INTRODUCTION TO GROUNDWATER INVESTIGATIONS-REFERENCES

- I. Allen, H.E., E.M. Perdue, and D.S. Brown (Eds.). *Metals in Groundwater*. Lewis Publishers, Inc. Chelsea, MI. 1993.
- Aller, L., T.W. Bennett, G. Hackett, R.J. Petty, J.H. Lehr, H. Sedoris, D.M. Nielsen, and J.H. Deanne. *Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells*. EPA 600/4-89/034. National Ground Water Association Publishers. Dublin, OH. 1989.
- 3. AIPG. *Ground Water Issues and Answers*. American Institute of Professional Geologists. Arvada, CO. 1985.
- 4. Back, W. and R.A. Freeze. *Chemical Hydrology*. Benchmark papers in Geology, v.73. Hutchinson Ross Publishing Co. Stroudsburg, PA. 1983.
- 5. Bear, J. *Dynamics of Fluids in Porous Media*. American Elsevier Publishing. New York, NY. 1972.
- 6. Bear, J. Hydraulics of Groundwater. McGraw-Hill. New York, NY. 1979.
- 7. Bear, J., D. Zaslavsky, and S. Irmay. *Physical Principles of Water Percolation and Seepage*. UNESCO. Paris, France. 1968.
- 8. Bennett, G.D. Introduction to Ground-Water Hydraulics: A Programmed Text for Self-Introduction. Techniques of Water-Resources Investigations of the United States Geological Survey. U.S. Geological Survey. Washington, DC. 1989.
- 9. Bennett, P. C., D. I. Siegel, M. J. Baedecker, and M. F. Hult. *Crude Oil in a Shallow Sand and Gravel Aquifer-!: Hydrogeology and Inorganic Chemistry*. Applied Geochemistry, v.8. Pergamon Press. Oxford, NY. 1993.
- Benson, RC., et al. Geophysical Techniques for Sensing Buried Wastes and Waste Migration. EPA 600/7-84/064. U.S. Environmental Protection Agency. Washington, DC. 1984.
- 11. Bitton, G. and C.P. Gerba. *Groundwater Pollution Microbiology*. John Wiley &Sons. New York, NY. 1984.
- 12. Bouwer, H. Groundwater Hydrology. McGraw-Hill. New York, NY. 1978.
- 13. Canter, L.W. and R.C. Knox. *Ground Water Pollution Control*. Lewis Publishers, Inc. Chelsea, MI. 1985.
- 14. Cedergren, H.R. *Seepage, Drainage and Flow Nets.* 2nd Ed. John Wiley & Sons. New York, NY. 1977.
- 15. Chapelle, Francis. Hidden Sea. Geosciences Press, Inc. Tucson, AZ. 1998
- 16. Clark, Ian D. and P. Fritz. *Environmental Isotopes in Hydrogeology*. Lewis Publishers. CRC Press. Boca Raton, FL. 1997.
- 17. Cohen, Robert M. and J. W. Mercer. *DNAPL Site Evaluation*. C. K. Smoley, Publisher. CRC Press. Boca Raton, FL. 1993.

- 18. Cole, J.A. (ed). *Groundwater Pollution in Europe*. Water Information Center, Inc. Port Washington, NY. 1974.
- 19. Collins, A.G. and A.I. Johnson (Eds.). *Ground-Water Contamination: Field Methods*. American Society for Testing and Materials. Philadelphia, PA. 1988.
- 20. Davis, S.N. and R.J.M. DeWiest. *Hydrogeology*. John Wiley & Sons. New York, NY. 1966.
- 21. Dawson, K.J. and J.D. Istok. Aquifer Testing. Lewis Publishers, Inc. Chelsea, MI. 1991.
- 22. DeWiest, R.J.M. Geohydrology. John Wiley & Sons. New York, NY. 1965.
- 23. Dobrin, M.B. Introduction to Geophysical Prospecting. McGraw-Hill. New York, NY. 1960.
- 24. Domenico, P.A. Concepts and Models in Groundwater Hydrology. McGraw-Hill. New York, NY. 1972.
- 25. Domenico, P.A. and F. W. Schwartz. *Physical and Chemical Hydrogeology*. John Wiley & Sons. New York, NY. 1990.
- 26. Dragun, J. Soil Chemist1y of Hazardous Materials. Hazardous Materials Control Research Institute. Silver Spring, MD. 1988.
- 27. Drever, J.I. *Geochemistry of Natural Waters*. 2nd Ed. Prentice-Hall, Inc. Englewood Cliffs, NJ. 1988.
- 28. Driscoll, F.G. Groundwater and Wells. 2nd Ed. Johnson Division. St. Paul, MN. 1986.
- 29. Everett, L.G., L.G. Wilson, and E.W. Hoylman. *Vadose Zone Monitoring for Hazardous Waste Sites*. Noyes Data Corporation. Park Ridge, NJ. 1984.
- 30. Faure, Gunter. Principles and Applications of Geochemistry, 2nd Ed. Prentice Hall. Upper Saddle River, NJ. 1998.
- 31. Fetter, C.W. *Applied Hydrogeology*. Charles E. Merrill Publishing Co. Columbus, OH. 1980.
- 32. Fetter, C. W. Applied Hydrogeology, 4th Ed. Prentice Hall. Upper Saddle River, NJ. 2001.
- 33. Florida DEP. *Monitoring Well Design and Construction Guidance Manual*. Florida Department of Environmental Protection, Bureau of Water Facilities Management, Tallahassee, Florida. 2008.
- 34. Freeze, R.A. and W. Back. *Physical Hydrogeology*. Benchmark Papers in Geology/v.72. Hutchinson Ross Publishing Co. Stroudsburg, PA. 1983.
- 35. Freeze, R.A. and J. Cherry. Groundwater. Prentice-Hall. Englewood Cliffs, NJ.1979.
- 36. Fried, J.J. Groundwater Pollution: Theory, Methodology, Modeling and Practical Rules Developments in Water Science. Elsevier Scientific Publishing Co. New York, NY. 1975.
- 37. Garrels, R.M. and C.L. Christ. *Solutions, Minerals, and Equilibria*. Harper and Row Corporation Publishers. New York, NY. 1987.

- 38. Gibson, U.P. and R.D. Singer. *Water Well Manual*. Number 4101. Premier Press. Berkeley, CA. 1971.
- 39. Harr, M.E. Groundwater and Seepage. McGraw-Hill. New York, NY. 1962.
- 40. Heath, R.C. *Basic Ground-Water Hydrology*. USGS Water Supply Paper 2220. U.S.Geological Survey. Washington, DC. 1987..
- 41. Heath, R.C. and F.W. Trainer. *Ground Water Hydrology*. National Ground Water Association. Dublin, OH. 1992.
- 42. Hem, J.D. *Study and Interpretation of the Chemical Characteristics of Natural Water*. USGS Water Supply Paper 2254. United States Geological Survey. Washington, DC. 1989.
- 43. Hermance, John F. A Mathematical Primer on Groundwater Flow: An Introduction to the Mathematical and Physical Concepts of Saturated Flow in the Subsurface. Prentice Hall. Upper Saddle River, NJ. 1999.
- 44. Hillel, D. Soil and Water: Physical Principles and Processes. Academic Press. New York, NY. 1971.
- 45. Hounslow, Arthur W. *Water Quality Data: Analysis and Intelpretation*. Lewis Publishers. CRC Press. Boca Raton, FL. 1995.
- 46. Johnson, A.I., C.B. Petterson, and J.L. Fulton (Eds.). *Geographic InformationSystems* (*GIS*) and *Mapping-Practices and Standards*. American Society for Testing and Materials. Philadelphia, PA. 1992.
- 47. Johnson, Richard L., S.M. Brillante, L. M. Isabelle, J. E. Houck, J. F. Pankow. *Migration of Chlorophenolic Compounds at the Chemical Waste Disposal Site at Alkali Lake, Oregon 2. Contaminant Distributions, Transport, and Retardation.* Ground Water, v. 23:5. Water Well Journal Publishing Co. Worthington, OH. 1985.
- 48. Krauskopf, K.B. Introduction to Geochemist1y. McGraw Hill, Inc. New York, NY. 1967.
- 49. Kruseman, G.P. and N.A. de Ridder. *Analysis and Evaluation of Pumping Test Data*. ILRI Publication 47. International Institute for Land Reclamation and Improvement. Wageningen, The Netherlands. 1990.
- 50. Langmuir, Donald. *Aqueous Environmental Geochemistry*. Colorado School of Mines. Prentice Hall. Upper Saddle River, NJ. 1997.
- Larkin, R.G. and J.M. Sharp, Jr. On The Relationship Between River Basin Geomorphology Aquifer Hydraulics and Ground-Water Flow Direction in Alluvial Aquifers. GSA Bulletin, v. 104, Issue 12, pp. 1608-1620. The Geological Society of America. Boulder, C0.1992.
- 52. LeBlanc, R.J. *Geometry of Sandstone Reservoir Bodies*. pp. 133-190. In: American Association of Petroleum Geologists Memoir 18. Underground Waste Management and Environmental Implications. T.D. Cook (ed). American Society of Petroleum Geologists. Tulsa, OK. 1972.
- 53. LeRoy, L.W. Substance Geologic Methods. Colorado School of Mines. Golden, CO. 1951.

- 54. Lohman, S.W. *Ground-Water Hydraulics*. USGS Professional Paper 708. U.S. Geological Survey. Washington, DC. 1979.
- 55. Lyman, W. J., W. F. Reehl, and D. H. Rosenblatt. *Handbook of Chemical Property Estimation Methods, Environmental Behavior of Organic Compounds.* American Chemical Society. Washington, D. C. 1990.
- 56. Mackay, D., W.-Y. Shiu, and K.-C. Ma. *Illustrated Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals.* Vol. I, II, and III. Lewis Publishers, Inc. Chelsea, MI. 1992.
- 57. Manahan, Stanley E. *Environmental Chemistly*. 6th Ed. Lewis Publishers. CRC Press. Boca Raton, FL. 1994.
- 58. Mandel, S. and Z.L. Shiftan. *Groundwater Resources: Investigation and Development*. Academic Press. New York, NY. 1981.
- 59. Matthess, G. The Properties of Groundwater. John Wiley & Sons, New York, NY.1982.
- 60. Mazor, E. Applied Chemical and Isotropic Groundwater Hydrology. Halsted Press. New York, NY. 1991.
- 61. McDonald, M.G. and A.W. Harbaugh. A Modular Three-Dimensional Finite-Difference Ground-Water Flow Model. Techniques of Water-Resources Investigations of the United States Geological Survey. U.S. Geological Survey. Washington, DC. 1988.
- 62. McWhorter, D. and D.K. Sunada. *Groundwater Hydrology and Hydraulics*. Water Resources Publishing. Ft. Collins, CO. 1977.
- 63. Montgomery, J.H. and L.M. Welkom. *Groundwater Chemicals Desk Reference*. Lewis Publishers, Inc. Chelsea, MI. 1990.
- 64. Morrison, R. *Groundwater Monitoring Technology*. Timco Mfg. Company. Prairie du Sac, WI. 1983.
- 65. Morrison, R.T. and R.N. Boyd. *Organic Chemistry*, 5th Ed. Allyn and Bacon, Inc. Boston, MA. 1959.
- 66. National Academy of Sciences. *Natural Attenuation for Groundwater Remediation*. National Academy Press. Washington, D. C. 2000.
- 67. Ney, R. E. Fate and Transport of Organic Chemicals in the Environment, a Practical Guide. Government Institutes, Inc. Rockville, MD. 1990.
- 68. Ney, R.E. Where Did That Chemical Go? A Practical Guide to Chemical Fate and Transport in the Environment. Van Nostrand Reinhold. New York, NY 1990.
- 69. NGWA. Summaries of State Ground Water Quality Monitoring Well Regulations by EPA Regions. National Ground Water Association. Dublin, OH. 1991.
- 70. NWWA. Selection and Installation of Well Screens and Ground Packs: An Anthology. National Water Well Association. Dublin, OH. No date.
- 71. Niaki, S. and J.A. Broscious. *Underground Tank Leak Detection Methods*. Noyes Data Corporation Publishers. Park Ridge, NJ. 1987.

- 72. Nielsen, D.M. (ed). *Practical Book of Ground-Water Monitoring*. Lewis Publishers, Inc. Chelsea, MI. 1991.
- 73. Nielsen, D.M. and A.I. Johnson (Eds.). *Ground Water and Vadose Zone Monitoring*. American Society for Testing and Materials. Philadelphia, PA. 1990.
- 74. Nielsen, D.M., R.D. Jackson, J.W. Cary, and D.D. *Evans. Soil Water*. American Society of Agronomy. Madison, WI. 1972.
- 75. Nielsen, D.M. and M.N. Sara (Eds.). *Current Practices in Ground Water and Vadose Zone Investigations*. American Society for Testing and Materials. Philadelphia, PA. 1992.
- 76. Ohio EPA. *Technical Guidance Manual for Groundwater Investigations, Chapter 7, Monitoring Well Design and Installation.* Ohio Environmental Protections Agency, Division of Drinking and Ground Waters, Columbus, Ohio, 2005.
- 77. Ohio EPA. *Technical Guidance Manual for Groundwater Investigations, Chapter 15, Use of Direct Push Technologies for Soil and Ground Water Sampling.* Ohio Environmental Protections Agency, Division of Drinking and Ground Waters, Columbus, Ohio, 2005.
- 78. Ohio EPA. *Technical Guidance Manual for Groundwater Investigations, Chapter 8, Monitoring Well Development. Maintenance and Redevelopment.* Ohio Environmental Protections Agency, Division of Drinking and Ground Waters, Columbus, Ohio, 2009.
- 79. Ohio EPA. *Technical Guidance Manual for Groundwater Investigations, Chapter 9, Sealing Abandoned Monitoring Wells and Boreholes.* Ohio Environmental Protections Agency, Division of Drinking and Ground Waters, Columbus, Ohio, 2009.
- 80. Palmer, C.M., J.L. Peterson, and J. Behnke. *Principles of Contaminant Hydrogeology*. Lewis Publishing, Inc. Chelsea, MI. 1992.
- 81. Pettyjohn, W.A. (ed). *Water Quality in a Stressed Environment*. Burgess Publishing. Minneapolis, MN. 1973.
- 82. Pettyjohn, W.A. Protection of Public Water Supplies from Ground-Water Contamination. Noyes Data Corporation. Park Ridge, NJ. 1987.
- 83. Polubarinova-Kochina, P.Y. *The01y of Groundwater Movement*. Princeton University Press. Princeton, NJ. 1962.
- 84. Powers, P.J. Construction Dewatering: A Guide to Theory and Practice. John Wiley & Sons. New York, NY. 1981.
- 85. Reisner, Marc. Cadillac Desert. Penguin USA. New York, NY. 1987
- 86. Princeton University Water Resources Program. *Groundwater Contamination from Hazardous Wastes*. Prentice-Hall, Inc. Englewood Cliffs, NJ. 1984.
- 87. Remson, I., G.M. Hornberger, and F.J. Molz. *Numerical Methods in Subsurface Hydrology*. Wiley-Interscience. New York, NY. 1971.
- 89. Schwille, F. Dense Chlorinated Solvents in Porous and Fractured Media, Model

Experiments. Lewis Publishers. Chelsea, MI. 1988.

- 90. Summers, W.K. and Z. Spiegel. *Ground Water Pollution, A Bibliography*. Ann Arbor Science Publishing. Ann Arbor, MI. 1971.
- 91. Sun, R.J. Regional Aquifer-System Analysis Program of the U.S. Geological Survey Summary of Projects. U.S. Geological Survey Circular 1002. U.S. Geological Survey. Washington, DC. 1978-84.
- 92. Telford, W.M., L.P. Geldart, R.E. Sheriff, and D.A. Keys. *Applied Geophysics*. Cambridge University Press. Cambridge, England. 1976.
- 93. Todd, D.K. Ground Water Hydrology. 2nd Ed. John Wiley & Sons. New York, NY.1980.
- 94. Todd, D.K. and D.E.O. McNulty. *Polluted Groundwater*. Water Information Center, Inc. Port Washington, NY. 1976.
- 95. Travis, C.C. and E.L. Etnier (Eds.). Groundwater Pollution, Environmental & Legal Problems. AAAS Selected Symposium 95. American Association for the Advancement of Science. Westview Press. Boulder CO. 1984.
- 96. U.S. EPA. *Geophysical Techniques for Sensing Buried Wastes and Waste Migration*. EPA/600/7-84/064. U.S. Environmental Protection Agency. Washington, DC 1984.
- 97. U.S. EPA. *Practical Guide for Ground-Water Sampling*. EPA/600/2-85/104. U.S. Environmental Protection Agency. Washington, DC. 1985.
- U.S. EPA. Protection of Public Water Supplies from Ground-Water Contamination: Seminar Publication. EPA/625/4-85/016. U.S. Environmental Protection Agency. Washington, DC. 1985.
- 99. U.S. EPA. *RCRA Ground-Water Monitoring Technical Enforcement Guidance Document*. OSWER-9950. U.S. Environmental Protection Agency. Washington, DC. 1986.
- U.S. EPA. Superfund State Lead Remedial Project Management Handbook. EPA/540/G-87/002. U.S. Environmental Protection Agency. Washington, DC. 1986.
- 101. U.S. EPA. Data Quality Objectives for Remedial Response Activities Example Scenario: RIIFS Activities at a Site with Contaminated Soil and Ground Water. EPA/540/G-87/004. U.S. Environmental Protection Agency. Washington, DC. 1987.
- 102. U.S. EPA. Superfund Federal Lead Remedial Project Management Handbook. EPA/540/G-87/001. U.S. Environmental Protection Agency. Washington, DC. 1987.
- 103. U.S. EPA. Guidance of Remedial Actions for Contaminated Ground Water at Superfund Sites. EPA/540/6-88/003. U.S. Environmental Protection Agency. Washington, DC. 1988.
- 104. U.S. EPA. Selection Criteria for Mathematical Models Used in Exposure Assessments: Ground-Water Models. EPA/600/8-88/075. U.S. Environmental Protection Agency. Washington, DC. 1988.
- 105. U.S. EPA. Superfund Exposure Assessment Manual. EPA/540/I-88/001. U.S. Environmental Protection Agency. Washington, DC. 1988.

- 106. U.S. EPA. *Technology Screening Guide for Treatment of CERCLA Soils and Sledges*. EPA/540/2-88/004. U.S. Environmental Protection Agency. Washington, DC. 1988.
- 107. U.S. EPA. Seminar Publication: Transport and Fate of Contaminants in the Subsurface. EPA/625/4-89/019. U.S. Environmental Protection Agency. Washington, DC. 1989.
- 108. U.S. EPA. Ground-Water Monitoring in Karst Terrains: Recommended Protocols & Implicit Assumptions. EPA/600/X-89/050. U.S. Environmental Protection Agency. Washington, DC. 1989.
- U.S. EPA. Basics of Pump-and-Treat Ground-Water Remediation Technology. EPA/600/8-90/003. U.S. Environmental Protection Agency. Washington, DC. 1990.
- 110. U.S. EPA. *Catalog of Superfund Program Publications*. EPA/540/8-90/015. U.S. Environmental Protection Agency. Washington, DC. 1990.
- 111. U.S. EPA. *Handbook: Ground Water Volume I: Ground Water and Contamination*. EPA/625/6-90/016a. U.S. Environmental Protection Agency. Washington, DC. 1990.
- 112. U.S. EPA. *Quality Assurance Project Plan*. Emergency Response Branch, Region VIII. U.S. Environmental Protection Agency. Denver, CO. 1990.
- 113. U.S. EPA. Subsurface Contamination Reference Guide. EPA/540/2-90/001. U.S. Environmental Protection Agency. Washington, DC. 1990.
- 114. U.S. EPA. Assessing UST Corrective Action Technology: A Scientific Evaluation of the Mobility and Degradability of Organic Contaminants in Subsurface Environments. EPA/600/2-91/053. U.S. Environmental Protection Agency. Washington, DC. 1991.
- U.S. EPA. Compendium of ERT Ground Water Sampling Procedures. EPA/540/P-911007. U.S. Environmental Protection Agency. Washington, DC. 1991.
- 116. U.S. EPA. Compendium of ERT Soil Sampling and Surface Geophysics Procedures. EPA/540/P-91/006. U.S. Environmental Protection Agency. Washington, DC. 1991.
- 117. U.S. EPA. *Ground-Water Monitoring* (Chapter 11 ofSW-846). Final Draft. Office of Solid Waste. U.S. Environmental Protection Agency. Washington, DC. 1991.
- 118. U.S. EPA. *Handbook Ground Water Volume II: Methodology*. EPA/625/6-90/016b. U.S. Environmental Protection Agency. Washington, DC. 1991.
- U.S. EPA. Subsurface Characterization and Monitoring Techniques: A Desk Reference Guide. Volume I: Solids and Ground Water, Appendices A and B. EPA/625/R-93/003a. Office of Research and Development. U.S. Environmental Protection Agency. Cincinnati, OH 1993.
- 120. U.S. EPA. Subsurface Characterization and Monitoring Techniques: A Desk Reference Guide. Volume II: The Vadose Zone, Field Screening and Analytical Methods, Appendices C and D. EPA/625/R-93/003b. Office of Research and Development. U.S. Environmental Protection Agency. Cincinnati, OH 1993.

- 121. U.S. EPA. Groundwater Sampling and Monitoring with Direct Push Technologies. EPA 540/R-04/005. U.S. Environmental Protections Agency, Office of Solid Waste and Emergency Response Washington, DC 20460. August 2000.
- 123. U.S. EPA Region 4. Design and Installation of Monitoring Wells. SESDGUID-101-R1. U.S. Environmental Protections Agency, Region 4, Science and Ecosystems Support Division, Athens, GA. 2013
- 124. VanDer Leeden, F., F.L. Troise, and D.K. Todd. *The Water Encyclopedia*. 2nd Ed. Lewis Publishers, Inc. Chelsea, MI. 1990.
- 125. NWWA. *Practical Applications of Ground Water Models*. National Conference National Water Well Association. Dublin, OH. August 19-20, 1985.
- 126. Verruijt, A. *Theory of Groundwater Flow*. Gordon & Breach Sciences Publishing, Inc. New York, NY. 1970.
- 127. Walton, W.C. Selected Analytical Methods for Well and Aquifer Evaluation. Bulletin 49. Illinois State Water Survey. Urbana, IL 1962.
- 128. Walton, W.C. Groundwater Resource Evaluation. McGraw-Hill. New York, NY. 1970.
- 129. Walton, W.C. *Practical Aspects of Ground Water Modeling*. National Water Well Association. Dublin, OH. 1984.
- 130. Walton, W.C. Analytical Groundwater Modeling. Lewis Publishers, Inc. Chelsea, MI. 1989.
- 131. Walton, W.C. Numerical Groundwater Modeling: Flow and Contaminant Migration. Lewis Publishers, Inc. Chelsea, MI. 1989.
- 132. Wang, H.F. and M.P. Anderson. *Introduction to Groundwater Modeling*. W.H. Freeman Co. San Francisco, CA. 1982.
- 133. Ward, C.H., W. Giger, and P.L. McCarty (Eds.). Groundwater Quality. John Wiley & Sons. Somerset, NJ. 1985.
- 134. Wilson, J.L. and P.J. Miller. *Two-Dimensional Plume in Uniform Ground-Water Flow*. Journal of Hydraulics Div. ASCE Paper No 13665. HY4, pp. 503-514. American Society of Civil Engineers. New York, NY 1978.
- 135. Wolfe, P. W. *Tales from the Underground. A Natural History of Subterranean Life.* Perseus Publishing. Cambridge, MA. 2001.

WEBSITES

www.envisionenviroed.net (groundwater simulator)

http://www.clu-in.org/characterization/technologies/soilandsoilgassamp.cfm

http://www.clu-in.org/characterization/technologies/dpgroundwater.cfm

toxics.usgs.gov

www.acs.org

www.epa.gov/safewater www.epa.gov/seahome/groundwater/src/ground.htm www.issaquah.org/COMORG/gwac/Hydro.htm <u>www.water.usgs.gov</u>

> www.environmental-expert.com www.flowpath.com