wall Map; December 2003, downloaded from: <http://www.nrc.gov/materials/fuel-cycle-fac/licapp-envir-rpts.html>.
15. Louisiana Energy Services, 2004b, *Ground Water Discharge Permit Application*, April 26, 2004.
16. Louisiana Energy Services, 2004c, *Response to NRC Request for Additional Information Regarding the National Enrichment Facility Environmental Report*, letter NEF#04-019, May 20, 2004.
17. Louisiana Energy Services, 2004d, *Answer of Louisiana Energy Services, L.P. to the Requests for Hearing and Petitions for Leave to Intervene of the New Mexico Attorney General and Nuclear Information and Resource Service and Public Citizen*, Docket No. 70-3103-ML, May 3, 2004.
18. Louisiana Energy Services, 2004e, *Applicant's Objections and Responses to Interrogatories From Nuclear Information and Resource Service and Public Citizen*, September 23, 2004.
19. Louisiana Energy Services, 2004g, *Comments Regarding Draft Report NUREG-1790, Environmental Impact for the Proposed National Enrichment Facility in Lea County, New Mexico*, November 5, 2004.
20. Lockwood Greene, 2004a, *Data/Information for Environmental Permit*, document number L4-50-01-RES, March 29, 2004, Bates stamp: LES-00768 – LES-00781.
21. Mehta, S., A. E. Fryar, and J. L., Banner, 2000, *Controls on the Regional-Scale Salinization of the Ogallala Aquifer, Southern High Plains, Texas, USA*, in *Applied Geochemistry*, 15 (2000) 849-864, URL: <http://www.geo.utexas.edu/faculty/banner/Publications/Mehta%20et%20al%202000.pdf>.
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24. New Mexico Water Quality Control Commission, 2002, *Regulations*, 20.6.2 NMAC, Effective September 15, 2002, URL: http://www.nmenv.state.nm.us/NMED_Regs/gwb/20_6_2_NMAC.pdf.
25. Nicholson, A., and A. Clebsch Jr., 1961, *Geology and Ground-Water Conditions in Southern Lea County, New Mexico*; Ground-Water Report 6, New Mexico Bureau of Mines and Mineral Resources, 1961.
26. Nuclear Regulatory Commission (NRC), 2004a, *Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico, Draft Report for Comment*, NUREG-1790, September 2004.
27. Nuclear Regulatory Commission (NRC), 2004b, *NRC Staff's Response to Interrogatories and Document Request by Petitioners Nuclear Information and Resource Service and Public Citizen to Commission Staff*, November 10, 2004.
28. Olson, R.E., D.E. Daniel, 1981, *Measurement of the Hydraulic Conductivity of Fine-Grained Soils*, in "Permeability and Groundwater Contaminant Transport", Zimmie and Riggs, editors, ASTM Special Technical Publication 746.
29. Rainwater, K., 1996, *Evaluation of Potential Groundwater Impacts by the WCS Facility in Andrews County, Texas*, December 1996.
30. Reddy, D.V., Butul, B., 1999, *A Comprehensive Literature Review of Liner Failures and Longevity*, Florida Center for Solid and Hazardous Waste Management, July 12, 1999 URL: http://www.floridacenter.org/publications/liner_failure_99.pdf.
31. United States Department of the Interior (USDO), 2004a, *Comments on the Draft Environmental Impact Statement (DEIS) for the Proposed National Enrichment Facility (NEF) to Produce Enriched Uranium, Lea County, New Mexico (Document No. NUREG-1790)*, November 5, 2004.
32. United States Geological Survey (USGS), 2004a, *Concentrations of Polycyclic Aromatic Hydrocarbons (PAHs) and Major and Trace Elements in Simulated Rainfall Runoff from Parking Lots, Austin, Texas, 2003*, Open File report 2004-1208 URL: <http://water.usgs.gov/pubs/of/2004/1208/>.
33. Walvoord, M.A., M.A. Plummer, F.M. Phillips, and A.V. Wolfsberg, 2002, *Deep arid system hydrodynamics, 1. Equilibrium states and response times in thick desert vadose zones*, in *Water Resources Research*, December 2002.
34. Yazdani, G., 1997, *Leakage through Liner Systems*, URL: <http://www.polyflex.com/news07.html>.

35. Draft Environmental Impact Statement for the National Enrichment Facility, NUREG-1790. Same document as Ex. 26, above. URL: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1790/>
36. Final EIS for the Construction and Operation of a Depleted Uranium hexafluoride Conversion Facility at the Paducah, Kentucky, Site, DOE/EIS-0359 (June 2004); <http://www.eh.doe.gov/nepa/eis/eis0359/>
37. Final EIS for the Construction and Operation of a Depleted Uranium hexafluoride Conversion Facility at the Portsmouth, Ohio, Site, DOE/EIS-0360 (June 2004); <http://www.eh.doe.gov/nepa/eis/eis0360/>
38. Final Programmatic EIS for Alternative Strategies for the Long-Term Management and Use of Depleted Uranium Hexafluoride (April 1999), DOE/EIS-0269; <http://web.ead.anl.gov/uranium/documents/nepacomp/peis/parts/maintext.cfm>
39. LLNL Engineering Analysis Report for the Long-Term Management of Depleted Uranium Hexafluoride, UCRL-AR-124080 (May 1997); <http://web.ead.anl.gov/uranium/pdf/EARVol1.pdf>
40. LLNL Cost Analysis Report for the Long-Term Management of Depleted Uranium Hexafluoride, UCRL-AR-127650 (May 1997); http://web.ead.anl.gov/uranium/pdf/CAR_Part1.pdf
41. Wilt, G., Dealing With a Dangerous Surplus from the Cold War, Science & Technology Review, April 1997 (LLNL) (PDF file)
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44. NEF statement, Uranium Hexafluoride Deconversion and Disposal in the United States, Jan. 19, 2004. (PDF file)
45. NEF Environmental Report, Dec. 2003, Table 1.1-3
46. U.S. Nuclear Fuel Cycle Projections 2000-2005, Jan. 2003
47. World Enrichment Requirements Projections by Region and Country Reference Case, 2000-2020
48. NEF Environmental Report, Dec. 2003, Table 1.1-8

- 49. Impact of Higher Tails Assay on Worldwide Cost of Nuclear Power and Worldwide Cost of Electricity.
- 50. Prospective Carbon Taxes and their Impacts on Fossil Fuel Electricity.
- 51. World Nuclear Association, Uranium Markets report, October 2004. URL: <http://www.world-nuclear.org/inf22.htm>
- 52. Massachusetts Institute of Technology, the Future of Nuclear Power, 2003. URL: <http://web.mit.edu/nuclearpower/>
- 53. Red Books report, Uranium 2003: Resources, Production and Demand. URL: <http://ww1.oecd.org/publications/e-book/6604081E.pdf>
- 54. Ux Weekly, October 11, 2004 (Vol. 18, No. 41), URL: <http://www.uxc.com/products/UxW18-41.pdf>
- 55. 2002 World Electricity Generation Table, URL: <http://www.eia.doe.gov/pub/international/iealf/table63.xls>

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January 6, 2005

CERTIFICATE OF SERVICE

Pursuant to 10 CFR § 2.305 the undersigned attorney of record certifies that on January 6, 2005, the foregoing Hearing Exhibits Offered on Behalf of Nuclear Information and Resource Service and Public Citizen was served by electronic mail and by expedited delivery upon the following:

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