

## REFERENCES

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- ATSDR (2000), *Health Consultation, Lawrence Livermore National Laboratory, Big Trees Park 1998 Sampling*, Livermore, California, Federal Facilities Assessment Branch, Division of Health Assessment and Consultation, Agency for Toxic Substances and Disease Registry (CERCLIS No. CA2890012584).
- ATSDR (2003), *Draft Public Health Assessment Plutonium 239 in Sewage Sludge Used as a Soil or Soil Amendment in the Livermore Community*, Lawrence Livermore National Laboratory, Main Site (U.S. DOE) Livermore, Alameda County, California, Agency for Toxic Substances Disease Registry, EPA Facility ID: CA2890012584.
- Althouse, P. E. (1998), *Radiological Background Levels Found in Glass Fiber Filters Used for Low-Level Environmental Surveillance Air Sampling*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-JC-131844).
- Arnold, R. A. (2002), *Report on the threatened valley elderberry longhorn beetle and its elderberry food plant at the Lawrence Livermore National Laboratory – Site 300*, Entomological Consulting Services, Ltd. Pleasant Hill, CA.
- Bainer, R. W. and K. Abbott (2002), Letter Report: LLNL Livermore Site First Quarter Self-Monitoring Report, dated May 31, 2002.
- Bainer, R. W. and H. Joma (2002a), Letter Report: LLNL Livermore Site Second Quarter Self-Monitoring Report, dated August 31, 2002.
- Bainer, R. W. and H. Joma (2002b), Letter Report: LLNL Livermore Site Third Quarter Self-Monitoring Report, dated November 31, 2002.
- Bainer, R. W., and H. Joma (2003), Letter Report: LLNL Livermore Site Fourth Quarter Self-Monitoring Report, dated February 28, 2003.
- Berg, L. L., E. N. Folsom, M. D. Dresen, R. W. Bainer, and A. L. Lamarre, eds. (1997), *Explanation of Significant Differences for Metals Discharge Limits at the Lawrence Livermore National Laboratory Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125927).
- Blake, R. G., C. M. Noyes, and M. P. Maley (1995), *Hydrostratigraphic Analysis—The Key to Cost-Effective Ground Water Cleanup at Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-JC-120614).
- Bloom, P. H. (2002), *Breeding Raptor and Loggerhead Shrike Status and Management Recommendations for Site 300*, Lawrence Livermore National Laboratory. Livermore, CA.
- Brandstetter, E (1998), *Lawrence Livermore National Laboratory Annual Industrial Activity Storm Water Monitoring Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126783-98).
- Brown, R. (2002a), *LLNL Experimental Test Site 300 Compliance Monitoring Report for Waste Discharge Requirements 96-248, First Quarter Report 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125915-02-1).
- Brown, R. (2002b), *LLNL Experimental Test Site 300 Compliance Monitoring Report for Waste Discharge Requirements 96-248, Second Quarter Report 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125915-02-2).

- Brown, R. (2002c), *LLNL Experimental Test Site 300 Compliance Monitoring Report for Waste Discharge Requirements 96-248, Third Quarter Report 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125915-02-3).
- Brown, R. (2003), *LLNL Experimental Test Site 300 Compliance Monitoring Report for Waste Discharge Requirements 96-248, Annual/Fourth Quarter Report 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-125915-02-4).
- Campbell, C. G. (2002a), *Lawrence Livermore National Laboratory Site 300 Annual Storm Water Report for Waste Discharge Requirements 97-03-DWQ*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-144362-02).
- Campbell, C. G. (2002b), *Lawrence Livermore National Laboratory Livermore Site Annual Storm Water Report for Waste Discharge Requirements 95-174*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-26783-02).
- Campbell, C. G. (2001), *Lawrence Livermore National Laboratory Livermore Site Annual Storm Water Monitoring Report for Waste Discharge Requirements 95-174*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126783-01).
- Campbell, C. G., K. Folks, S. Mathews, and R. Martinelli (Submitted), *Algae Toxicity from UPstream Storm Water Runoff: A Source Investigation*. Submitted to Environmental Management (April 2002), (UCRL-JC-147164).
- Campbell, C.G, and D. Laycak (2002), *Lawrence Livermore National Laboratory Livermore Site Annual Storm Water Monitoring Report for Waste Discharge Requirements 95-174*, Livermore, CA (UCRL-AR-126783-02).
- Carlsen, T., L. Paterson, and E. Espeland (2003), *Rare Plant Restoration and Monitoring at Lawrence Livermore National Laboratory Site 300 Project Progress Report Fiscal Year 2002 October 2001 – September 2002*. Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-142408-0).
- Carpenter, D. W., J. J. Sweeney, P. W. Kasameyer, N. R. Burkhard, K. G. Knauss, and R. J. Shelmon (1984), *Geology of the Lawrence Livermore National Laboratory Site and Adjacent Areas*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-53316).
- Christofferson, E. and D. H. MacQueen (2002a), *LLNL Experimental Test Site 300 Compliance Monitoring Program for RCRA-Closed Landfill Pits 1 and 7, First Quarter Report, January–March 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10191-02-1).
- Christofferson, E. and D. H. MacQueen (2002b), *LLNL Experimental Test Site 300 Compliance Monitoring Program for RCRA-Closed Landfill Pits 1 and 7, Second Quarter Report, April–June 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10191-02-2).
- Christofferson, E. and D. H. MacQueen (2002c), *LLNL Experimental Test Site 300 Compliance Monitoring Program for RCRA-Closed Landfill Pits 1 and 7, Third Quarter Report, July–September 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10191-02-3).
- Christofferson, E. and D. H. MacQueen (2003), *LLNL Experimental Test Site 300 Compliance Monitoring Program for RCRA-Closed Landfill Pits 1 and 7, Annual Report for 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10191-02-4).
- Christofferson, E. and M. J. Taffet (2001), *LLNL Experimental Test Site 300 Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, First Quarter Report, January–March 2001*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132057-01-1).
- Christofferson, E., S. P. Vonder Haar, and W. A. McConachie (2002a), *LLNL Experimental Test Site 300 Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, First Quarter Report, January–March 2001*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132057-01-1).

- Christofferson, E., M. J. Taffet, W. A. McConachie, and S. P. Vonder Haar (2002b), *LLNL Experimental Test Site 300 Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, Second Quarter Report, April–June 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132057-02-2).
- Christofferson, E., S. P. Vonder Haar, W. A. McConachie, and M. J. Taffet (2002c), *LLNL Experimental Test Site 300 Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, Third Quarter Report, July–September 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132057-02-3).
- Christofferson, E., S. P. Vonder Haar, and W. A. McConachie (2003), *LLNL Experimental Test Site 300 Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, Annual Report for 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132057-02-4).
- Ciba-Geigy Ltd. (1981), “Units of Measurement, Body Fluids, Composition of the Body, Nutrition.” In *Geigy Scientific Tables*, Vol. 1, Eighth Edition, Basel, Switzerland.
- Clark, H. O., D. A. Smith, B. L. Cypher, and P. A. Kelly (2002), *Mesocarnivore Surveys on Lawrence Livermore National Laboratory Site 300*, California State University, Stanislaus, Endangered Species Recovery Program, Fresno, CA.
- Clough, R. E. (2000), *Integrated Safety Management System Description*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132791 Rev. 3).
- CNPS (2001), *Inventory of Rare and Endangered Plants of California* (sixth edition), Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor, California Native Plant Society, Sacramento, CA. 388pp.
- Cooperrider, A. Y., B. J. Boyd, and H. R. Stuart, eds. (1986), *Inventory and Monitoring of Wildlife Habitat*, U. S. Department of Interior, Bureau of Land Management, Service Center, Denver, CO.
- Dibblee, T. W., Jr. (1980), *Preliminary Geologic Map of the Midway Quadrangle, Alameda and San Joaquin Counties, California*, USGS Open File Report 80-535.
- Dibley, V. and R. Depue (2002), *LLNL Livermore Site and Site 300 Environmental Restoration Project Standard Operating Procedures (SOPs)*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-MA-109115 Rev. 7).
- Dibley, V., M. Dresen, L. Berg, R. Bainer, E. Folsom, R. Blake, J. Coty, Z. Demir, K. Folks, S. Gregory, B. Heffner, G. Howard, J. Karachewski, P. Krauter, W. McConachie, C. Noyes, R. Ruiz, and R. Ward (2003), *LLNL Ground Water Project 2002 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126020-02).
- Dresen, M. D., J. P. Ziagos, A. J. Boegel, and E. M. Nichols (eds.) (1993), *Remedial Action Implementation Plan for the LLNL Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-110532).
- Eccher, B., K. Folks, R. Goluba, M. Gonzalez, D. Hieb, W. Isherwood, M. Kelly, S. Mathews, V. Mode, B. Schumacher, T. Schmiegel, and S. Thomson (1994a), *Storm Water Pollution Prevention Plan (SWPPP) Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-110573-94).
- Eccher, B., K. Folks, R. Goluba, M. Gonzalez, D. Hieb, W. Isherwood, M. Kelly, S. Mathews, V. Mode, B. Schumacher, T. Schmiegel, and S. Thomson (1994b), *Storm Water Pollution Prevention Plan (SWPP), Experimental Test Site (Site 300)*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-110572-94).
- Eckerman, K. F. and J. C. Ryman (1993), *External Exposure to Radionuclides in Air, Water and Soil*, U.S. Environmental Protection Agency, Washington, DC (Federal Guidance Report No. 12, EPA 402-R-93-081).
- Environmental Laboratory (1987), *U.S. Army Corps of Engineers Wetlands Delineation Manual*, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi (Technical Report Y-87-1).

- EPD (1997), *Transition Plan: Transfer of Existing Waste Treatment Units to the Decontamination and Waste Treatment Facility*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126352).
- Ferry, L., T. Berry, and D. MacQueen (1998), *Post-Closure Plan for the Pit 6 Landfill Operable Unit, Lawrence Livermore National Laboratory, Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-128638).
- Ferry, L.S., R. Ferry, W. Isherwood, R. Woodward, T. Carlsen, Z. Demir, R. Qadir, and M. Dresen, (1999), *Final Site-Wide Feasibility Study for Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132609).
- Ferry, L. and R. Kearns (2002), *Characterization Summary for the Building 854 Operable Unit at Lawrence Livermore National Laboratory Site 300*, Livermore, CA., May 3, 2002.
- Ferry, R., L. Ferry, M. Dresen, and T. Carlsen (2002), *Compliance Monitoring Plan/Contingency Plan for Interim Remedies at Lawrence Livermore National Laboratory Site 300* (UCRL-AR-147570).
- Ferry R., L. Ferry, S. Gregory, V. Madrid, and J. Valett (2002), *Five-Year Review Report for the Building 834 Area Operable Unit at Lawrence Livermore National Laboratory Site 300* (UCRL-AR-144744).
- Ferry, R., L. Ferry, S. Gregory, V. Madrid, J. Valett, R. Depue, and K. Heyward (2001a), *Draft Five-Year Review Report for the Building 834 Operable Unit at Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-144744DR).
- Ferry, R., M. Dresen, L. Ferry, W. Isherwood, J. Ziagos, W. Daily, R. Depue, E. Folsom, R. Halden, B. Heffner, K. Heyward, M. Taffet, and S. Vonder Haar (2001c), *Remedial Design Work Plan for Interim Remedies at Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-143563).
- Folks, K. (1997), *LLNL Report of Waste Discharge for Beneficial Reuse of Soil at the Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-126943).
- Gallegos, G. M. (1991), *Assessment of Sediment Monitoring at LLNL*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-121236).
- Gallegos, G. M. (1993), "Surveillance Monitoring of Soils for Radioactivity: Lawrence Livermore National Laboratory 1976 to 1992," *Health Physics* 69(4), 487-493.
- Gallegos, G. M., R. J. Harrach, R. L. Berger, N. A. Bertoldo, P. J. Tate, and S-R. Peterson (2001), *LLNL NESHAPs 2000 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-113867-01).
- Gallegos, G. M., P. E. Althouse, N. A. Bertoldo, R. G. Blake, S. L. Brigdon, R. A. Brown, C. G. Campbell, E. Christofferson, L. M. Clark, A. R. Grayson, R. J. Harrach, H. E. Jones, D. H. MacQueen, S. Mathews, S. R. Peterson, M. A. Revelli, L. Sanchez, M. J. Taffet, P. J. Tate, R. Ward, and R. A. Williams., (2002), *Environmental Report 2001*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-01).
- Gallegos, G. M., B. K. Balke, K. A. Surano, W. G. Hoppes, P. J. Tate, J. C. Steenhoven, B. C. Fields, L. M. Garcia, K. C. Lamson (1992), *Environmental Report 1991*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-91).
- Gallegos, G. M., D. MacQueen, and K. Surano (1999), *Livermore Big Trees Park: 1998 Summary Results*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-134581).
- Gallegos, G. M., P. J. Tate, B. K. Balke, E. Christofferson, R. J. Harrach, W. G. Hoppes, R. A. Failor, S. Wander, B. C. Fields, L. M. Garcia, and A. R. Grayson (1994), *Environmental Report for 1993*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-93).

- Galles, H. L. (1997), Letter to J. Cho re: Lawrence Livermore National Laboratory Drainage Retention Basin Monitoring Plan Amendment (WGMG97-439, December 9, 1997).
- Games, P. A., and J. F. Howell (1976), "Pairwise Multiple Comparison Procedures with Unequal n's and/or Variances. A Monte Carlo Study," *Journal of Educational Statistics* 1:113–125.
- Gouveia, F., and K. R. Chapman (1989), *Climatology of Lawrence Livermore National Laboratory*, Lawrence Livermore National Laboratory, Livermore, CA (UCID-21686).
- Gregory, S., V. Madrid, L. Ferry, R. Halden, Z. Demir, S. Bilir, R. Depue, R. Ferry, K. Heyward, and J. Valett (2001), *Final Interim Remedial Design for the Building 834 Operable Unit Treatment Facility at Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-144919).
- Gudiksen, P. H., C. L. Lindeken, C. Gatrousis, and L. R. Anspaugh (1972), *Environmental Levels of Radioactivity in the Vicinity of the Lawrence Livermore Laboratory, January through December 1971*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-51242).
- Gudiksen, P. H., C. L. Lindeken, J. W. Meadows, and K. O. Hamby (1973), *Environmental Levels of Radioactivity in the Vicinity of the Lawrence Livermore Laboratory, 1972 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-51333).
- Harrach, R. J., S-R. Peterson, G. M. Gallegos, P. J. Tate, N. A. Bertoldo, and Paris E. Althouse (2003), *LLNL NESHAPs 2002 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-113867-02).
- Harrach, R. J. (1998), *Guidance for Radiological Dose Assessment*, Operations and Regulatory Affairs Division, Lawrence Livermore National Laboratory, Livermore, CA (EMP-R-DA).
- Harrach, R. J., G. M. Gallegos, R. A. Failor, E. Christofferson, P. J. Tate, E. R. Brandstetter, J. M. Larson, J. McIntyre, B. C. Fields, R. A. Brown, L. M. Garcia, and A. R. Grayson (1995), *Environmental Report 1994*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-94), <http://www.llnl.gov/saer/>.
- Harrach, R. J., R. A. Failor, G. M. Gallegos, P. J. Tate, E. Christofferson, E. R. Brandstetter, J. M. Larson, A. H. Biermann, R. A. Brown, B. C. Fields, L. M. Garcia, and A. R. Grayson (1996), *Environmental Report 1995*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-95), <http://www.llnl.gov/saer/>.
- Harrach, R. J., G. M. Gallegos, P. J. Tate, E. Christofferson, E. R. Brandstetter, J. M. Larson, A. H. Biermann, B. C. Fields, L. M. Garcia, and K. A. Surano (1997), *Environmental Report 1996*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-96), <http://www.llnl.gov/saer/>.
- Homann, S. G. (1994), *HOTSPOT Health Physics Codes for the PC*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-MA-10615).
- Huey, A. S. (1948), "Geology of the Tesla Quadrangle, California," *California Division of Mines and Geology, Bulletin* 140.
- ICRP (1979 et seq.), *Limits for Intakes of Radionuclides by Workers*, International Commission on Radiological Protection, Publication 30, Pergamon Press, New York, NY.
- ICRP (1995), Age dependent doses to members of the public from intake of radionuclides, Part 4, Inhalation Dose Coefficients. Publication 71; Ann. ICRP 25(3&4), Pergamon Press, Oxford.
- ICRP (1996), "Compilation of Ingestion and Inhalation Dose Coefficients." In *Age-dependent Doses to Members of the Public from Intake of Radionuclides: Part 5*. Annals of the ICRP Vol. 26 No. 1. ICRP No. 72 ISSN 0146-6453, Pergamon Press, Oxford.

- Isherwood, W. F., C. H. Hall, M. D. Dresen, and A. J. Boegel (1991), *CERCLA Feasibility Study Report for the LLNL Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-104040).
- Jack Faucett Associates, Inc. and SC % A, Inc. (1987), *Comparison of AIRDOS-EPA Predictions of Ground-Level Airborne Radionuclide Concentrations to Measured Values*. Jack Faucett Associates, Bethesda, MD, (JACKFAU-341/12-87).
- Jackson, C. S. (1997), Letter to the San Francisco Bay Regional Water Quality Control Board re: Lawrence Livermore National Laboratory Building 253 Catch Basin Mercury Residue, May 23, 1997.
- Lamarre, A. L., and M. J. Taffet (1989), *Firing Table Gravel Cleanup at Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10282).
- Lamarre, A. L. (2002a), *Fourth Quarter 2001 Compliance Report for the Eastern and Central General Services Area Soil Vapor and Ground Water Treatment Systems at Lawrence Livermore National Laboratory Site 300*, Livermore, CA., March 30, 2002.
- Lamarre, A. L. (2002b), *First Quarter 2002 Compliance Report for the Eastern and Central General Services Area Soil Vapor and Ground Water Treatment Systems at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, June 30, 2002.
- Lamarre, A. L. (2002c), *Second Quarter 2002 Compliance Report for the Eastern and Central General Services Area Soil Vapor and Ground Water Treatment Systems at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, September 30, 2002.
- Lamarre, A. L. (2002d), *Third Quarter 2002 Compliance Report for the Eastern and Central General Services Area Soil Vapor and Ground Water Treatment Systems at Lawrence Livermore National Laboratory Site 300*, Livermore, CA., December 30, 2002.
- Lamarre, A. L. (2002e), *Fourth Quarter 2001 Compliance Report for the Building 834 Ground Water Treatment System at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, March 30, 2002.
- Lamarre, A. L. (2002f), *First Quarter 2002 Compliance Report for the Building 834 Ground Water Treatment System at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, June 30, 2002.
- Lamarre, A. L. (2002g), *Second Quarter 2002 Compliance Report for the Building 834 Ground Water Treatment System at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, September 30, 2002.
- Lamarre, A. L. (2002h), *Third Quarter 2002 Compliance Report for the Building 834 Ground Water Treatment System at Lawrence Livermore National Laboratory Site 300*, Livermore, CA., December 30, 2002.
- Lamarre, A. L. (2002i), *Fourth Quarter 2001 Compliance Report for the Building 815 Source and Building 815 Distal Site Boundary Ground Water Treatment Systems in the High Explosives Process Area at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, March 30, 2002.
- Lamarre, A. L. (2002j), *First Quarter 2002 Compliance Report for the Building 815 Source and Building 815 Distal Site Boundary Ground Water Treatment Systems in the High Explosives Process Area at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, June 30, 2002.
- Lamarre, A. L. (2002k), *Second Quarter 2002 Compliance Report for the Building 815 Source and Building 815 Distal Site Boundary Ground Water Treatment Systems in the High Explosives Process Area at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, Septemeber 30, 2002.
- Lamarre, A. L. (2002l), *Third Quarter 2002 Compliance Report for the Building 815 Source and Building 815 Distal Site Boundary Ground Water Treatment Systems in the High Explosives Process Area at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, December 30, 2002.

- Lamarre, A. L. (2002m), *Fourth Quarter 2001 Compliance Report for the Building 832 Canyon and the Building 854 Operable Units (OUs) at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, March 30, 2002.
- Lamarre, A. L. (2002n), *First Quarter 2002 Compliance Report for the Building 832 Canyon and the Building 854 Operable Units (OUs) at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, June 30, 2002.
- Lamarre, A. L. (2002o), *Second Quarter 2002 Compliance Report for the Building 832 Canyon and the Building 854 Operable Units (OUs) at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, September 30, 2002.
- Lamarre, A. L. (2002p), *Third Quarter 2002 Compliance Report for the Building 832 Canyon and the Building 854 Operable Units (OUs) at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, December 30, 2002.
- Larson, J. M., A. H. Biermann, R. J. Harrach, P. E. Althouse, N. A. Bertoldo, R. G. Blake, E. R. Brandstetter, S. L. Brigdon, R. A. Brown, E. Christofferson, K. J. Folks, G. M. Gallegos, L. M. Garcia, T. A. Giesing, A. R. Grayson, L. C. Hall, D. H. MacQueen, S. Mathews, S. R. Peterson, M. J. Taffet, P. J. Tate, R. J. Vellinger, R. J. Ward, and R. A. Williams (2000), *Environmental Report 1999*, Lawrence Livermore National Laboratory, Livermore, CA, (UCRL-50027-99), <http://www.llnl.gov/saer>.
- LLNL (1998), *Livermore Big Trees Park 1998 Sampling Plan*, Lawrence Livermore National Laboratory, Livermore, CA, (UCRL-ID-130551).
- LLNL (2001), *Post-Closure Permit Application for the Building 829 HE Open Burn Facility—Volume I*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-139697).
- LLNL (2002) *ES&H Manual*, Volume III, Document 32.4, “Discharges to the Sanitary-Sewer System,” Lawrence Livermore National Laboratory, Livermore, CA. (November 22, 2002) [http://www.llnl.gov/es\\_and\\_h/hsm/doc\\_32.04/doc32-04.html](http://www.llnl.gov/es_and_h/hsm/doc_32.04/doc32-04.html) .
- LLNL (2003), Personal communication with Jim Woolett and Michael van Hattem, wildlife biologists, Lawrence Livermore National Laboratory, Livermore, CA.
- Limnion Corporation, The (1991), *The Drainage Retention Basin Management Plan*, Lawrence Livermore National Laboratory, Livermore, CA.
- Longley, K. E., H. V. Johns, and H. Abraham (1994), *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region, Sacramento and San Joaquin River Basins*, Central Valley Regional Water Control Board, Sacramento, CA.
- MacQueen, D. H. et al., (2002),
- MacQueen, D. H. (1995), *Livermore Big Trees Park January 1995 Soil Survey Results*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-121045).
- Madrid, V., L. Ferry, A. Ritcey, J. Valett, and M. Verce (2002), *Final Interim Remedial Design for the High Explosives Process Area Operable Unit at Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-147095).
- Marshack, J.B. (2000), *A Compilation of Water Quality Goals*, California Environmental Protection Agency Regional Water Quality Control Board, Central Valley Region, August 2000.
- Mathews, S. (2000), *Lawrence Livermore National Laboratory Site 300 Water Suppliers’ Pollution Prevention and Monitoring and Reporting Program*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-139704).
- Mathews, S., and M. Taffet (1997), *Final Closure Plan for the High-Explosives Open Burn Facility at Lawrence Livermore National Laboratory Experimental Test Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-111753 Rev. 1).

- McFarlane, J.C., R. D. Rogers, and D. V. Bradley (1978), Environmental tritium oxidation in surface soil. *Environmental Science and Technology*, **12**, no. 5: 590-593.
- Moore, R. E., C. F. Baes, III, L. M. McDowell-Boyer, A. P. Watson, F. A. Hoffman, J. C. Pleasant, and C. W. Miller (1979), *AIRDOS-EPA: A Computerized Methodology for Estimating Environmental Concentrations and Dose to Man from Airborne Releases of Radionuclides*. Oak Ridge National Laboratory, Oak Ridge, TN (ORNL-5532).
- Napier, B.A., R. A. Peloquin, D. L. Streng, J. V. Ramsdell (1988) *GENII - the Hanford environmental radiation dosimetry software system*. Pacific Northwest Laboratory, Richland, WA, (PNL-6584 Vol. UC-60).
- NCRP (1987a), *Recommendations on Limits of Exposure to Ionizing Radiation*, Report No. 91, National Council on Radiation Protection and Measurements, Washington, DC.
- NCRP (1987b), *Ionizing Radiation Exposure of the Population of the United States*, Report No. 93, National Council on Radiation Protection and Measurements, Washington, DC.
- NCRP (1999), *Recommended Screening Limits for Contaminated Surface Soil and Review of Factors Relevant to Site-Specific Studies*, Report No. 129, National Council on Radiation Protection and Measurements, Bethesda, MD.
- Oak Ridge Institute for Science and Education (1995), *Atmospheric Dispersion Modeling Resources*, Second Edition.
- Orloff, S. (1986), *Wildlife Studies of Site 300 Emphasizing Rare and Endangered Species, Lawrence Livermore National Laboratory, San Joaquin County, California*. BioSystems Analysis, In., Sausalito, CA.
- Osborne, R. V. (1968), "Intake of Tritium When Skin Is Splashed with Tritiated Water." *Health Physics*, **15**:155–156.
- Parks, B. S. (1997), *CAP88-PC Version 2.0 User's Guide*. U.S. Department of Energy, Germantown, MD, (ER-8/GTN).
- Parks, B. S. (1992), *User's Guide for CAP88-PC, Version 1.0*, U.S. Environmental Protection Agency, Office of Radiation Programs, Las Vegas, NV (EPA 402-B-92-001).
- Pendleton, B., A. Giron, B. A. Millsap, K. W. Cline, and D. M. Bird, eds. (1987), *Raptor Management Techniques Manual*, National Wildlife Federation, Washington, DC.
- Peterson, S-R. (2003), *Testing CAP88-PC's Predicted Air Concentrations Against Historical Air Tritium Monitoring Data, 1986 – 2001, at Lawrence Livermore National Laboratory*. Lawrence Livermore National Laboratory, Livermore, CA. (In draft).
- Peterson, S-R., and P. A. Davis (2002), "Tritium Doses from Chronic Atmospheric Releases: A New Model Proposed for Regulatory Compliance." *Health Physics*. (UCRL-JC-141535).
- Peterson, W. B., and L. G. Lavdas (1986), "INPUFF 2.0—A Multiple Source Gaussian Puff Dispersion Algorithm," In *User's Guide*, U.S. Environmental Protection Agency, Research Triangle, NC.
- Preston, R.E. (2002a), *Special-status plant species surveys and vegetation mapping at Lawrence Livermore National Laboratory*, Jones and Stokes, Sacramento, CA.
- Preston, R.E. (2002b), *Delineation of Waters of the United States for Lawrence Livermore National Laboratory, Site 300*, Jones and Stokes, Sacramento, CA.
- Raber, E., and D. W. Carpenter, eds. (1983), *An Evaluation of the Hydrogeology and Groundwater Chemistry Associated with Landfills at LLNL's Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-53416).
- Raber, E., and Gilbert, K. V. (2001a), *Annual Hazardous Waste Report—Mainsite*, Lawrence Livermore National Laboratory, Livermore, CA.



- Raber, E., and Gilbert, K. V. (2001b), *Annual Hazardous Waste Report—Site 300*, Lawrence Livermore National Laboratory, Livermore, CA.
- Rainey, B. (2003), Personal communication with Lisa Paterson, July 2003.
- Revelli, M. A. (2003), *Lawrence Livermore National Laboratory Site 300—Compliance Monitoring Program for the Closed Building 829 Facility—Annual Report 2002*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-143121-02).
- Rogers/Pacific Corporation (1990), *Lawrence Livermore National Laboratory Site 300 Resource Conservation and Recovery Act Closure and Post-Closure Plans—Landfill Pits 1 and 7*, Vols. I and II, Van Nuys, CA (California EPA No. CA2890090002).
- SFBRWQCB (1982a), *Water Quality Control Plan, San Francisco Bay Basin*, State of California, San Francisco Bay Regional Water Quality Control Board, Oakland, CA.
- SFBRWQCB (1982b), *Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for: U.S. Department of Energy and Lawrence Livermore National Laboratory*, San Francisco Bay Regional Water Quality Control Board, Oakland, CA. (Order No. 95-174, NPDES No. CA030023).
- SFBRWQCB (1995), *Water Quality Control Plan, San Francisco Bay Basin*, State of California, San Francisco Bay Regional Water Quality Control Board, Oakland, CA.
- SFBRWQCB (1996), Letter from Loretta Barsamian and Richard McMurtry, SFRWQCB Executive Officer and Ground Water Protection and Waste Containment Division Chief, respectively, to Paul Ko, DOE Project Manager, stating that no further remedial action related to the fuel hydrocarbons is required, dated October 30, 1996.
- Scheffé, H. (1953), “A Method for Judging All Contrasts in the Analysis of Variance,” *Biometrika*, **40**: 87-104.
- Schemnitz, S. D., ed. (1980), *Wildlife Management Techniques Manual*, The Wildlife Society, Washington, DC.
- Shleien, B., and M. S. Terpilak (1984), *The Health Physics and Radiological Health Handbook*, Nucleon Lectern Associates, Inc., Olney, MD.
- Silver, W. J., C. L. Lindeken, J. W. Meadows, W. H. Hutchin, and D. R. McIntyre (1974), *Environmental Levels of Radioactivity in the Vicinity of the Lawrence Livermore Laboratory, 1973 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-51547).
- Silver, W. J., C. L. Lindeken, J. W. Meadows, W. H. Hutchin, and D. R. McIntyre (1975), *Environmental Monitoring at the Lawrence Livermore Laboratory, 1974 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-74).
- Silver, W. J., C. L. Lindeken, K. M. Wong, E. H. Willes, and J. H. White (1978), *Environmental Monitoring at the Lawrence Livermore Laboratory, 1977 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-77).
- Silver, W. J., C. L. Lindeken, J. H. White, and R. W. Buddemeir (1980), *Environmental Monitoring at the Lawrence Livermore Laboratory, 1979 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-79).
- State of California (2002), *E-1 City/County Population Estimates, with Annual Percent Change, January 1, 2001 and 2002*, Department of Finance, Sacramento, California, May 2002.
- Struckmeyer, R. (1994), *NRC TLD Direct Radiation Monitoring Network, Progress Report, July-September, 1994*, Nuclear Regulatory Commission, Washington, DC (NUREG-0837, Vol. 14, No. 3).

- Surano, K.A, G. B. Hudson, R. A. Failor, J. M. Sims, R. C. Holland, S. C. MacLean, and J. C. Garrison (1992), Helium-3 mass spectrometry for low-level tritium analysis of environmental samples. *J. of Radioanalytical and Nuclear Chemistry*, **161**, no. 2: 443-453.
- Swaim, K. (2002), *Results of surveys for special status reptiles at the Site 300 facilities of Lawrence Livermore National Laboratory*, Swaim Biological Consulting, Livermore, CA.
- Sweet, C.W., and C. E. Murphy, Jr. (1984), Tritium deposition in pine trees and soil from atmospheric releases of molecular tritium. *Environmental Science and Technology*, **18**: 358.
- SWRCB (1999), *Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity*. NPDES General Permit No. CAS000002 (Order No. 99-08-DWQ).
- SWRCB (2001), *Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRQB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction Activity*, State Water Resources Control Board Resolution No. 2001 - 046, April 26, 2001.
- Taffet, M. J., L. Green-Horner, L. C. Hall, T. M. Carlsen, and J. A. Orberdorfer (1996), *Addendum to Site-Wide Remedial Investigation Report, Building 850/Pit 7 Complex Operable Unit, Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-108131, Add. 1).
- Tate, P., S. Mathews, G. Gallegos, L. M Garcia, J. M. Larson, A. H. Biermann, E. R. Brandstetter, E. Christofferson, R. J. Harrach, D. Rueppel, F. Gouveia, P. Althouse, B. C. Fields, D. MacQueen, R. A. Brown, R. Vellingner, K. A. Surano, K. J. Folks, S. L. Brigdon, A. L. Grayson, W. G. Hoppes, R. L. Welsh, N. A. Bertoldo, G. J. Cannon, R. L. Berger, R. G. Blake, M. J. Taffet, R. A. Failor, and C. Choate (1999), *Environmental Monitoring Plan*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-ID-106132 Rev. 2).
- Thorpe, R. K., W. F. Isherwood, M. D. Dresen, and C. P. Webster-Scholten (1990), *CERCLA Remedial Investigation Report for the LLNL Livermore Site*, Vols. 1-5, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10299).
- Toy, A. J., C. L. Lindeken, K. S. Griggs, and R. W. Buddemeier (1981), *Environmental Monitoring at the Lawrence Livermore National Laboratory, 1980 Annual Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-50027-80).
- U.S. DOE (1988), *External Dose-Rate Conversion Factors for Calculation of Dose to the Public*, U.S. Department of Energy, Washington, DC (DOE/EH-0070).
- U.S. DOE (1991), *Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance*, U.S. Department of Energy, Washington, DC (DOE/EH-0173T).
- U.S. DOE (1993), *Record of Decision for the Lawrence Livermore National Laboratory Livermore Site*, U.S. Department of Energy, Washington, DC (UCRL-AR-109105).
- U.S. DOE (2002), *A Graded Approach for Evaluating Radiation Doses to Aquatic and Terrestrial Biota*, U.S. Department of Energy, Washington, DC, (DOE-STD-1153-2002).
- U.S. DOE and UC (1992a), *Final Environmental Impact Statement and Environmental Impact Report for Continued Operation of Lawrence Livermore National Laboratory and Sandia National Laboratories, Livermore*, Lawrence Livermore National Laboratory, Livermore, CA (DOE/EIS-0157, SCH90030847).
- U.S. DOE and UC (1992b), *Final Environmental Impact Statement and Environmental Impact Report Executive Summary*, Lawrence Livermore National Laboratory, Livermore, CA (DOE/EIS-0157).
- U.S. EPA (1987), *Data Quality Objectives for Remedial Response Activities: Development Process*, U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC (EPA 540/G-87/003, OSWER Directive 9355-0).

- U.S. EPA (1993), *Supplement B to the Guideline on Air Quality Models (Revised)*, U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC (EPA Report No. EPA-450/2-78-027R Supplement B).
- U.S. EPA (2000), "Notice: Final Reissuance of National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for Industrial Activities," Environmental Protection Agency, Federal Register, Volume 65, No. 210 (October 30, 2000).
- U.S. NRC (1977), *Calculation of Annual Doses to Man from Routine Releases of Reactor Effluent for the Purpose of Evaluation Compliance with 10 Code of Federal Regulations, Part 50, Appendix I*, U.S. Nuclear Regulatory Commission, Washington, DC (Regulatory Guide 1.109).
- USFWS (1998), *Recovery Plan for Upland Species of the San Joaquin Valley, California*, U.S. Department of the Interior, Fish and Wildlife Service, Region 1, Portland Oregon, 319 pp.
- USFWS (2000), "Endangered and threatened wildlife and plants; final determination of critical habitat for the Alameda whipsnake (*Masticophis lateralis euryxanthus*)," Federal Register 65(192) 58933- 58962.
- USFWS (2001), "Final determination of critical habitat for the California red-legged frog," Federal Register 66(49) 14626-14758.
- USFWS (2002). Sacramento Fish and Wildlife Office California red-legged frog recovery. Available at: <http://sacramento.fws.gov/es/herps/crf.htm>, Accessed December 30,2002.
- van Hattem, M. (2003a), *The current and historical distribution of special status amphibians at the Livermore site and Site 300*, Lawrence Livermore National Laboratory, Livermore, CA.
- van Hattem, M. (2003b), *LLNL avian monitoring program variable circular plot point count and constant effort mist netting*, Lawrence Livermore National Laboratory, Livermore, CA.
- Vancheeswaran, S, S. Yu, P. Daley, R. U. Halden, K. J. Williamson, J. D. Ingle Jr, and L. Semprini (2002), *Anaerobic Biotransformation of Trichloroethene Driven by Tetraalkoxysilanes at Site 300*, Lawrence Livermore National Laboratory, CA, Oregon State University, (in press-Remediation Journal).
- Weber, W. (2002), *2001-2002 Wet Season Branchiopod Survey Report*, University of California, Lawrence Livermore National Laboratory, Site 300, Alameda and San Joaquin Counties. Condor Country Consulting. Hayward, CA.
- Webster-Scholten, C. P., and C. H. Hall (1988), *Work Plan, Lawrence Livermore National Laboratory, Livermore Site: CERCLA/SARA Remedial Investigations/ Feasibility Studies*, Lawrence Livermore National Laboratory, Livermore, CA (UCAR-10225).
- Webster-Scholten, C. P., ed. (1994), *Final Site-Wide Remedial Investigation Report, Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-108131).
- West, E. (2002), *Small Mammal Inventory at Lawrence Livermore National Laboratory, Site 300*, Jones & Stokes, Sacramento, CA.
- Ziagos and Ko (1997), *Treatability Study Report for the Building 832 Canyon Operable Unit at Lawrence Livermore National Laboratory Site 300*, Livermore, CA, March, 1997.
- Ziagos, J., and E. Reber-Cox (1998), *Ground Water Tritium Plume Characterization Summary Report for the Building 850/Pits 3 and 5 Operable Unit, Lawrence Livermore National Laboratory Site 300*, Livermore, CA, October 30, 1998.

