

10. REFERENCES

- Aalderink, R., L. Lijklema, J. Breukelman, W. van Raaphorst, and A. Brinkman. 1984. Quantification of wind induced resuspension in a shallow lake. *Wat. Sci. Tech.* 17: 903-914.
- Address, J.M. 1990. Methane Cycling in Onondaga Lake, NY. Master's Thesis, College of Environmental Science and Forestry, State University of New York. Syracuse, NY.
- Agency for Toxic Substances and Disease Registry (ATSDR). 1990. Toxicological profile for chlorobenzene. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1994. Toxicological Profile for Zinc. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1995a. Toxicological Profile for Xylenes. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1995b. Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs). Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1997a. Toxicological Profile for Nickel. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1997b. Toxicological Profile for Benzene. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1998a. Toxicological Profile for 1,4-Dichlorobenzene. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1998b. Toxicological Profile for Chlorinated Dibenzo-p-Dioxins (CDDs). Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1999a. Toxicological Profile for Lead. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1999b. Toxicological Profile for Cadmium. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1999c. Toxicological Profile for Ethylbenzene. Atlanta, GA: US Department of Health and Human Services, Public Health Service.
- ATSDR. 1999d. Toxicological Profile for Copper. Atlanta, GA: US Department of Health and Human Services, Public Health Service.

ATSDR. 2000a. Toxicological Profile for Chromium. Atlanta, GA: US Department of Health and Human Services, Public Health Service.

ATSDR. 2000b. Toxicological Profile for Toluene. Atlanta, GA: US Department of Health and Human Services, Public Health Service.

ATSDR. 2002. Toxicological Profile for Hexachlorobenzene. Atlanta, GA: US Department of Health and Human Services, Public Health Service.

Allied Chemical Corporation. 1966. Letter from A.J. Von Frank, Director for Water Pollution Control for Allied Chemical Corporation, to P. Indritz, Chief Council for the Natural Resources and Power Subcommittee for the House Committee on Government Operation. August 30, 1966.

American Public Health Association (APHA). 1989. Standard Methods for Examination of Water and Wastewater, Method 2130. 17th Edition. American Public Health Association, Washington, DC.

American Society for Testing and Materials (ASTM). 1991. Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates. American Society for Testing and Materials, Philadelphia, PA.

Anati, D.A. 1994. Advection and diffusion in marine sediments: DSDP Site 374 in the eastern Mediterranean as an example. *Earth Planet. Sci. Lett.* 128:575–589.

Andrle, R. J. and J. R. Carroll. 1988. Atlas of Breeding Birds in New York State. Cornell University Press, Ithaca, NY.

Arrigo, M.A. 1995. Aquatic macrophyte survey of Onondaga Lake, New York. Report for the period June 15–August 30, 1995. State University of New York, College of Environmental Science and Forestry, Syracuse, NY.

Auer, M.T., M.L. Storey, S.W. Effler, N.A. Auer, and P. Sze. 1990. Zooplankton impacts on chlorophyll and transparency in Onondaga Lake, New York, USA. *Hydrobiol.* 200/201:603–617.

Auer, M.T., N.A. Johnson, M.R. Penn, and S.W. Effler. 1996. Pollutant sources, depositional environment, and the surficial sediments of Onondaga Lake, New York. *J. Environ. Qual.* 25:46–55.

Ayers, D., Data Manager, Cornell Institute for Resource Information Systems, Cornell University, Ithaca, NY. 2001. Personal communication with R. Montione, TAMS Consultants, Inc., Latham, NY. Provision of copies of historic aerial photographs of Onondaga Lake, Syracuse, NY. June.

Babiarz, C.L., J.P. Hurley, S.R. Hoffmann, A.W. Andren, M.M. Shafer and D.E. Armstrong. 2001. Partitioning of total mercury and methylmercury to the colloidal phase in freshwaters. *Environ. Sci. Technol.* 35: 4773–4782.

Bahnick, D.A. and W.J. Doucette. 1988. Use of Molecular connectivity indices to estimate soil sorption coefficients for organic chemicals. *Chemosphere* 17: 1703–1715.

- Bailey, M.C. and D.P. Hamilton. 1997. Wind induced sediment resuspension: a lake-wide model. *Ecological Modelling* 99: 217-228.
- Barkay, T., C. Liebert, and M. Gillman. 1989. Environmental significance of the potential for mer(Tn21)-mediated reduction of Hg^{2+} to Hg^0 in natural waters. *Appl. Environ. Microbiol.* 55:1196-1202.
- Berg, C.O. 1963. Middle Atlantic states. pp. 191-237. In: *Limnology in North America*. D.G. Frey (ed). University of Wisconsin Press, Madison, WI.
- Blasland & Bouck. 1989. Hydrogeologic Assessment of the Allied Waste Beds in the Syracuse area. Volume 1 of 2. Prepared for AlliedSignal, Syracuse, NY. Blasland & Bouck Engineers, P.C., Syracuse, NY.
- Blasland, Bouck & Lee, Inc. (BBL). 1990. Waste Bed Feasibility Study (Sections 1-4). Prepared for AlliedSignal, Inc., Solvay, NY. Blasland, Bouck & Lee, Inc., Syracuse, NY.
- BBL. 1995. Allied Wastebeds 9 to 15 and Lower Nine Mile Valley, Onondaga County, New York. Summary data report. Prepared for AlliedSignal, Syracuse, NY. Blasland, Bouck & Lee, Inc., Syracuse, NY.
- BBL. 1997. Supplemental site investigation work plan, Wastebeds 9 to 15, Onondaga County, New York. Prepared for AlliedSignal, Syracuse, NY. Blasland, Bouck & Lee, Inc., Syracuse, NY.
- BBL. 1999. Supplemental Site Investigation Report, Wastebeds 9 to 15, Onondaga County, New York. Prepared for Honeywell, Inc., Syracuse, NY. BB&L Engineers and Scientists, Syracuse, NY.
- BBL. 2000. Ninemile Creek/Geddes Brook Sediment IRM Sampling Plan. Prepared for Honeywell, Inc., Syracuse, NY. Blasland, Bouck and Lee, Inc. Syracuse, NY.
- Bloesch, J. and U. Uehlinger. 1986. Horizontal sedimentation differences in a Eutropic Swiss Lake. *Limnology and Oceanography* 31: 1094-1109.
- Bloom, N. and W.F. Fitzgerald. 1988. Determination of volatile mercury species at the picogram level by low-temperature gas chromatography with cold-vapour atomic fluorescence detection. *Anal. Chim. Acta* 208:151-161.
- Bloom, N.S. and C.J. Watras. 1989. Observations of methylmercury in precipitation. *Sci. Total Environ.* 87/88:199-207.
- Bloom, N.S. and S.W. Effler. 1990. Seasonal variability in the mercury speciation of Onondaga Lake (New York). *Water Air Soil Pollut.* 53:251-265.
- Bloom, N.S. 1992. On the chemical form of mercury in edible fish and marine invertebrate tissue. *Can. J. Fish. Aquat. Sci.* 49:1010-1017.

- Borden R. C., M. D. Lee, J. M. Thomas, P. B. Bedient, and C. H. Ward. 1989. In situ measurement and numerical simulation of oxygen limited biotransformation. *Groundwater Monit. Rev.* 9 (1): 83-91.
- Boudreau, B.P. 1996. *Diagenetic Models and Their Implementation: Modelling Transport and Reaction in Aquatic Sediments*. Springer Verlag, Berlin, Hiedelberg, NY. 414 pp.
- Brooks, A.S. and D.N. Edgington. 1994. Biogeochemical control of phosphorus cycling and primary production in Lake Michigan. *Limnology and Oceanography* 39:962-968.
- Brun-Cottan, J. C., S. Guillou, and Z. H. Li. 2000. Behaviour of a puff of resuspended sediment: a conceptual model. *Marine Geology* 167: 355-373.
- Burdige, D.J. 1989. 1988 Sediment Monitoring Program in the Southern Chesapeake Bay. Prepared for the Virginia State Water Control Board, Richmond, Virginia. Old Dominion University Research Foundation, Norfolk, VA.
- C&S. 2002. Draft PSA Report for the Lake Pump Site. Prepared for Crucible Specialty Metals by C&S Engineers, June 2002.
- Callister, S.M. and M.R. Winfrey. 1986. Microbial methylation of mercury in upper Wisconsin River sediments. *Water Air Soil Pollut.* 29:453-465.
- CDR Environmental Specialists (CDR). 1991. Environmental Assessment of Lower Reaches of Ninemile Creek and Geddes Brook, Oswego watershed, New York. Prepared for AlliedSignal, Solvay, NY. CDR Environmental Specialists, Stow, MA.
- Chiou, C. T., P. E. Porter, and D. W. Schmedding. 1983. Partition equilibria of nonionic organic compounds between soil organic matter and water. *Environ. Sci. Technol.* 17(4): 227-231.
- CSDE. 1948. Pollution survey of Onondaga Lake and tributaries. City of Syracuse, Department of Engineering, Syracuse, NY.
- Compeau, G. and R. Bartha. 1984. Methylation and demethylation of mercury under controlled redox, pH, and salinity conditions. *Appl. Environ. Microbiol.* 48:1203-1207.
- Coquery, M., D. Cossa, and J. Sanjuan, 1997. Speciation and sorption of mercury in two macrotidal estuaries, *Mar. Chem.* 58: 213-227.
- Cornett, R.J., B.A. Risto, and D.R. Lee. 1989. Measuring groundwater transport through lake sediments by advection and diffusion. *Water Resources Res.* 25:1815-1823.
- Crucible Materials Corporation. 1984. Hazardous Waste Disposal Questionnaire, Transporter Form Parts 1 and 2. August 15.

- Dahanayake, K., G. Gerdes, and W.E. Krumbein. 1985. Stomatolites, oncolites, and oolites biogenically formed *in situ*. *Naturwissenschaften* 72:513–518.
- Dean, W.E. and J.R. Eggleston. 1984. Freshwater oncolites created by industrial pollution, Onondaga Lake, NY. *Sediment. Geol.* 40(4):217–232.
- Doerr, S.M., S.W. Effler, K.A. Whitehead, M.T. Auer, M.G. Perkins, and T.M. Heidtke. 1994. Chloride model for polluted Onondaga Lake. *Water Res.* 28:849–861.
- Drever, J. I. 1997. *The Geochemistry of Natural Waters*. Third edition. Prentice Hall, Inc. New Jersey.
- Driscoll, C.T., Syracuse University. 1995. Personal communication via electronic transfer of data on diskette to E.A. Henry, PTI Environmental Services, Waltham, MA, at a meeting regarding Onondaga Lake future tributary sampling in 1996 in Solvay, NY. November 3.
- Duursma, E.K. 1977. Effect of hydrostatic pressure on the diffusion of chloride in marine sediment. An *in situ* experiment. *Deep-Sea Res.* 24:1161–1166.
- Eadie, B.J., Chambers, R.L., Gardner, W.S. and Bell, G.L. 1984. Sediment trap studies in Lake Michigan: Resuspension and chemical fluxes in the southern basin. *J. Great Lakes Research*, 10:307-321.
- Eadie, B.J. and J.A. Robins. 1987. The role of particulate matter in the movement of contaminants in the Great Lakes. In: *Sources and Fates of Aquatic Pollutants*. ACS Adv. Chem. Ser., vol. 216, edited by R. Hites and S. Eisenreich, pp. 319-364, Am. Chem. Soc., Washington, D.C.
- Eadie, B. J., B. McKee, M. B. Lansing, J. A. Robbins, S. Metz, and J. H. Trefry. 1994. Nutrient enhanced coastal ocean productivity recorded in sediments from the Louisiana shelf, *Estuaries*, 17: 754-766.
- Effler, S.W. (ed). 1996. *Limnological and Engineering Analysis of a Polluted Urban Lake*. Springer-Verlag, New York, NY.
- Effler, S.W. and M.C. Rand. 1976. The Cazenovia Lake study. I. Initiation. Department of Civil Engineering, Syracuse University, Syracuse, NY.
- Effler, S.W., M.G. Perkins, C.M. Brooks and E.M. Owens. 1985. A Review of the Limnology and Water Quality of Owasco Lake. Upstate Freshwater Institute, Submitted to Cayuga County, Auburn, NY.
- Effler, S.W. and C.T. Driscoll. 1985. Calcium chemistry and deposition in ionically enriched Onondaga Lake, New York. *Environ. Sci. Technol.* 19:717–720.
- Effler, S.W. and C.T. Driscoll. 1986. A chloride budget for Onondaga Lake, New York, USA. *Water Air Soil Pollut.* 27:29–44.
- Effler, S.W., S.M. Doerr, C.M. Brooks, and H.C. Rowell. 1990. Chloride in the porewater and water column of Onondaga Lake, New York, USA. *Water Air Soil Pollut.* 51: 315-326.

- Effler, S.W. and G. Harnett. 1996. Background. In: *Limnological and Engineering Analysis of a Polluted Urban Lake, Prelude to Environmental Management of Onondaga Lake*, New York. S.W. Effler (ed). pp. 1–31. Springer-Verlag, New York, NY.
- Effler, S.W. and M. G. Perkins. 1996. Optics. In: *Limnological and Engineering Analysis of a Polluted Urban Lake, Prelude to Environmental Management of Onondaga Lake*, New York. S.W. Effler (ed). pp. 535–599. Springer-Verlag, New York, NY.
- Effler, S.W. and K.A. Whitehead. 1996. Tributaries and discharge. In: *Limnological and Engineering Analysis of a Polluted Urban Lake*. S.W. Effler (ed). pp. 97–199. Springer-Verlag, New York, NY.
- Effler, S.W., M.T. Auer, N. Johnson, M. Penn, and H.C. Rowell. 1996a. Sediments. In: *Limnological and Engineering Analysis of a Polluted Urban Lake*. S.W. Effler (ed). pp. 600–666. Springer-Verlag, New York, NY.
- Effler, S.W., C.T. Driscoll, S.M. Doerr, C.M. Brooks, M.T. Auer, B.A. Wagner, J. Address, W. Wang, D.L. Johnson, J. Jiao, and S.G. Dos Santos. 1996b. Chemistry. In: *Limnological and Engineering Analysis of a Polluted Urban Lake*. S.W. Effler (ed). pp. 263–383. Springer-Verlag, New York, NY.
- Effler, S.W., S.M. Doerr, C.M. Brooks, M.T. Auer, R.P. Canale, R.K. Gelda, E.M. Owens, and T.M. Heidtke. 1996c. Mechanistic modeling of water quality in Onondaga Lake. In: *Limnological and Engineering Analysis of a Polluted Urban Lake*. S.W. Effler (ed). pp. 667–788. Springer-Verlag, New York, NY.
- Effler, S.W. and C. Brooks. 1998. Dry weight deposition in polluted Onondaga Lake, New York, USA. *Water Air Soil Pollut.* 103:389–404.
- Efron, B. 1982. *The Jackknife, the Bootstrap and Other Resampling Plans*. J.W. Arrowsmith, Ltd., Bristol, England.
- Exponent. 1998a. Onondaga Lake RI/FS Baseline Ecological Risk Assessment. Prepared for AlliedSignal Inc., Solvay, NY. Exponent, Bellevue, WA.
- Exponent. 1998b. Onondaga Lake RI/FS Geddes Brook/Ninemile Creek Remedial Investigation Work Plan. Prepared for AlliedSignal Inc., Solvay, NY. Exponent, Bellevue, WA.
- Exponent. 1999. Onondaga Lake RI/FS Supplemental Lake Water Sampling Work Plan. Prepared for AlliedSignal Inc., Solvay, NY. Exponent, Bellevue, WA.
- Exponent. 2000. Onondaga Lake RI/FS Supplemental Data Phase 2A Work Plan and Dredged Material Disposal Area Addendum. Prepared for Honeywell, Inc., Syracuse, NY. Exponent, Bellevue, WA.
- Exponent. 2001a. Onondaga Lake RI/FS Baseline Ecological Risk Assessment. Prepared for Honeywell, Inc., Syracuse, NY. Exponent, Bellevue, WA. Revised by NYSDEC.

- Exponent. 2001b. Onondaga Lake RI/FS Human Health Risk Assessment. Prepared for Honeywell, Inc., Syracuse, NY. Exponent, Bellevue, WA. Revised by NYSDEC.
- Exponent. 2001c. Onondaga Lake RI/FS Remedial Investigation. Prepared for Honeywell, Inc., Syracuse, NY. Exponent, Bellevue, WA. Revised by NYSDEC.
- Exponent. 2001d. Geddes Brook/Ninemile Creek RI/FS Remedial Investigation report. Prepared for Honeywell, East Syracuse, New York. Exponent, Bellevue, WA. Under NYSDEC revision.
- Franz, T. P. and S. J. Eisenreich. 2000. Accumulation of polychlorinated biphenyls and polycyclic aromatic hydrocarbons in the snowpack of Minnesota and Lake Superior. *J. Great Lakes Res.* 26(2): 220-234.
- Furutani, A. and J. W. M. Rudd. 1980. Measurement of mercury methylation in lake water and sediment samples. *Appl. Environ. Microbiol.* 40:770-776.
- Gailani, J., C. K. Ziegler, and W. Lick. 1991. Transport of suspended solids in the lower Fox River. *J. Great Lakes Res.* 17 (4): 479-494.
- Galappatti, G. and C. B. Vreugdenhil. 1985. A depth-integrated model for suspended sediment transport. *J. Hydraul. Res.*, 23: 359-376.
- Gbondo-Tugbawa, S. 1997. Concentrations and fluxes of total and methyl mercury to Onondaga Lake, Syracuse, New York. Thesis. Syracuse University, Syracuse, NY.
- Gbondo-Tugbawa, S. and C. T. Driscoll. 1998. Application of the regional mercury cycling model (RMCM) to predict the fate and remediation of mercury in Onondaga Lake, New York. *Water, Air, Soil Pollut.* 105: 417-426.
- Gelhar, L. W., A. Mantaglou, C. Welty, and K. R. Rehfeldt. 1992. A critical review of data on field-scale dispersion in aquifers. *Water Resources Res.* 28:1955-1974.
- Gigliotti, C. L., J. Dachs, E. D. Nelson, P. A. Brunciak, and S. J. Eisenreich. 2000. Polycyclic Aromatic Hydrocarbons in the New Jersey Coastal Atmosphere. *Environ. Sci. Technol.* 34(17): 3547-3554.
- Gilbert, R. O. 1987. *Statistical Methods for Environmental Pollution Monitoring*. Van Nostrand Reinhold, New York.
- Gillham, R. W. and J. A. Cherry. 1982. Contaminant migration in saturated unconsolidated geologic deposits. pp. 31-62. In: *Special Paper 189*. Geological Society of America.
- Gilmour, C. C. and E. A. Henry. 1991. Mercury methylation in aquatic systems affected by acid deposition. *Environ. Pollut.* 71:131-169.
- Golightley, S. K. 1995. Fate of Organic Contaminants in Onondaga Lake. Master's Thesis. State University of New York, College of Environmental Science and Forestry, Syracuse, New York.

Golubic, S. and A. G. Fisher. 1975. Ecology of calcareous nodules forming in Little Conestoga Creek near Lancaster, Pennsylvania. *Verh. Int. Ver. Limnol.* 19:2315–2323.

Gradient and Parsons. 1999. Feasibility Study Report, LCP Bridge Street Facility, Solvay, New York. Prepared for AlliedSignal, Inc., Solvay, NY. Gradient Corporation, Cambridge, MA and Parsons Engineering-Science, Liverpool, NY.

Gustafson, K. E. and R. M. Dickhut. 1997. Distribution of polycyclic aromatic hydrocarbons in southern Chesapeake Bay surface water: evaluation of three methods for determining freely dissolved water concentrations. *Environ. Toxicol. Chem.* 16; No. 3, pp. 452–461.

Hairston, N. G. Jr., L. J. Perry, A. J. Bohonak, M. Q. Fellow, and C. M. Kearns. 1999. Population biology of a failed invasion: paleolimnology of *Daphnia exilis* in upstate New York. *Limnol. Oceanogr.* 44(3): 477–486.

Hairston, N. G., M. G. Duffy, L. J. Perry, C. M. Kearns L. J. Weider. 2000. Paleogenetic evidence for past invasion of Onondaga Lake, New York, by exotic *Daphnia curvirostris* using mtDNA from dormant eggs. *Limnol. Oceanogr.* 45(6). 1409–1414.

Hassett, J. P. 1994. Sources of Organic Contaminants to Onondaga Lake. Progress Report to the Onondaga Lake Management Conference. SUNY College of Environmental Science and Forestry.

Hassett, J. P. and S. M. Hubbard. 1995. Sources of Organic Contaminants to Onondaga Lake. Final Report to the Onondaga Lake Management Conference. SUNY College of Environmental Science and Forestry.

Hassett, J. P., Professor, SUNY College of Environmental Science and Forestry. 2002. Personal communication via email with R. Montione, TAMS Consultants, Inc., Albany, NY. May.

Hawley, N. and B. Lesht. 1992. Sediment resuspension in Lake St. Clair. *Limnol. Oceanogr.* 37: 1720–1737.

Hawley, N. 2000. Sediment resuspension near the Keweenaw Peninsula, Lake Superior during the fall and winter 1990-1991. *J. Great Lakes Res.* 26(4):495–505.

Hesler, D., NYSDEC. 2002. Personal communication via telephone call with R. Montione, TAMS Consultants, Inc., regarding confirmation that NYSDEC had signed a consent order for the Geddes Brook IRM. November.

Hintelmann, H. and R. D. Evans. 1997. Application of stable isotopes in environmental tracer studies – measurement of monomethylmercury (CH_3Hg^+) by isotope dilution ICP/MS and detection of species transformation. *Fres. J. Anal. Chem.* 358:378–385.

Howard, P. H. 1989. Handbook of Environmental Fate and Exposure of Organic Chemicals. Volume I. Large Production and Priority Pollutants. Chelsea, MI: Lewis Publishers, Inc.

- Hubbard, M. S. 1996. Sources of Organic Contaminants to Onondaga Lake. Master's Thesis. State University of New York, College of Environmental Science and Forestry, Syracuse, New York.
- Hurley, J. P., D. P. Krabbenhoft, C. L. Babiarz, and A. W. Andren. 1994. Cycling of mercury across the sediment-water interface in seepage lakes. pp. 425–449. In: *Environmental Chemistry of Lakes and Reservoirs*. ACS Advances in Chemistry Series. No. 237. L. A. Baker (ed). American Chemical Society, Washington, DC.
- Ingersoll, C., D. MacDonald, N. Wang, J. Crane, L. J. Field, P. Haverland, N. Kemble, R. Lindscoog, C. Severn, and D. Smorong. 2000. Prediction of Sediment Toxicity Using Consensus-based Freshwater Sediment Quality Guidelines. EPA 905/R-00/007. June.
- Jacobs, L., PTI Environmental Services. 1994. Personal communication via letter to Tim Larson, NYSDEC, Albany, NY, regarding modifications to Round 2 sampling in the West Flume investigation. October 28.
- Johnson, N. A. 1989. Surficial sediment characteristics and sediment phosphorus release rates in Onondaga Lake, NY. Thesis. Michigan Technological University, Houghton, MI.
- Jones, F. G. and B. H. Wilkinson. 1978. Structure and growth of lacustrine pisoliths from recent Michigan marl lakes. *J. Sed. Petrol.* 48:1103–1110.
- Kantrowitz, I. H. 1970. Ground Water Resources in the Eastern Oswego River Basin. New York, Basin Planning Report ORB-2, Albany, New York.
- Klump, J. V. and C. S. Martens. 1981. Biogeochemical cycling in an organic rich coastal marine basin—II. Nutrient sediment-water exchange processes. *Geochimica et Cosmochimica Acta*. 45:101–121.
- Koester, C. J. and R. A. Hites. 1992. Wet and dry deposition of chlorinated dioxins and furans. *Environ. Sci. Technol.* 26: 1375–1382.
- Korthals, E. T. and M. R. Winfrey. 1987. Seasonal and spatial variations in mercury methylation and demethylation in an oligotrophic lake. *Appl. Environ. Microbiol.* 53:2397–2404.
- Krabbenhoft, D. P. and C. L. Babiarz. 1992. The role of groundwater transport in aquatic mercury cycling. *Water Res.* 28(12):3119–3128.
- Kulhawy, F. H., D. A. Sangrey, and C. S. Grove, Jr. 1977. Geotechnical behavior of Solvay process wastes. In: *Proc. Conference on Geotechnical Practice for Disposal of Solid Waste Materials*. June 13–15, 1977. University of Michigan, Ann Arbor, MI.
- Labuz, A. J., Honeywell. 2000. Personal communication via letter to T. Larson, NYSDEC, Albany, NY, regarding Onondaga Lake RI, former Dredge Spoils Area. June 29.

- Labuz, A. J., Honeywell. 2002. Personal communication via email to D. J. Hesler, NYSDEC, Albany, NY, regarding Willis Avenue DNAPL recovery system. October 9.
- Latimer, J. S., W. R. Davis, and D. J. Keith. 1999. Mobilization of PAHs and PCBs from in-place contaminated marine sediments during simulated resuspension events. *Estuarine, Coastal and Shelf Science* 49: 577 – 595.
- Lee, Y-H. and A. Iverfeldt. 1991. Measurement of methylmercury and mercury in runoff, lake and rain waters. *Water Air Soil Pollut.* 56:309–321
- Lerman, A. 1975. Maintenance of steady-state in oceanic sediments. *Am. J. Science* 275:609–635.
- Lerman, A. and T. A. Lietzke. 1977. Fluxes in a growing sediment layer. *Am. J. Science* 277:25–37.
- Lerman, A. 1979. *Geochemical Processes – Water and Sediment Environments*. John Wiley and Sons: New York.
- Lesht, B. M. and N. Hawley. 2000. Empirical modeling of sediment resuspension in the Great Lake. 43rd Annual International Conference Great Lakes, Great Rivers 2000 Ontario, Canada.
- Li, Y-H. and S. Gregory. 1974. Diffusion of ions in sea water and in deep-sea sediments. *Geochim. Cosmochim. Acta* 38:703–714.
- Liang, L., N. Bloom, and M. Horvat. 1992. Determination of mercury species in biological materials. In: *Mercury as a Global Contaminant*. June 1992.
- Ligocki, M.P., C. Leuenberger, and J. F. Pankow. 1985. Trace organic compounds in rain – II. Gas scavenging of neutral organic compounds. *Atmospheric Environment* 19: 1609-1617.
- Lincoln, D. F. 1982. Glaciation in the finger-lake region of New York. *Am. J. Sci.* 144(26):290–301.
- Lou, J., T. Wolf, and W. Rosenthal. 1999. Modeling sediment resuspension in coastal areas. In: *Computerized Modeling of Sedimentary Systems*. J. Harff et al. (eds.). pp 23-35. Springer-Verlag, New York.
- Lou, J., D. J. Schwab, D. Beletsky, and N. Hawley. 2000. A model of sediment resuspension and transport dynamics in southern Lake Michigan. *J. Geophys. Res.* 105(3): 6591-6610.
- Lövgren, L. and S. Sjöberg. 1989. Equilibrium approaches to natural water systems – 7. Complexation reactions of copper(II), cadmium(II) and Mercury(II) with dissolved organic matter in a concentrated bog water, *Water Res.*, 23: 327-332.
- Luettich Jr., R., D. Harleman, L. Somlyódy. 1990. Dynamic behavior of suspended sediment concentrations in a shallow lake perturbed by episodic wind events. *Limnol. Oceanogr.* 35(5), 1990. pp. 1050-1067.

Mackay, D., W. Y. Shiu, and K. C. Ma. 1992. Illustrated Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals. Volume I: Monoaromatic Hydrocarbons, Chlorobenzenes, and PCBs. Chelsea, MI: Lewis Publishers, Inc.

Madsen, J. D., R. M. Smart, L. W. Eichler, C. W. Boylen, J. W. Sutherland, and J. A. Bloomfield. 1993. Submersed Littoral Vegetation Distribution: Field Quantification and Experimental Analysis of Sediment Types from Onondaga Lake, New York. Technical Report A093-14. US Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS.

Madsen, J. D., J. A. Bloomfield, J. W. Sutherland, L. W. Eichler, and C. W. Boylen. 1996a. The aquatic macrophyte community of Onondaga Lake: field survey and plant growth bioassays of lake sediments. *Lake Reserv. Manage.* 12(1):73–79.

Madsen, J. D., R. M. Smart, L. W. Eichler, C. W. Boylen, J. W. Sutherland, and J. A. Bloomfield. 1996b. Aquatic macrophytes. pp. 436–445. In: *Limnological and Engineering Analysis of a Polluted Urban Lake: Prelude to Environmental Management of Onondaga Lake*, New York. S.W. Effler (ed). Springer-Verlag, New York, NY.

Maris, C.R.P. and M.L. Bender. 1982. Upwelling of hydrothermal solutions through ridge flank sediments shown by pore water profiles. *Science* 216:623–626.

Maris, C.R.P., M.L. Bender, P.N. Froehlich, R. Barnes, and N.A. Luedtke. 1983. Chemical evidence for advection of hydrothermal in the sediments of the Galapagos Mounds Hydrothermal Field. *Geochim. Cosmochim. Acta* 48:2331–2346.

Martens, C.S., G.W. Kipphut, and J.V. Klump. 1980. Sediment-water chemical exchange in the coastal zone traced by in-situ radon-222 flux measurements. *Science* 4: 208:285-288.

Martens, C.S. and J.V. Klump. 1980. Biogeochemical cycling in Cape Lookout Bight – I. Methane sediment-water exchange processes. *Geochim. Cosmochim. Acta.* 44: 471-490.

Mason, R.P., W.F. Fitzgerald, J. Herley, A.K. Hanson Jr., P.L. Donaghay, and J.M. Sieburth. 1993. Mercury biogeochemical cycling in a stratified estuary. *Limnol. Oceanogr.* 38(6):1227–1241.

Mason, R.P., N.M. Lawson, and K.A. Sullivan. 1997. Atmospheric deposition to the Chesapeake Bay watershed—regional and local sources. *Atmos. Environ.* 31:3531–3540.

Matisoff, G. 1980. Time dependent transport in Chesapeake Bay sediments: Part 1. Temperature and chloride. *Am. J. Science* 280:1–25.

McAlear, J. A. 1996. Concentrations and Fluxes of Total Mercury and Methylmercury within a Wastewater Treatment Plant. Thesis. Syracuse University Syracuse, NY.

McBride, M.S. and H.O. Pfannkuch. 1975. The distribution of seepage within lakebeds. *J. Res. US Geol. Surv.* 3:505–512.

Miskimmin, B.M., J.W.M. Rudd, and C.A. Kelly. 1992. Influence of dissolved organic carbon, pH, and microbial respiration rates on mercury methylation and demethylation in lake water. *Can. J. Fish. Aquat. Sci.* 49:17–22.

Moore, C., Onondaga County Department of Parks and Recreation, Liverpool, NY. 1991. Personal communication via telephone conversation with T. Michelsen, PTI Environmental Services, Bellevue, WA. March 25.

Munthe, J., H. Hultberg, and A. Iverfeldt. 1995. Mechanisms of deposition of methylmercury and mercury to coniferous forests. *Water Air Soil Pollut.* 80:363–371.

Murphy, C.B. 1978. Onondaga Lake. In: *Lakes of Western New York State*. J. Bloomfield (ed). Academic Press, New York, NY. pp. 223–365.

National Atmospheric Deposition Program. 1998. Mercury Deposition Network Web site: <http://nadp.sws.uiuc.edu/mdn>. As accessed May 15, 1998.

National Climatic Data Center (NCDC). 1995. Syracuse Hancock AP Onondaga County, New York USA average rainfall. Web site: [http://www.worldclimate.com/cgi-bin/data.pl?ref= N43W076+2200+308383C](http://www.worldclimate.com/cgi-bin/data.pl?ref=N43W076+2200+308383C). As accessed in 1995.

NCDC. 1998. <http://www.ncdc.noaa.gov>. As accessed in 1998.

National Oceanic and Atmospheric Administration (NOAA). 1992. Local climatological data annual summary with comparative data (1992), Hancock Airport, Syracuse, NY. National Oceanic and Atmospheric Administration, National Environmental Satellite Data and Information Office, National Climatic Data Center, Asheville, NC.

NOAA. 2001. Syracuse, NY, climate data web page. <http://www.nws.noaa.gov/er/bgm/cli/syrcli.htm>. As accessed in 2001. National Oceanic and Atmospheric Administration, National Weather Service.

National Research Council (NRC). 2000. *Toxicological Effects of Methylmercury*. Prepublication copy. National Research Council, National Academy Press, Washington, DC.

Nazaroff W. W. and L. Alvarez-Cohen. 2001. *Environmental Engineering Science*. John Wiley & Sons. Inc. New York, NY.

New York State Department of Environmental Conservation (NYSDEC). 1986. Freshwater wetland classification sheets. Camillus, Brewerton, Baldwinsville, and Syracuse West Quadrangles. New York State Department of Environmental Conservation, Division of Fish and Wildlife, Albany, NY.

NYSDEC. 1989. *Engineering Investigations at Inactive Hazardous Waste Sites in the State of New York: Phase II Investigation, Onondaga Lake, Onondaga County*. New York State Department of Environmental Conservation, Division of Hazardous Waste Remediation, Albany, NY.

NYSDEC. 1992a. Annual Monitoring Data for Onondaga Lake Fish. New York State Department of Environmental Conservation, Albany, NY.

NYSDEC. 1992b. Rotating Intensive Basin Studies. New York State Department of Environmental Conservation, Albany, NY.

NYSDEC. 1994. Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites (FWIA). New York State Department of Environmental Conservation, Division of Fish and Wildlife, Albany, NY.

NYSDEC. 1999. Technical Guidance for Screening Contaminated Sediments. New York State Department of Environmental Conservation, Division of Fish, Wildlife, and Marine Resources, Albany, NY.

NYSDEC. 2000. Standard Operating Procedures for General Fish Collection and Handling. Bureau of Habitat, Division of Fish and Wildlife, New York State Department of Environmental Conservation, Albany, NY.

NYSDEC. 2001. Registry of Inactive Hazardous Waste Disposal Sites in New York State. Volume 7. Prepared by New York State Department of Environmental Conservation, Division of Environmental Remediation, Albany, NY.

NYSDEC. 2002. Technical and Administrative Guidance Memorandum #4046 – Recommended Soil Cleanup Objectives for Volatile Organic Contaminants, Semi-Volatile Organic Contaminants, Organic Pesticides/Herbicides and PCBs, and Heavy Metals. January 1994. Web site: <http://www.dec.state.ny.us/website/der/tagms/prtg4046b.html>. Accessed in 2002.

NYSDEC/TAMS Consultants, Inc. (TAMS). 1998a. New York State's Revision of the Onondaga Lake Calcite Modeling Report. Prepared for New York State Department of Environmental Conservation, Superfund Standby Program, Albany, NY by TAMS Consultants, Inc., Bloomfield, NJ.

NYSDEC/TAMS. 1998b. New York State's Revision of the Onondaga Lake Mercury Modeling Report. Prepared for New York State Department of Environmental Conservation, Superfund Standby Program, Albany, NY by TAMS Consultants, Inc., Bloomfield, NJ.

NYSDEC/TAMS. 1998c. New York State's Revision of the Remedial Investigation Report, LCP Bridge Street Site, Solvay, New York. Prepared for New York State Department of Environmental Conservation, Albany, NY by TAMS Consultants, Inc., New York, NY.

NYSDEC/TAMS. 2001. Onondaga Lake Database. Prepared for New York State Department of Environmental Conservation, Albany, NY by TAMS Consultants, Inc., New York, NY.

New York State Department of Health (NYSDOH). 1951. Onondaga Lake Drainage Basin, Recommended Classifications and Assignment of Standards of Quality and Purity for Designated Waters of New York State. Oswego River Drainage Basin Survey Series Report No. 1. Water Pollution Control Board. July.

NYSDOH. 1995. Public Health Assessment. Onondaga Lake, City of Syracuse, Towns of Salina and Geddes, Onondaga County, New York. New York State Department of Health, Albany, NY.

NYSDOH. 1999. 1999 – 2000 Health Advisories: Chemicals in Game and Sportfish. New York State Department of Health. Division of Environmental Health Assessment, Troy, NY.

NYSDOH. 2002. 2002 – 2003 Health Advisories: Chemicals in Sportfish and Game. New York State Department of Health. Division of Environmental Health Assessment, Troy, NY.

Newsom, J. M. 1985. Transport of organic compounds dissolved in ground water. *Ground Water Monit. Rev.* 5(2): 28-36.

O'Brien & Gere. 1989. History of the Semet Residue Ponds Report. Prepared for Allied-Signal, Inc. Solvay, New York. O'Brien & Gere Engineers, Inc., Syracuse, New York.

O'Brien & Gere. 1990. History of the Willis Avenue Plant, Petroleum Storage Facility, and Associated "Hot-Spots." Prepared for Allied-Signal, Inc. Solvay, New York. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 1991. Semet Residue Ponds Remedial Investigation, Geddes, New York. Prepared for AlliedSignal, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 1997. Treatability Study Report Addendum No. 1, Semet Residue Ponds Site, Geddes, New York. Prepared for AlliedSignal, Inc., Solvay, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 1999a. Feasibility Study Revised Final Report, Semet Residue Ponds Site, Geddes, New York. Prepared for AlliedSignal, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 1999b. Supplemental RI/FS – Former Inland Fisher Guide Facility and Ley Creek Deferred Media, Final Work Plan. Prepared for General Motors Corporation, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 1999c. Screening Level Ecological Assessment, Willis Avenue Chlorobenzene Site, Geddes, New York. Prepared for AlliedSignal Inc. Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY. July. Updated March 2001.

O'Brien & Gere. 2000a. Preliminary Site Assessment Work Plan, Ballfield Site, Geddes, New York. Prepared for AlliedSignal, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 2000b. Preliminary Site Assessment Work Plan, Harbor Brook Site, Geddes, New York. Prepared for AlliedSignal, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 2002a. Harbor Brook Site Remedial Investigation/Feasibility Study Work Plan. Prepared for Honeywell. O'Brien & Gere Engineers, Inc., Syracuse, NY. February.

O'Brien & Gere. 2002b. I-690 Storm Drainage System Underdrain Isolation Pilot Study. Prepared for Honeywell. O'Brien & Gere Engineers, Inc., Syracuse, NY. March.

O'Brien & Gere. 2002c. Remedial Investigation/Feasibility Study – Ballfield Site, Geddes, New York. Prepared for Honeywell. O'Brien & Gere Engineers, Inc., Syracuse, NY. May.

O'Brien & Gere. 2002d. Semet Ponds/Willis Avenue Groundwater IRM. Prepared for Honeywell, Syracuse, New York. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 2002e. Willis Avenue Chlorobenzene Site – Remedial Investigation, Geddes, New York. Prepared for Honeywell, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 2002f. Pumping Tests, Semet Ponds and Willis Avenue Sites, Geddes, New York. Prepared for Honeywell, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY. August.

O'Brien & Gere. 2002g. East Flume IRM Work Plan. Under NYSDEC review. Prepared for Honeywell. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 2002h. Seeps IRM Semet Residue Ponds Site, Geddes, New York. Prepared for Honeywell, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

O'Brien & Gere. 2002i. The DNAPL Recovery System Modifications Completion Report. Under NYSDEC review. Prepared for Honeywell, Syracuse, NY. O'Brien & Gere Engineers, Inc., Syracuse, NY.

Offenberg, J. H. and J. E. Baker. 2000. PCBs and PAHs in Southern Lake Michigan in 1994 and 1995: Urban Atmospheric Influences and Long-Term Declines. *J. Great Lakes Res.* 26(2): 196-208.

Olivero, A. 2001. Classification and Mapping of New York's Calcareous Fen Communities. New York Natural Heritage Program. Albany, NY.

Olson, B.H. and R.C. Cooper. 1976. Comparison of aerobic and anaerobic methylation of mercuric chloride by San Francisco Bay sediments. *Water Res.* 10:113–116.

Onondaga County. 1998. Summary of the Onondaga Lake Amended Consent Judgment, January 25. Onondaga County, Office of the County Executive, Syracuse, NY.

Onondaga County Department of Water Environment Protection (OCDWEP). 2002. Web site: <http://www.lake.onondaga.ny.us/ol14.htm>. Accessed November 22.

Onondaga Lake Management Conference (OLMC). 1993. Onondaga Lake: A Plan for Action. Onondaga Lake Management Conference, Syracuse, NY.

OLMC. 1994. The State of Onondaga Lake. Prepared by Upstate Freshwater Institute. Onondaga Lake Management Conference, Syracuse, NY.

- Ordóñez, S. and M.A. García del Cura. 1983. Recent and tertiary fluvial carbonates in Central Spain. *Special Pub. Inter. Assoc. Sedimentol.* 6:485–497.
- Owens, E.M. and S.W. Effler. 1996. Hydrodynamics and transport. In: *Limnological and Engineering Analysis of a Polluted Urban Lake*. S.W. Effler (ed). Springer-Verlag, New York, NY. pp. 200–262.
- Pagano, T.S., D.B. Terry, and A.W. Ingram. 1986. Geohydrology of the glacial-outwash aquifer in the Baldwinsville Area, Seneca River, Onondaga County, New York. US Geological Survey, Water Resources Investigation Open File Report 85-4094.
- Parsons Engineering Science, Inc. 2001. Work Plan for Remedial Investigation/Feasibility Study at the LCP Bridge Street Site, Operable Unit 2, Solvay, New York. Prepared for Honeywell. October.
- Parsons. 2002a. Draft Interim Remedial Measure Work Plan for the Geddes Brook Site, Geddes, New York. Prepared for Honeywell.
- Parsons. 2002b. Groundwater Upwelling Investigation Work Plan for Onondaga Lake. Syracuse, New York. Prepared for Honeywell, Morristown, New Jersey. October.
- Parsons. 2002c. Remedial Design Work Plan for the LCP Bridge Street Site, Solvay, New York. Prepared for Honeywell.
- Penn, M.R., J.J. Pauer, R.K. Gelda, and M.T. Auer. 1994. Laboratory Measurements of Chemical Exchange at the Sediment-Water Interface of Onondaga Lake. Technical Report. Prepared for Upstate Freshwater Institute, Syracuse, NY. Michigan Technological University, Department of Civil and Environmental Engineering, Houghton, MI.
- Pentecost, A. 1989. Growth and calcification of *Calothrix*-dominated oncolites from northern England. pp. 443–454. In: *Origin, Evolution, and Modern Aspects of Biomineralization in Plants and Animals*. R.E. Crick (ed). Plenum Press, New York, NY.
- Phillips, J.S. 1955. Origin and Significance of Subsidence Structures in Carbonate Rocks Overlying Silurian Evaporites in Onondaga County, Central New York. Master's Thesis, Syracuse University, Syracuse, NY.
- Pike, S.M. and S.B. Moran. 2001. Trace elements in aerosol and precipitation at New Castle, NH, USA. *Atmospheric Environment*. 35:3361-3366.
- PTI Environmental Services (PTI). 1991a. Onondaga Lake RI/FS Sampling and Analysis Plan. Volume 1: Field Sampling Plan. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.
- PTI. 1991b. Onondaga Lake RI/FS Sampling and Analysis Plan. Volume 2: Quality Assurance Project Plan. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.

PTI. 1991c. Onondaga Lake RI/FS Work Plan. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.

PTI. 1992a. Onondaga Lake RI/FS Geophysical Survey Report. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Waltham, MA.

PTI. 1992b. Onondaga Lake RI/FS Sediment Gas and Total Petroleum Hydrocarbon Survey (addition to Task 4). PTI Environmental Services, Bellevue, WA.

PTI. 1992c. Onondaga Lake RI/FS Sediment Processes Study Work Plan and Sampling and Analysis Plan. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.

PTI. 1992d. Onondaga Lake RI/FS Site History Report. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.

PTI. 1993a. Onondaga Lake RI/FS Bioaccumulation Investigation Data Report. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Waltham, MA.

PTI. 1993b. Onondaga Lake RI/FS Ecological Effects Investigation. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Waltham, MA.

PTI. 1993c. Onondaga Lake RI/FS Mercury and Calcite Mass Balance Investigation Data Report. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.

PTI. 1993d. Onondaga Lake RI/FS Substance Distribution Investigation Data Report. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.

PTI. 1993e. Onondaga Lake RI/FS Supplemental Sampling Plan – East Flume Sediments. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Waltham, MA.

PTI. 1993f. Results of Groundwater and Tributary Mercury Sampling Conducted. PTI Environmental Services, Lake Oswego, OR.

PTI. 1994a. Onondaga Lake RI/FS Tributary and Sewer Flow Rate Data Report. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Waltham, MA.

PTI. 1994b. Supplemental Sediment Sampling at Onondaga Lake – East Flume. Prepared for Allied Signal Inc. PTI Environmental Services, Waltham, MA.

PTI. 1995. Onondaga Lake RI/FS Ninemile Creek Supplemental Sampling Work Plan. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.

PTI. 1996a. Onondaga Lake RI/FS West Flume Mercury Investigation and Supplemental Sampling and Ninemile Creek Supplemental Sampling Data Report. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.

- PTI. 1996b. Supplemental Mercury Methylation and Remineralization Studies Work Plan. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.
- PTI. 1997. Onondaga Lake RI/FS Supplemental Mercury Methylation and Remineralization Studies Data Report. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA.
- PTI and BBL. 1994. Onondaga Lake RI/FS West Flume Mercury Investigation Work Plan. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA and Blasland, Bouck & Lee Inc., Syracuse, NY.
- PTI and BBL. 1995. Onondaga Lake RI/FS West Flume Supplemental Sampling Work Plan. Prepared for AlliedSignal Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA, and Blasland, Bouck & Lee Inc., Syracuse, NY.
- PTI and Dames & Moore. 1997. Addendum to the Onondaga Lake RI/FS Mercury Modeling Report. Re-evaluation of Tributary Loading. Prepared for AlliedSignal, Inc., Solvay, NY. PTI Environmental Services, Bellevue, WA and Dames & Moore, Salem, NH.
- Ramlal, P.S., J.W.M. Rudd, and R.E. Hecky. 1986. Methods for measuring specific rates of mercury methylation and degradation and their use in determining factors controlling rates of mercury methylation. *Appl. Environ. Microbiol.* 51:110–114.
- Reimann-Buechner Partnership. 1991. 1991 Onondaga Lake Development Plan.
- Reschke, C. 1990. Ecological Communities of New York State. New York State Department of Environmental Conservation, New York Natural Heritage Program, Albany, NY.
- Rickard, L.V. and D.W. Fisher. 1975. Correlation of the Silurian and Devonian Rocks in New York State. New York State Museum and Science Service Map and Chart Series Number 24. 16p.
- Ringler, N.A., C. Gandino, P. Hirethota, R. Danehy, P. Tango, C. Morgan, C. Millard, M. Murphy, M.A. Arrigo, R.J. Sloan, and S.W. Effler. 1996. Fish communities and habitats in Onondaga Lake, adjoining portions of the Seneca River, and lake tributaries. In: *Limnological and Engineering Analysis of a Polluted Urban Lake: Prelude to Environmental Management of Onondaga Lake*, New York. S.W. Effler (ed). Springer-Verlag, New York, NY. pp. 453–493.
- Ritchie, J.C. and J.R. McHenry. 1990. Application of radioactive fallout Cs-137 for measuring soil erosion and sediment accumulation rates and patterns: A review. *Journal of Environmental Quality* 19: 215-233.
- Robbins, J.A. and B.J. Eadie. 1991. Seasonal cycling of trace elements, Cs-137, Be-7 and Pu-239+240 in Lake Michigan. *J. Geophysical Research.* 96: 17081-17104.
- Rowell, H.C. 1992. Paleolimnology, Sediment Stratigraphy, and Water Quality History of Onondaga Lake, Syracuse, NY. Dissertation. State University of New York, College of Environmental Science and Forestry, Syracuse, NY.

Rudd, J.W.M., M.A. Turner, A. Furutani, A.L. Swick, and B.E. Townsend. 1983. The English-Wabigoon River System. I: A synthesis of recent research with a view towards mercury amelioration. *Can. J. Fish. Aquat. Sci.* 40:2206–2217.

Sarin, M.M., S. Krishnaswami, T. K. Dalai, V. Ramaswamy, and V. Ittekkot. 2000. Settling fluxes of U- and Th-series nuclides in the Bay of Bengal: results from time-series sediment trap studies. *Deep-Sea Research I* 47: 1961-1985.

Sayles, F.L. and W.J. Jenkins. 1982. Advection of pore fluids through sediments in the Equatorial East Pacific. *Science* 217:245–248.

Schwarzenbach, R. P. and J. Westall. 1981. Transport of nonpolar organic compounds from surface water to groundwater: Laboratory sorption studies. *Environ. Sci. Technol.*, 15: 1360-1367.

Schwarzenbach, R. P., P. M. Gschwend, and D. M. Imboden. 1993. *Environmental Organic Chemistry*, A Wiley-Interscience Publication.

Sharpe, C. and C.T. Driscoll. 2002. Personal communication via email to S. Gbondo-Tugbawa, TAMS Consultants, Inc., regarding 2000 conductivity data for Onondaga Lake. September 27.

Sellers, P., C.A. Kelly, J.W.M. Rudd, and A.R. MacHutchens. 1996. Photodegradation of methylmercury in lakes. *Nature* 380:694–697.

Service Environmental & Engineering. 2002. Draft Geology-Hydrogeology Report for St. Louis River/Interlake/Duluth Tar Site (SLRIDT), Duluth, Minnesota. January 29, 2002. Web site: <http://www.slridt.com>. Accessed October 2002.

Shepard, Jr., W., Manager, AlliedSignal. 1996. Personal communication via letter to T. Larson, NYSDEC, regarding Onondaga Lake Site History Report. April 3.

Siegfried, C., N.A. Auer, and S.W. Effler. 1996. Changes in the zooplankton of Onondaga Lake: Causes and implications. *Lake Reserv. Manage.* 12(1):59–71.

Sittig, M. 1991. *Handbook of Toxic and Hazardous Chemicals and Carcinogens*, Volumes 1 and 2, Third Edition. Noyes Publications, Park Ridge, NJ.

Sloan, R., L. Skinner, E. Horn, and R. Karcher. 1987. An overview of mercury contamination in the fish of Onondaga Lake. New York State Department of Environmental Conservation Technical Report 87-1 (BEP).

Soil Conservation Service (SCS). 1977. *Soil Survey of Onondaga County, New York*. US Department of Agriculture, Soil Conservation Service.

Spectrum Chemical Fact Sheet. 2002. Web site: <http://www.speclab.com/compound/chemabc.htm>. Accessed July.

Stearns & Wheler. 1993. Bioaccumulation of Organic Compounds in Fish Flesh in Onondaga Lake. Stearns & Wheler, Cazenovia, NY.

Stearns & Wheler. 1994. Onondaga Lake Cooperative Monitoring Program, 1992 Annual Report. Stearns & Wheler, Cazenovia, NY.

Stearns & Wheler, LLC. 2001. Draft Report. Remedial Investigation, Maestri II Site, Geddes, New York. Volume I of II. Prepared for Colt Industries, Inc., Crucible Materials Corporation, and Val's Dodge, Inc. June.

Syracuse Water Department (SWD). 2000. Syracuse water newsletter. Web site: <http://www.syracuse.ny.us/syrmayor/Services/Departments/waterreport.html>. City of Syracuse, Syracuse Water Department, Syracuse, NY. Accessed May.

TAMS Consultants, Inc. (TAMS). 1995. Wastebeds Investigation Report. Prepared for New York State Department of Environmental Conservation, Albany, NY. September.

TAMS. 2001. Work Plan for Supplemental Sampling in Onondaga Lake – 2001. Onondaga Lake RI/FS. Prepared for New York State Department of Environmental Conservation, Albany, NY. November 29.

TAMS. 2002a. Onondaga Lake Baseline Ecological Risk Assessment. Original document prepared by Exponent, Bellevue, Washington, for Honeywell, East Syracuse, New York. Revision prepared by TAMS, New York, New York and YEC, Valley Cottage, New York, for New York State Department of Environmental Conservation, Albany, New York. December.

TAMS. 2002b. Onondaga Lake Human Health Risk Assessment Report. Original document prepared by Exponent, Bellevue, Washington, for Honeywell, East Syracuse, New York. Revision prepared by TAMS, New York, New York and YEC, Valley Cottage, New York, for New York State Department of Environmental Conservation, Albany, New York. December.

TAMS/USEPA. 2000. Hudson River PCBs Reassessment RI/FS – Response to Peer Review Comments on the Data Evaluation and Interpretation Report (DEIR) and the Low Resolution Sediment Coring Report (LRC). Prepared for USEPA Region 2 and USACE by TAMS Consultants, Inc, Bloomfield, NJ.

TAMS/USEPA. 2002. Responsiveness Summary for the Hudson River PCBs Site Record of Decision. Prepared for USEPA Region 2 and USACE by TAMS Consultants, Inc., Bloomfield, NJ.

Thomas, R. G. 1990. Volatization from water. In: Handbook of Chemical Property Estimation Methods. Environmental Behavior of Organic Compounds. Lyman, W. J., W. F. Reehl, and D. H. Roseblatt (eds.) Washington DC: American Chemical Society.

Trewartha, G. T. 1968. An Introduction to Climate. Fourth Edition. McGraw-Hill Book Co., New York, NY.

Ulrich, S. M., T. W. Tanton, and S. A. Abdrashitova. 2001. Mercury in the aquatic environment: a review of factors affecting methylation. *Critical Reviews in Environ. Sci. Technol.* 31(3): 241-293.

United States (US) Census Bureau. 2002. Table CO-EST2001-08-36 – New York Population Change for Counties Sorted in Alphabetical Order. Web site: <http://eire.census.gov/popest/data/counties/tables/CO-EST2001-08/CO-EST2001-08-36.php>. US Census Bureau, Population Division. Release Date: April 29, 2002. Accessed November 2002.

United States Environmental Protection Agency (USEPA). 1973. Report of Mercury Source Investigation, Onondaga Lake, New York and Allied Chemical Corporation, Solvay, New York. Prepared by National Field Investigations Center Cincinnati and USEPA Region II, New York. USEPA Office of Enforcement and General Counsel. April.

USEPA. 1981. Aquatic Fate Process Data for Organic Priority Pollutants. EPA-440/4-81-014. US Environmental Protection Agency, Office of Water Regulations and Standards, Washington, DC.

USEPA. 1983. Methods for Chemical Analysis of Water and Wastes. US Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Cincinnati, OH.

USEPA. 1989. Memorandum from H.M. Fribush, Technical Project Officer, Analytical Operations Branch, to S. Wells, Chief, NPL Criteria Section, Site Assessment Branch, regarding *J*-qualified CLP data and recommendations for its use. US Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, DC.

USEPA. 1995. Method 1669: Method for Sampling Ambient Water for Determination of Metals at EPA Ambient Criteria Levels. US Environmental Protection Agency, Office of Science and Technology, Environmental and Analysis Division (4303), Washington, DC.

USEPA. 1997a. Exposure Factors Handbook. EPA/600/P-95/002F. US Environmental Protection Agency, Office of Research and Development, Washington, DC.

USEPA. 1997b. Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments. EPA 540-R-97-0C5. US Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, DC.

USEPA. 1998. Guidelines for Ecological Risk Assessment. Risk Assessment Forum. US Environmental Protection Agency, Washington, DC. EPA/630/R-95/002F. April 1998.

USEPA. 2000. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates. EPA/600/R-99/064. US Environmental Protection Agency, Office of Research and Development, Duluth, MN. Office of Science and Technology, Office of Water, Washington, DC.

United States Geological Survey (USGS). 1990. Data dump from WATSTORE: flow data for tributaries to Onondaga Lake and lake elevations, water years 1970 – 1989. US Geological Survey, New York.

USGS. 2001. United States NWIS-W data retrieval. US Geological Survey, Washington, DC. Web site: <http://waterdata.usgs.gov/nwis/sw>. Accessed May 2002.

USGS. 2002. Water resources of the United States. Flow data for tributaries to Onondaga Lake and lake elevations, water years 1970–1989. US Geological Survey, New York. Web site: <http://waterdata.usgs.gov/nwis/sw>. Accessed October 2002.

Upstate Freshwater Institute (UFI). 1992. Hydrologic Budget Considerations and Mass Balance Modeling of Onondaga Lake. Prepared for Onondaga Lake Management Conference, Syracuse, NY. Upstate Freshwater Institute, Syracuse, NY.

UFI. 1994. The State of Onondaga Lake. Prepared for Onondaga Lake Management Conference, Syracuse, NY. Upstate Freshwater Institute, Syracuse, NY.

Van den Berg, M., L. Birnbaum, A.T.C. Bosveld, B. Brunström, P. Cook, M. Feeley, J.P. Giesy, A. Hanberg, R. Hasegawa, S.W. Kennedy, T. Kubiak, J.C. Larsen, F.X.R. van Leeuwen, A.K.D. Liem, C. Nolt, R.E. Peterson, L. Poellinger, S. Safe, D. Schrenk, D. Tillitt, M. Tysklind, M. Younes, F. Wærn, and T. Zacharewski. 1998. Toxic equivalency factors (TEFs) for PCBs, PCDDs, PCDFs for humans and wildlife. *Environ. Health Perspect.* 106(12):775–792.

Van Ry, D. A., C. L. Gigliotti, T. R. Glenn, E. D. Nelson, L. A. Totten, and S. J. Eisenreich. 2002. Wet deposition of polychlorinated biphenyls in urban and background areas of the mid-Atlantic states. *Environ. Sci. Technol.* 36(15): 3201-3209.

Verschuieren, K. 1983. *Handbook of Environmental Data on Organic Chemicals*. 2nd ed. New York, NY: Van Nostrand Reinhold Company, 477-478.

Verta, M., T. Matilainen, P. Porvari, M. Niemi, A. Uusi-Rauva, and N. S. Bloom 1994. Methylmercury Sources in Boreal Lake Ecosystems. In: *Mercury Pollution: Integration and Synthesis*. Watras, C. J. and J. W. Huckabee (eds.). Lewis Publishers, CRC Press. Boca Raton, Florida. pp. 119-136.

Wagner, B.A., D.M. O'Donnell, and E.A. Cowen. 2002. An Upwelling Event at Onondaga Lake, NY: Characterization, Impact and Recurrence. Presentation given at the Fourth Annual Onondaga Lake Scientific Forum, Liverpool, NY.

Wakeham, S. G., A. C. Davis, and J. L. Karas. 1983. Mesocosm experiments to determine the fate and persistence of volatile organic compounds in coastal seawater. *Environ. Sci. Technol.* 17:611-617.

Walker, W. W. 1987. *Empirical Methods for Predicting Eutrophication in Impoundments*. Report 4, Phase III: Applications Manual. Technical Report E-81-9. US Army Corps of Engineers Waterways Experiments Station, Vicksburg, MS.

Wang, M. J. and K. C. Jones. 1994. Behavior and fate of chlorobenzenes in spiked and sewage sludge-amended soil. *Environ. Sci. Technol.* 28:1843–1852.

Wang, W. and C.T. Driscoll. 1995. Patterns of total mercury concentrations in Onondaga Lake, New York. *Environ. Sci. Technol.* 29:2261–2266.

Watras, C.J., N.S. Bloom, R.J.M. Hudson, S. Gherini, R. Munson, S.A. Claas, K.A. Morrison, J. Hurley, J.G. Wiener, W.F. Fitzgerald, R. Mason, G. Vandal, D. Powell, R. Rada, L. Rislov, M. Winfrey, J. Elder, D. Krabbenhoft, A.W. Andren, C. Babiarz, D.B. Porcella, and J.W. Huckabee. 1994. Sources and fates of mercury and methylmercury in Wisconsin lakes. pp. 153–177. In: *Mercury Pollution: Integration and Synthesis*. C.J. Watras and J.W. Huckabee (eds). Lewis Publishers, Boca Raton, FL.

Watras, C.J., N.S. Bloom, S.A. Claas, K.A. Morrison, C.C. Gilmour, and S.R. Craig. 1995. Methylmercury production in the anoxic hypolimnion of a dimictic seepage lake. *Water Air Soil Pollut.* 80:735–745.

Weber, J.H. 1993. Review of possible paths for abiotic methylation of mercury(II) in the aquatic environment. *Chemosphere* 26:2063–2077.

Wetzel, R.G. 1983. *Limnology*. Second Edition. Saunders College Publishing, Philadelphia, PA.

Wieland, E., P. Lienemann, S. Bollhalder, A. Luck, and P. H. Santschi. 2001. Composition and transport of settling particles in Lake Zurich: relative importance of vertical and lateral pathways. *Aquatic Sciences* 63: 123-149.

Wilson, J. T., C. G. Enfield, W. J. Dunlap, R. L. Cosby, and D. A. Foster 1981. Transport and fate of selected organic pollutants in a sandy soil. *J. Environ. Qua.* 110:501-506.

Winkley, S.J. 1989. *The Hydrogeology of Onondaga County, New York*. Prepared for Onondaga County Water Quality Management, Onondaga County Health Department, and Onondaga County Environmental Management Council. Syracuse University, Department of Geology, Syracuse, NY.

Womble, R.N., C.T. Driscoll, and S.W. Effler. 1996. Calcium carbonate deposition in Ca^{2+} polluted Onondaga Lake, New York, USA. *Water Res.* 30(9):2139–2147.

Zheng, C. and G.D. Bennett. 1995. *Applied Contaminant Transport Modeling*. Van Nostrand Reinhold, New York, NY.

Ziegler, C. K. and W. Lick. 1988. The transport of fine-grained sediments in shallow waters. *Environ. Geol. Water Sci.*, 11: 123-132.