

REFERENCES

**Partial List of References and Background Documents
for
Site Characterizations/Remedial Actions
in the
Los Angeles Region**

GENERAL REFERENCES

State Water Laws

- Porter-Cologne Water Quality Act, Section 13000 et seq.
- California Safe Drinking Water and Toxic Enforcement Act of 1986 (a.k.a. Proposition 65)
- California Safe Drinking Water Act of 1989

California Health and Safety Code (H&SC)

- Division 20, Chapter 6.5 -- Hazardous Waste Control
- Division 20, Chapter 6.7 -- Underground Storage of Hazardous Substances
- Division 20, Chapter 6.75 --Petroleum Underground Storage Tank Cleanup

California Code of Regulations (CCR)

- Title 22, Division 4, Chapters 15, 16, and 17 -- California Drinking Water Quality Standards
- Title 22, Division 4 5, Environmental Health Standards for the Management of Hazardous Waste
- Title 23, Division 3, Chapter 15 -- Discharges of Waste to Land
- Title 23, Division 3, Chapter 16 -- Underground Tank Regulations

Los Angeles County Department of Public Works (DWP)

- County Code, Title 11, Division 4 -- Underground Storage of Hazardous Materials, September 1984. as revised

Los Angeles City Fire Department

- Los Angeles Municipal Code, Article 7, Chapter 5, Section 57.31.30 et seq. -- Underground Tanks
- F.P.B. Requirement No. 41, Abandonment of Underground Storage Tanks, 29 July 1992
- Minimum Requirements for Site Assessment, October 1988
- Guidance for Site Mitigation Workplans, September 1992

Ventura County, Resources Agency, Environmental Health Division

- Underground Storage Tank Compliance Manual, January 1992
- Leaking Underground Fuel Tank Manual, September 1993

State Water Resources Control Board

- Resolution No. 68-16 -- Statement of Policy with Respect to Maintaining High Quality of Waters in California
- Resolution No. 88 63 -- Adoption of Policy Entitled "Source of Drinking Water"
- Resolution No. 92-49 -- Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304
- Leaking Underground Fuel Tank (LUFT) Field Manual, December 1987 (revised October 1989) -- currently under revision

California Regional Water Quality Control Board (Los Angeles Region)

- Basin Plans for the Los Angeles Region, adopted in 1975 (amended in 1978, 1990, 1991, and 1994)
- Draft Update, Water Quality Control Plan, Los Angeles Region (4), Santa Clara River and Los Angeles River Basins
- Order No. 90-148 -- Land Treatment of Petroleum Hydrocarbon Contaminated Soil in Los Angeles and Santa Clara River Basins

- Order No. 91-92 -- General NPDES Permit and Waste Discharge Requirements for Discharges of Groundwater to Surface Waters in Los Angeles and Santa Clara River Basins
- Order No. 91-93 -- General Waste Discharge Requirements for Discharge of Non-Hazardous Contaminated Soils and Other Wastes in Los Angeles and Santa Clara River Basins
- Order No. 91-111 -- General NPDES Permit and Waste Discharge Requirements for Discharges of Hydrostatic Test Water to Surface Waters in Los Angeles and Santa Clara River Basins
- Order No. 92-091 -- General NPDES Permit and Waste Discharge Requirements for Discharge of Groundwater from Investigation and/or Cleanup of Petroleum Fuel Pollution to Surface Waters in Los Angeles and Santa Clara River Basins
- Order No. 93-010 -- General Waste Discharge Requirements for Specified Discharges to Groundwater in Santa Clara River and Los Angeles River Basin

California Regional Water Quality Control Board (Central Valley Region)

- Marshack, Jon. B. The Designated Level Methodology for Waste Classification and Cleanup Level Determination, October 1986, updated June 1989
- Marshack Jon B, A Compendium of Water Quality Goals, September 1991.
- Marshack, Jon B. Water Quality Goals for Components of Petroleum Based Fuels in "MUN" Designated Waters, 13 May 1993.

California Environmental Protection Agency, Department of Toxic Substances Control (DTSC)

- Hazardous Waste Testing Laboratory Certification List, Hazardous Materials Laboratory Section, Berkeley, California
- California Site Mitigation Decision Tree Manual, May 1986
- Scientific and Technical Standards for Hazardous Waste Sites, August 1990
- Integrated Site Mitigation Process, August 1991 (draft final)
- Waste Classification Regulation Guidance Manual, 1 October 1993
- Preliminary Endangerment Assessment Guidance Manual, January 1994

- Health-Based Soil Screening Levels (HBSSLs), January 1994

California Department of Water Resources

- Water Well Standards. Bulletins 74-81 and 74-90

San Diego County Environmental Health Services

- Site Assessment & Mitigation (SAM) Manual, 1993

United States Environmental Protection Agency (USEPA)

- Superfund Public Health Evaluation Manual, EPA/540/1 86/060 (OSWER Directive 9285.4-1), 1986
- A Compendium of Superfund Field Operations Methods, EPA/540/P-87/001 (OSWER Directive 9355.0-14), 1987
- Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, EPA/540/G-89/004 (OSWER Directive 9355.3-01), 1988
- Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW 846, 1991
- Technologies and Options for UST Corrective Actions: Overview of Current Practice, EPA/542/R-92/010, August 1992
- Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA, EPA540-R93-057, 1993
- Region IX Preliminary Remediation Goals (PRGs), draft March 1993

American Society of Testing and Materials (ASTM)

- Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites, Draft, 6 January 1994.

LOS ANGELES AREA AND VENTURA COUNTY AREA GEOLOGY AND HYDROGEOLOGY BACKGROUND DOCUMENTS

- USGS 7.5 Minute Topographic Maps
- Los Angeles County Flood Control District Groundwater Elevation Maps

Los Angeles County

- Blevins, M. L. 1993. Watermaster Service in the Upper Los Angeles River Area, Los Angeles County. 66 pp. plus appendixes.
- California State Board of Water Resources. 1952. Central Basin Investigation - Lower Los Angeles and San Gabriel Rivers Area, County of Los Angeles. Bulletin No. 8. 32 pp. and 7 plates.
- Convey, B. L. 1967. Early Pliocene Sedimentary History of the Los Angeles Basin, California. California Division of Mines and Geology Special Report 93. 62 pp. and 4 plates.
- Crowell, John C. 1975. San Andreas Fault in Southern California: A guide to San Andreas Fault from Mexico to Carrizo Plain. CDMG Special Report No. 118. 272 pp.
- Department of Water Resources. 1961. Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County. Appendix A Ground Water Geology. Bulletin 104.
- Department of Water Resources. 1964. Ground Water Occurrence and Quality, Lahontan Region (South). Bulletin No. 106 1.
- Department of Water Resources. 1965. Water Well Standards: Central, Hollywood, Santa Monica Basins, Los Angeles County. Bulletin No. 74-4.
- Department of Water Resources. 1966. Planned Utilization of Ground Water Basins, San Gabriel Valley. Appendix A: Geohydrology. Bulletin No. 104 2.
- Department of Water Resources. 1971. Meeting Water Demands in the Raymond Basin Area. Bulletin No. 104-6.
- Department of Water Resources. 1980. Planned Utilization of Water Resources in Antelope Valley. District Report. 56 pp.

- Department of Water Resources. Watermaster Service in the West Coast Basin, Los Angeles County.
 - October 1, 1980 - June 30, 1981
 - July 1, 1981 - June 30, 1982
 - July 1, 1982 - June 30, 1983
 - July 1, 1984 - June 30, 1985
- Department of Water Resources. Watermaster Service in the Central Basin, Los Angeles County.
 - October 1, 1978 - September 30, 1979
 - July 1, 1983 - June 30, 1984
 - July 1, 1984 - June 30, 1985
- Dibblee, T. W., Jr. 1989. Geologic Map of the Los Angeles Quadrangle, Los Angeles County, California. Dibble Geological Foundation. Scale 1:24,000.
- Duell, Lowell, F. W. Jr. 1987. Geohydrology of the Antelope Valley Area, California, and Design for a Groundwater Quality Monitoring Network. USGS Water Resources Investigations Report 84 4081. 72 pp. plus plates.
- Durham, D. L. and R. F. Yerkes. 1964. Geology and Oil Resources of the Eastern Puente Hills Area, Southern California. U.S. Geological Survey Professional Paper 420-B. 61 pp and 4 plates.
- Eckis, R. 1934. South Coastal Basin Investigation, Geology and Ground-water Storage Capacity of Valley Fill. California Division of Water Resources, Bulletin No. 45. 279 pp.
- Hill, R. L. and Others. 1979. Earthquake Hazards Associated with Faults in the Greater Los Angeles Metropolitan Area, Los Angeles County, California. Including Faults in the Santa Monica - Raymond, Verdugo-Eagle Rock, and Benedict Canyon Fault Zones. California Division of Mines and Geology Open-File Report 79-16.
- Hoots, H. W. 1931. Geology of the Eastern Part of the Santa Monica Mountains, Los Angeles County, California. USGS Professional Paper No. 165-C. pp. 83-134.
- Jennings, C. W. (compiler). 1962. Geologic Map of California, Long Beach Sheet. California Division of Mines and Geology. Scale 1:250,000.

- Kohler, S. L. 1982. Mineral Land Classification of the Greater Los Angeles Area. California Division of Mines and Geology. Special Report 143, Part IV. 20 pp. and 24 plates.
- Kundert, C. J. 1952. Geology of the Whittier - La Habra Area, Los Angeles County, California. CDMG Special Report 18. 22 pp. and 3 plates.
- Lamar, D. L. 1970. Geology of the Elysian Park-Repetto Hills Area, Los Angeles County, California. California Division of Mines and Geology, Special Report 101. 45 pp. and 2 plates.
- Los Angeles County Department of Public Works. 1990. San Gabriel Valley Groundwater Contours for Fall 1990. 1 sheet, 1" = 1 mile, unpublished.
- Los Angeles County Department of Public Works. 1991. Hydrologic Report 1989-90.
- Oakeshott, G. B. 1975. San Fernando, California, Earthquake of 9 February 1971. California Division of Mines and Geology Bulletin 196. 463 pp. and 5 plates.
- Poland, J. F. 1959. Hydrology of the Long Beach Santa-Ana Area, California. U.S. Geological Survey Water Supply Paper 1471. 253 pp. and 11 plates.
- Poland, J. F., A. A. Garrett, and A. Sinnotti. 1959. Geology Hydrology, and Chemical Character of Ground Waters in the Torrance-Santa Monica Area, California. US Geological Survey Water Supply Paper 1461.
- Smith, Drew P. 1984. Geology of the Northeast Quarter of the Newhall Quadrangle, Los Angeles County, California. California Division of Mines and Geology Open-File Report 84 49. 42 pp. and 1 plate.
- Smith, Drew P. 1986. Geology of the North Half of the Pasadena Quadrangle, Los Angeles County, California. California Division of Mines and Geology Open-File Report 86.4. 40 pp. and 4 plates.
- Topozada, T. R. and Others. 1988. Planning Scenario for a Major Earthquake on the Newport-Inglewood Fault Zone. CDMG Special Publication 99. 197 pp.
- Weber, F. H., Jr. and Oxlers. 1982. Slope Stability and Geology of the Baldwin Hills, Los Angeles County, California. California Division of Mines and Geology Special Report 152. 93 pp. and 2 plates.

- Weber, F. H., Jr. 1984. Geology of the Calabasas-Agoura-Eastern Thousand Oaks Area, Los Angeles and Ventura Counties, California. California Division of Mines and Geology Open file Report 84-1 LA 191 pp. and 7 plates.
- Winterer, E. L., and D. L. Durham 1962. Geology of Southeastern Ventura basin, Los Angeles County, California. U.S. Geological Survey Professional Paper 334-H. 275-356 pp.
- Yerkes, R. F., T. H. McCulloh, J. E. Schoellhamer, and J. G. Vedder. 1965. Geology of the Los Angeles Basin California - An Introduction. U.S. Geological Survey Professional Paper 420-A 55 pp. and 4 plates.
- Yerkes, R. F., J. C. Tinsley, and K M. Williams. 1977. Geologic Aspects of Tunneling in the Los Angeles Area. U.S. Geological Survey Map MF 866, 5 sheets (1:12,000) and excerpts.

Ventura County

- Department of Water Resources. 1959. Water Quality and Water Quality Problems, Ventura County Bulletin No. 75. Volume 1 - Text and Plates (195 pp. and 17 plates), Volume 2 Appendices.
- Department of Water Resources. 1965. Sea Water Intrusion: Oxnard Plain of Ventura County. Bulletin No. 63-1. Variousy paged.
- Department of Water Resources. 1967. Oxnard Basin Salinity Barrier, Ventura County: Progress Report. 132 pp. and 5 plates.
- Department of Water Resources. 1968. Santa Clara River Valley Water Quality Study. 119 pp. and 20 plates.
- Department of Water Resources. 1971. Sea Water Intrusion: Aquitards in the Coastal Groundwater Basin of Oxnard Plain, Ventura County. Bulletin No. 63-4. Variousy paged.
- Department of Water Resources. 1988. Update of Basin Plan for Piru, Sespe, and Santa Paula Hydrologic Areas. 141 pp.
- Dutcher, L. C., and R. E. Miller. 1968. Proposed Water - Resources Study of the Lower Santa Clara River - Oxnard Plain Area, California. U.S.G.S. Open File Report. 52 pp.
- French, J. J. 1980. Groundwater in the Thousand Oaks Area, Ventura County, California. U.S.G.S. Water Resources Investigations 80-63. 40 pp.

- State Water Resources Control Board. 1953. Ventura County Investigation. Bulletin No. 12. 489 pp. 4 Volumes including - Geology and Groundwater of Ventura County, California, with 5 plates.
- State Water Resources Control Board, Division of Water Rights. 1979. Oxnard Plain Groundwater Study (Staff Report), Water Code Section 2100. 68 pp.
- Tompkins, E. 1979. Preliminary Evaluation of State Water Project Groundwater Storage Program: Santa Clara River Valley Basins. Department of Water Resources, Technical Information Record No. 1610-9-J-1. 94 pp. and 8 plates.
- Weber, F. H., Jr. and Others. 1973. Geology and Mineral Resources Study of Southern Ventura County, California. California Division of Mines and Geology Preliminary Report 14. 102 pp. and 5 plates.
- Weber, F. H., Jr. 1984. Geology of the Calabasas-Agoura-Eastern Thousand Oaks area, Los Angeles and Ventura Counties, California. California Division of Mines and Geology Open file Report 84-1 LA. 191 pp. and 7 plates.
- Yerkes, R. F. and P. K Showalter. 1991. Preliminary Geologic Map of the Thousand Oaks 7.5 minute Quadrangle, Southern California. USGS Open-file Report 91-288. 10 pp., 1 sheet, 1:24,000.

HISTORICAL OPERATIONS ASSESSMENTS

Guidance

- American Society for Testing and Materials (ASTM). 1993. Standards on Environmental Site Assessments for Commercial Real Estate. E1527-93: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 24 pp.
- ASTM. 1993. Standards on Environment Site Assessments for Commercial Real Estate. E1528-93 Standard Practice for Environmental Site Assessments: Transaction Screen Process, 30 pp.
- Cahill, Lawrence B., and R. W. Kane. 1989. Environmental Audits (6th Edition), variously paged.
- Union Bank. 1994. Information Required for a Full Preliminary Site Assessment (dated 24 January 1994).

Historical Aerial Photographs

- Federal Agencies USGS-EROS Data Center, Sioux Falls, South Dakota
USDOD-Army Corps of Engineers, Los Angeles, California USDA-ASCS, Salt Lake City, Utah
- State Agencies Cal Trans, District Office, Los Angeles
- Universities/Libraries
 - University of California, Los Angeles, Department of Geography, Cartography Office A-145 Bunche Hall
 - Whittier College, Department of Geology, The Fairchild Aerial Photography Collection
 - University of California, Santa Barbara, Map and Imagery Laboratory-Library
 - Los Angeles Public Library, History Department
- Commercial Vendors (various)

GEOPHYSICAL INVESTIGATIONS

- Benson, R. C., R. A. Glaccum, and M. R. Noel. 1982. Geophysical Techniques for Sensing Buried Waste and Waste Migration, 236 pp.
- DTSC. 1994. Application of Surface Geophysics at Hazardous Substance Release Sites (draft), 19 pp.
- ERT. 1988. Applications of Geophysics in Hydrogeology and Waste Management Investigations, Redmond, Washington. 27 pp.
- Milsom, John. 1989. Field Geophysics.
- Telford, M. W., L. P. Geldart, R. E. Sheriff, and D. A. Keyes. 1976. Applied Geophysics PP-
- USGS. 1974 (reprinted 1980). Applications of Surface Geophysics to Ground-Water Investigations, 116 pp.

- Ward, S. H. 1990. Geotechnical and Environmental Geophysics, Volume I, review and tutorial. Society of Exploration Geophysicists, Tulsa, Oklahoma.

SOIL GAS AND SOIL INVESTIGATIONS

Agency Guidance and Procedures

- DTSC. 1994. Drilling, Coring, Sampling, and Logging at Hazardous Substance Release Sites(draft), 27 pp.
- DTSC. 1994. Application of Borehole Geophysics at Hazardous Substance Release Sites(draft), 23 pp.
- Los Angeles County Department of Health Services/Los Angeles County Fire Department. 1991. Guidance for Site Mitigation Workplans.
- RWQCB. 1994. Workplan Requirements for Initial Subsurface Engineering/Geologic Soil Investigation (Well Investigation Program).
- RWQCB. 1992. Quality Assurance/Quality Control Guidance Document for Well Investigation Program – San Gabriel and San Fernando Basins.
- RWQCB. 1996. Work Plan Requirements for Active Soil Gas Investigation.

Other sources

- DTSC. 1990. Scientific and Technical Standards for Hazardous Waste Sites. Volume I: Site Characterization. August 1990 (draft).
- Godoy, Franco E., and David S. Naleid. 1990. Optimizing the Use of Soil Gas Surveys. In: Hazardous Materials Control, September-October 1990, 23-29 pp.
- Marks, Barbara J., and Mohindar Singh. 1990. Comparison of Soil-Gas, Soil, and Groundwater Contaminant Levels of Benzene and Toluene. In: Hazardous Materials Control, November December 1990, 40-46 pp.
- Marrin, Donn L. 1987. Soil Gas Sampling Strategies: Deep vs. Shallow Aquifers. In: Proceedings of First National Outdoor Action Conference on Aquifer Restoration, GroundWater Monitoring and Geophysical Methods. May 18 21, 1987. Tropicana Hotel, Las Vegas, Nevada.
- USEPA. 1983. Preparation of Soil Sampling Protocol: Techniques and Strategies.

- USEPA. 1985. Verification of PCB Spill Cleanup By Sampling and Analysis.
- USEPA. 1986. Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup.
- USEPA. 1987. Soil-Gas Sensing for Detection and Mapping of Volatile Organics. EPA S1-K 92-071.
- USEPA. 1987. A Compendium of Superfund Field Operations Methods.
- USEPA. 1987. Processes Affecting Subsurface Transport of Leaking Underground Tank Fluids. EPA 600-S-87 005.
- USEPA. 1987. Data Quality Objectives for Remedial Response Activities Development Process.
- USEPA. 1989. Soil Sampling Quality Assurance User's Guide. Second Edition.
- USEPA. 1990. Quality Assurance/Quality Control Guidance for Removal Activities. Sampling QA/QC Plan and Data Validation Procedures.
- USEPA. 1991. Test Methods For Evaluating Solid Waste Physical/Chemical Methods, SW846, Third Edition. Chapter 9. Sampling Plan.

GROUNDWATER MONITORING AND WELL INSTALLATION

Agency Guidelines

- DPW. 1994. Guidelines for Report Submittals, Appendix E. Well Construction.
- DTSC. 1986. California Site Mitigation Decision Tree Manual.
- DTSC. 1990. Scientific and Technical Standards for Hazardous Waste Sites. Volume 1: Site Monitoring Wells and Piezometers at Hazardous Waste Sites (draft).
- DTSC. 1994. Aquifer Testing for Hydrogeologic Characterization (draft), 29 pp.
- DTSC. 1994. Monitoring Well Design and Construction for Hydrogeologic Characterization(draft), 43 pp.
- DTSC. 1994. Representative Sampling of Ground Water for Hazardous Substances (draft), 34 pp.

- DWR -- Water Well Standards. Bulletins 74-81 and 74-90.
- RWQCB -- Supplementary Subsurface Investigation (Well Investigation Program). Monitoring Well Construction/Development
- USEPA. 1986 (currently being revised). RCRA Ground Water Monitoring Technical Enforcement Guidance Document (TEGD).

Other references

- Driscoll, Fletcher G. 1986. Groundwater and Wells. Second Edition. Johnson Division, St. Paul, Minnesota, 1,109 pp.
- Fetter, C. W. 1988. Applied Hydrogeology. Second Edition. Merrill Publishing Company, Columbus, Ohio, 592 pp.
- Fetter, C. W. 1993. Contaminant Hydrogeology. Macmillian Publishing Company, New York, 458 pp.
- Freeze, R. Allan, and John A. Cherry. 1979. Groundwater. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 604 pp.
- Nielsen, David M. (ed.). 1991. Practical Handbook of Ground-Water Monitoring. Lewis Publishers, Chelsea, Michigan. 717 pp.
- USEPA. 1989. Handbook of Suggested Practices for the Design and Installation of GroundWater Monitoring Wells. EPA 600/4-89/034.
- USEPA. 1991. Ground Water Issue: Dense nonaqueous Phase Liquids. EPA/540/4-91 002.

REMEDIATION

- DTSC. 1991. Remedial Technology Applications Matrix for Soils and Sludges. Prepared by Remedial Technology Unit, Alternative Technology Division, 16 pp.
- Kostecki, Paul T., and Edward J. Calabrese. 1989. Petroleum Contaminated Soils; 3 Volumes. Lewis Publishers, Cheslea, Michigan.
- Lyman, Warren J., David C. Noon, and Patrick J. Reidy. 1990. Cleanup of Petroleum Contaminated Soils at Underground Storage Tanks. Noyes Data Corporation, Park Ridge, New Jersey.

- Nyer, Evan K 1985. Groundwater Treatment Technology. Van Nostrand Reinhold, New York, 188 pp.
- Sims, Ronald C. 1990. Soil Remediation Techniques at Uncontrolled Hazardous Waste Sites: A Critical Review in Journal of Air Waste Management Association, Vol. 40, No. 5, 704 732 PP
- Testa, Stephen M., and Duane L. Winegardner.1991. Restoration of Petroleum-Contaminated Aquifers. Lewis Publishers, Chelsea, Michigan, 269 pp.
- USEPA. 1985. Remedial Action at Waste Disposal Sites. EPA/625/6-85/006.
- USEPA. 1988. Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites. EPA/540/G-88/003.
- USEPA. 1988. Technology Screening Guide for Treatment of CERCLA Soils and Sludges. EPA/540/2-88/004.
- USEPA. 1989. Evaluation of Ground-Water Extraction Remedies. EPA/540/2-89/054.
- USEPA. 1989. Guide for Conducting Treatability Studies Under CERCLA Interim Final. EPA/540/2-89/058.
- USEPA. 1990. Basics of Pump-and-Treat Ground-Water Remediation Technology. EPA/600/890/003.
- USEPA. 1990. Subsurface Contamination Reference Guide. EPA/540/2-90/011.
- USEPA. 1990. Handbook on In Situ Treatment of Hazardous Waste-Contaminated Soils. EPA/540/2-90/002.
- USEPA. 1991. Soil Vapor Extraction Technology Reference Handbook. EPA/540/2-91/003.

Computer Data Bases

- ATTIC. USEPA Alternative Technology Treatment Information Center. On-line computer data base.
- CLU-IN. USEPA Clean-up Information Bulletin Board. On-line computer data base.

- RREL. USEPA Risk Reduction Engineering Laboratory Treatability Data Base. Available on computer diskette from USEPA Risk Reduction Engineering Laboratory.
- VISITT. USEPA Vendor Information System for Innovative Treatment Technologies. Available on computer diskette from National Center for Environmental Publications Information.

Computer Programs

- HASP. Health and Safety Plan (HASP) User's Guide. USEPA Publication 9285-8-01, March 1992.
- HYPERVENTILATE. Decision-Support Software for Soil Vapor Extraction Technology Application. EPA/600/R-93/028. February 1993.
- CORA, Cost of Remedial Action Model. USEPA Office of Emergency and Remedial Response, Washington, D.C. Available through CH2M Hill, Herndon, Virginia.

FATE AND TRANSPORT MODELING

- DTSC. 1990. Scientific and Technical Standards for Hazardous Waste Sites (draft). Volume 2: Exposure Assessment Volume 3: Toxicity Assessment and Risk Characterization Volume 4: Soil Remediation Levels
- DTSC. 1992. Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities.
- DTSC. 1994. Preliminary Endangerment Assessment Guidance Manual (January 1994).
- Fitchko, J. 1989. Criteria for Contaminated Soil/Sediment Cleanup. Pudvan Publishing Company, Nonhbrook, Illinois.
- SCAQMD. 1987. CAPCOA Manual: Toxic Air Pollutant Source Assessment Manual.
- USEPA. 1986. Superfund Risk Assessment Information Directory. EPA/540/1-86/061.
- USEPA. 1986. Superfund Public Health Evaluation Manual. EPA/540/1-86/060.
- USEPA. 1988. Superfund Exposure Assessment Manual. EPA/540/1-88/001.

- USEPA. 1989. Risk Assessment Guidance for Superfund. Volume 1: Human Health Evaluation Manual (Part A). EPA/540/1-89/002.
- USEPA. 1991. Risk Assessment Guidance for Superfund. Volume I - Human Health Evaluation Manual (Part B, Development of Risk - Based Preliminary Remediation Goals). OSWER Directive 9285.7-01B.
- USEPA. 1991. Risk Assessment Guidance for Superfund. Volume I - Human Health Evaluation Manual (Part C, Risk Evaluation of Remedial Alternatives). OSWER Directive 9285.7-01C.
- USEPA. 1989. Risk Assessment Guidance for Superfund. Volume II: Environmental Evaluation Manual. EPA/54011-89/001.
- USEPA. 1989. Determining Soil Response Action Levels Based on Potential Contaminant Migration to Ground Water: A Compendium of Examples. EPA/540/2-89/O57.
- USEPA. 1989. Transport and Fate of Contaminants in the Subsurface. Seminar Publication. EPA/625/4-89/019.

Chemical Properties References

- Dragun, James. 1988. The Soil Chemistry of Hazardous Materials. Hazardous Materials Control Research Institute. Silver Spring, Maryland, 458 pp.
- EPRI. 1988. Chemical Data for Predicting the Fate of Organic Compounds in Water. EA 5818, Volumes 1 and 2. Electric Power Research Institute.
- Howard, Philip H. et al. 1991. Handbook of Environmental Degradation Rates. Lewis Publishers, Boca Raton, Florida, 776 pp.
- Lyman, W. J., W. F. Reehl, and D. H. Rosenblatt (eds.). 1990. Handbook of Chemical Property Estimation Methods. American Chemical Society, Washington D.C.
- Meyer, Eugene. 1989. Chemistry of Hazardous Materials. Second Edition. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 509 pp.
- Montgomey, John H., and Linda M. Welkam. 1989 and 1991. Ground Water Chemicals Desk Reference, Volumes I and II. Lewis Publishers, Chelsea, Michigan, 640 pp. and 981 pp., respectively.

- Verschueren, Karl. 1983. Handbook of Environmental Data on Organic Chemicals, Second Edition. Van Nostrand Reinhold, 1,310 pp.
- Weast, Robert C. (ed.). 1980. CRC Handbook of Chemistry and Physics. 61st Edition. CRC Press, Inc., Boca Raton, Florida.

Also information available on the following computer databases:

- ENVIROFATE - National Technical Information Service (NTIS)
- HSDB - Hazardous Substances Data Base - National Library of Medicine
- IRIS - Integrated Risk Information System - National Library of Medicine

Modeling References

- Calabrese, Edward J., and Paul T. Kostecki. 1992. Risk Assessment and Environmental Fate Methodologies. Lewis Publishers, Boca Raton, Florida, 150 pp.
- DTSC. 1994. Ground Water Modeling for Hydrogeologic Characterization (draft), 17 pp.
- Hern, Stephen C., and Susan M. Melancon. 1986. Vadose Zone Modeling of Organic Pollutants. Lewis Publishers, Chelsea, Michigan, 295 pp.
- Javandel, I., C. Doughty, and C. F. Tsang. 1984. Groundwater Transport: Handbook of Mathematical Models. American Geophysical Union, Water Resources Monograph 10, 1 p.

Analytical and Computer Models

- American Petroleum Institute (API). 1994. Decision Support System (DSS) for Risk/Exposure Assessment. Version 1.0. Distributed by Geraghty & Miller, Inc., Reston, VA (includes SESOIL and Jury unsaturated zone models, AT123D saturated zone model, and Farmer, Jury, and Thibodeaux air emission models).
- Arthur D. Little, Inc. 1984. SESOIL: A Seasonal Soil Compartment Model. NTIS, Springfield, Virginia. Developed for USEPA Office of Toxic Substances, Washington D.C., 558 pp.
- EPRI. 1989. MYGRT Code Version 2.0: An IBM Code for Simulating Migration of Organic and Inorganic Chemicals in Groundwater. Prepared by Tetra Tech, Lafayette, California, EPRI EN-6531.
- USEPA. 1983. Rapid Assessment of Potential Ground-Water Contamination Under Emergency Response Conditions. EPA 600/8-83/030.

- USEPA. 1990. VLEACH: A One-Dimensional Finite Difference Vadose Zone leaching Model, Version 2.0. USEPA Robert S. Kerr Environmental Research Laboratory, Ada, Oklahoma.
- Other models available through on-line computer databases:
 - AT123D - Groundwater model
 - EXAMS II - Surface water model
 - PRZM2 - Pesticide root zone model
 - MINTEQ - Geochemical equilibrium speciation model

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