

## 9. REFERENCES

- ACGIH. 2009. Chlorinated camphene. In: 2009 TLVs and BEIs: Threshold limit values for chemical substances and physical agents and biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists.
- Adams RS. 1967. The fate of pesticide residue in soil. *J Minn Acad Sci* 34:44-48.
- Adinolfi M. 1985. The development of the human blood-CSF-brain barrier. *Dev Med Child Neurol* 27(4):532-537.
- Adlercreutz H. 1995. Phytoestrogens: Epidemiology and a possible role in cancer protection. *Environ Health Perspect Suppl* 103(7):103-112.
- Agency for Toxic Substances and Disease Registry. 1989. Decision guide for identifying substance-specific data needs related to toxicological profiles; Notice. Agency for Toxic Substances and Disease Registry, Division of Toxicology. *Fed Regist* 54(174):37618-37634.
- Agency for Toxic Substances and Disease Registry. 1990. Biomarkers of organ damage or dysfunction for the renal, hepatobiliary, and immune systems. Subcommittee on Biomarkers of Organ Damage and Dysfunction. Atlanta, GA: Agency for Toxic Substances and Disease Registry.
- Agency for Toxic Substances and Disease Registry. 2005. Health consultation. Organic chemical residue in schoolyard soils, Goodyear and Burroughs-Mollette Elementary Schools and Risley Middle School and Edo-Miller Park/Lanier Field, city of Brunswick, Glynn County, Georgia. <http://www.atsdr.cdc.gov/HAC/pha/OrganicChemicalResidueInSchoolyardSoils/BWKSchoolHCFinal020905.pdf>. June 3, 2010.
- Agency for Toxic Substances and Disease Registry. 2009. Health consultation. Technical support document for a toxaphene reference dose (RfD) as a basis for fish consumption screening values (FCSVs). State of Michigan. Atlanta, GA: Agency for Toxic Substances and Disease Registry.
- AIHA. 2010. Emergency response planning guidelines (ERPG). Fairfax, VA: American Industrial Hygiene Association. [http://www.aiha.org/foundations/GuidelineDevelopment/ERPG/Documents/ERPG\\_Values2010.pdf](http://www.aiha.org/foundations/GuidelineDevelopment/ERPG/Documents/ERPG_Values2010.pdf). June 16, 2010.
- Alava JJ, Keller JM, Wyneken J, et al. 2011. Geographical variation of persistent organic pollutants in eggs of threatened loggerhead sea turtles (*Caretta caretta*) from southeastern United States. *Environ Toxicol Chem* 30(7):1677-1688.
- Alder L, Beck H, Khandker S, et al. 1997. Levels of toxaphene indicator compounds in fish. *Chemosphere* 34(5-7):1389-1400.
- Allen AL, Koller LD, Pollock GA. 1983. Effect of toxaphene exposure on immune responses in mice. *J Toxicol Environ Health* 11:61-69.

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\* Not cited in text

## 9. REFERENCES

- Altman PL, Dittmer DS. 1974. Biological handbooks: Biology data book. Vol. III. 2nd ed. Bethesda, MD: Federation of American Societies for Experimental Biology, 1987-2008, 2041.
- Andersen ME, Krishnan K. 1994. Relating *in vitro* to *in vivo* exposures with physiologically based tissue dosimetry and tissue response models. In: Salem H, ed. Animal test alternatives: Refinement, reduction, replacement. New York, NY: Marcel Dekker, Inc., 9-25.
- Andersen ME, Clewell HJ, Gargas ML, et al. 1987. Physiologically based pharmacokinetics and the risk assessment process for methylene chloride. *Toxicol Appl Pharmacol* 87(2):185-205.
- Anderson C, Sundberg K, Groth O. 1986. Animal model for assessment of skin irritancy. *Contact Dermatitis* 15:143-151.
- Andersson O, Linder C, Olsson M, et al. 1988. Spatial differences and temporal trends of organochlorine compounds in biota from the Northwestern hemisphere. *Arch Environ Contam Toxicol* 17:755-765.
- Andrews P, Headrick K, Pilon JC, et al. 1996. Capillary GC-ECD and ECNI GCMS characterization of toxaphene residues in primate tissues during a feeding study. *Chemosphere* 32(6):1043-1053.
- Andrews P, Newsome WH, Boyle M, et al. 1993. High resolution selective monitoring GC-MS determination of toxaphene in Great Lakes fish. *Chemosphere* 27(10):1865-1872.
- APHA. 1998a. Method 6410B. Liquid-liquid extraction gas chromatographic/mass spectrometric method. In: Standard methods for the examination of water and wastewater. American Public Health Association. American Water Works Association. Water Environmental Federation, 6-59 to 56-72.
- APHA. 1998b. Method 6630c. Liquid-liquid extraction gas chromatographic method II. In: Standard methods for the examination of water and wastewater. American Public Health Association. American Water Works Association. Water Environmental Federation, 6-97 to 96-104.
- Arcaro KF, Yang Y, Vakharia DD, et al. 2000. Toxaphene is antiestrogenic in a human breast-cancer cell assay. *J Toxicol Environ Health A* 59(3):197-210.
- Archer TE, Crosby DG. 1966. Gas chromatographic measurement of toxaphene in milk, fat, blood, and alfalfa hay. *Bull Environ Contam Toxicol* 1:70-75.
- Arnold DL, Bryce F, Baccanale C, et al. 2001. Toxicological consequences of toxaphene ingestion by cynomolgus (*Macaca fascicularis*) monkeys. Part 1. Pre-mating phase. *Food Chem Toxicol* 39(5):467-476.
- Arthur RD, Cain JD, Barrentine BF. 1976. Atmospheric levels of pesticides in the Mississippi Delta. *Bull Environ Contam Toxicol* 15:129-134.
- Atuma SS, Bergh A, Nilsson I, et al. 2000. Toxaphene levels in salmon (*Salmo salar*) from the Baltic Sea. *Chemosphere* 41(4):517-520.
- Atuma SS, Jensen S, Mowrer J, et al. 1986. Separation of lipophilic substances in environmental samples with special reference to toxaphene. *Int J Environ Anal Chem* 24:213-225.

## 9. REFERENCES

- Ault JA, Spurgeon TE. 1984. Multiresidue gas chromatographic method for determining organochlorine pesticides in poultry fat: Collaborative study. *J Assoc Off Anal Chem* 67:284-289.
- Badaeva LN. 1976. [Effects of polychlorocamphene on some organs and their nervous structure.] *Bull Exp Biol Med* 82:1177-1179. (Russian)
- Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol* 8(4):471-486.
- Barr JR, Woolfitt AR, Maggio VL, et al. 2004. Measurement of toxaphene congeners in pooled human serum collected in three U.S. cities using high-resolution mass spectrometry. *Arch Environ Contam Toxicol* 46(4):551-556.
- Barrie L, Bidleman T, Dougherty D, et al. 1993. Atmospheric toxaphene in the high Arctic. *Chemosphere* 27(10):2037-2046.
- Barthel WF, Hawthorne JC, Ford JH, et al. 1969. Pesticides in water: Pesticide residues in sediments of the lower Mississippi River and its tributaries. *Pestic Monit J* 3:8-34.
- Bartoš T, Škarek M, Čupr P, et al. 2005. Genotoxic activity of a technical toxaphene mixture and its photodegradation products in SOS genotoxicity tests. *Mutat Res* 565(2):113-120.
- BCPC. 2003. Camphechlor. In: Tomlin CDS, ed. *The e-pesticide manual*. 13th ed. British Crop Protection Council.
- Berger GS, ed. 1994. Epidemiology of endometriosis. In: *Endometriosis: Advanced management and surgical techniques*. New York, NY: Springer-Verlag, 3-7.
- Besselink H, Nixon E, McHugh B, et al. 2008. Evaluation of tumour promoting potency of fish borne toxaphene residues, as compared to technical toxaphene and UV-irradiated toxaphene. *Food Chem Toxicol* 46:2629-2638.
- Beyer WN, Stafford C. 1993. Survey and evaluation of contaminants in earthworms and in soils derived from dredged material at confined disposal facilities in the Great Lakes Region. *Environ Monit Assess* 24:151-165.
- Bidleman TE, Leone A. 2004. Soil-air relationships for toxaphene in the southern United States. *Environ Toxicol Chem* 23(10):2337-2342.
- Bidleman TF, Olney CE. 1975. Long range transport of toxaphene insecticide in the atmosphere of the western North Atlantic. *Nature* 257:475-477.
- Bidleman TF, Alegria H, Ngabe B, et al. 1998. Trends of chlordane and toxaphene in ambient air of Columbia, South Carolina. *Atmos Environ* 32(11):1849-1856.
- Bidleman TF, Christensen EJ, Harder HW. 1981. Aerial deposition of organochlorines in urban and coastal South Carolina. In: Eisenreich SJ, ed. *Atmospheric pollutants in natural waters*. Ann Arbor, MI: Ann Arbor Science, 481-508.
- Bidleman TF, Cotham WE, Addison RF, et al. 1992. Organic contaminants in the Northwest Atlantic atmosphere at Sable Island, Nova Scotia, 1988-89. *Chemosphere* 24(9):1389-1412.

## 9. REFERENCES

- Bidleman TF, Falconer RL, Walla MD. 1995. Toxaphene and other organochlorine compounds in air and water at Resolute Bay, N.W.T., Canada. *Sci Total Environ* 160-161:55-63.
- Bidleman TF, Patton GW, Walla MD, et al. 1989. Toxaphene and other organochlorines in Arctic Ocean fauna: Evidence for atmospheric delivery. *Arctic* 42(4):307-313.
- Bidleman TF, Stern GA, Tomy GT, et al. 2013. Scavenging amphipods: Sentinels for penetration of mercury and persistent organic chemicals into food webs of the deep Arctic Ocean. *Environ Sci Technol* 47(11):5553-5561.
- Bidleman TF, Walla MD, Muir DCG, et al. 1993. The selective accumulation of polychlorocamphenes in aquatic biota from the Canadian Arctic. *Environ Toxicol Chem* 12:701-709.
- Biessmann A, Mohammed A, Slanina P. 1983. Studies on the tissue disposition and fate of [<sup>14</sup>C] toxaphene in Japanese quail. *Toxicology* 28:155-165.
- Bigley WS, Plapp FW Jr, Hanna RL, et al. 1981. Effect of toxaphene, camphene and cedar oil on methyl parathion residues on cotton. *Bull Environ Contam Toxicol* 27:90-94.
- Bordajandi LR, Ramos L, Gonzalez MJ. 2006. Determination of toxaphene enantiomers by comprehensive two-dimensional gas chromatography with electron-capture detection. *J Chromatogr A* 1125(2):220-228.
- Boshoff PR, Pretorius V. 1979. Determination of toxaphene in milk, butter and meat. *Bull Environ Contam Toxicol* 22:405-412.
- Boyd EM, Taylor FI. 1971. Toxaphene toxicity in protein-deficient rats. *Toxicol Appl Pharmacol* 18:158-167.
- Brown KW, Donnelly KC. 1988. An estimation of the risk associated with the organic constituents of hazardous and municipal waste landfill leachates. *Hazard Waste Hazard Mater* 5:1-30.
- Brumley WC, Brownrigg CM, Grange AH. 1993. Determination of toxaphene in soil by electron-capture negative-ion mass-spectrometry after fractionation by high-performance gel-permeation chromatography. *J Chromatogr* 633:177-183.
- Bruns GW, Birkholz D. 1993. Analysis of environmental samples for toxaphene using gas chromatography/oxygen negative ion-electron capture mass spectrometry (GC/ONEC-MS). *Chemosphere* 27:1873-1878.
- Bryce F, Iverson F, Andrews P, et al. 2001. Effects elicited by toxaphene in the cynomolgus monkey (*Macaca fascicularis*): A pilot study. *Food Chem Toxicol* 39(12):1243-1251.
- Bryson PD. 1989. Chlorinated hydrocarbons (organochlorines). In: Comprehensive review in toxicology. Rockville, MD: Aspen Publication, 527-529.
- Budavari S, O'Neil MJ, Smith A, et al. 1989. The Merck index. 11th ed., 1504-1505.
- Burniston DA, Strachan WM, Wilkinson RJ. 2005. Toxaphene deposition to Lake Ontario via precipitation, 1994-1998. *Environ Sci Technol* 39(18):7005-7011.

## 9. REFERENCES

- Buser HR, Haglund P, Muller MD, et al. 2000. Rapid anaerobic degradation of toxaphene in sewage sludge. *Chemosphere* 40(9-11):1213-1220.
- Butler PA. 1973. Residues in fish, wildlife, and estuaries. Organochlorine residues in estuarine mollusks, 1965-72-National Pesticide Monitoring Programs. *Pestic Monit J* 6:238-362.
- Butler Walker J, Seddon L, McMullen E, et al. 2003. Organochlorine levels in maternal and umbilical cord blood plasma in Arctic Canada. *Sci Total Environ* 302(1-3):27-52.
- Cairns T, Siegmund EG, Froberg JE. 1981. Chemical ionization mass spectrometric examination of metabolized toxaphene from milk fat. *Biomed Mass Spectrom* 8:569-574.
- Calabrese EJ. 1978. Pollutants and high risk groups. The biological basis of increased human susceptibility to environmental and occupational pollutants. New York, NY: John Wiley and Sons, 24-26, 186-193.
- Camanzo J, Rice CP, Jude DJ, et al. 1987. Organic priority pollutants in nearshore fish from 14 Lake Michigan tributaries and embayments, 1983. *J Great Lakes Res* 13:296-309.
- Canada Department of National Health and Welfare. 1978. Guidelines for Canadian drinking water quality. Ottawa, Ontario: Department of National Health and Welfare.
- Cantor KP, Blair A, Everett G, et al. 1992. Pesticides and other agricultural risk factors for non-Hodgkins-lymphoma among men in Iowa and Minnesota. *Cancer Res* 52:2447-2455.
- Carey AE, Douglas P, Tai H, et al. 1979a. Pesticide residue concentrations of five United States cities, 1971-Urban soils monitoring program. *Pestic Monit J* 13:17-22.
- Carey AE, Gowen JA, Tai H, et al. 1978. Pesticide residue levels in soils and crops, 1971--National soils monitoring program (III). *Pestic Monit J* 12:117-136.
- Carey AE, Gowen JA, Tai H, et al. 1979b. Pesticide residue levels in soils and crops from 37 states, 1972-National soils monitoring program (IV). *Pestic Monit J* 12:209-229.
- Casida JE, Holmstead RL, Khalifa S, et al. 1974. Toxaphene insecticide: A complex biodegradable mixture. *Science* 183:520-521.
- CDC. 1963. Clinical handbook on economic poisons: Emergency information for treating poisoning. Atlanta, GA: U.S. Public Health Service, Communicable Disease Center. PHS Publication No. 476 Rev. PB218287.
- Champoux L, Moisey J, Muir DC. 2010. Polybrominated diphenyl ethers, toxaphenes, and other halogenated organic pollutants in great blue heron eggs. *Environ Toxicol Chem* 29(2):243-249.
- Chan HM, Yeboah F. 2000. Total toxaphene and specific congeners in fish from the Yukon, Canada. *Chemosphere* 41(4):507-515.
- Chan HM, Zhu J, Yeboah F. 1998. Determination of toxaphene in biological samples using high resolution GC coupled with ion trap MS/MS. *Chemosphere* 36(9):2135-2148.

## 9. REFERENCES

- Chandra J, Durairaj G. 1992. Toxicity of toxaphene on histopathology of vital organs in guinea pig (*Cavia-procellus*). *J Environ Biol* 13:315-322.
- Chandra J, Durairaj G. 1995. Toxicity of toxaphene on the lipid profile in the vital organs of guinea pig, *Cavia procellus*. *J Environ Biol* 16(1):75-81.
- Chandurkar PS, Matsumura F. 1979. Metabolism of toxaphene components in rats. *Arch Environ Contam Toxicol* 8:1-24.
- ChemIDplus Advanced. 2010. Camphechlor. ChemIDplus Advanced. Bethesda, MD: U.S. National Library of Medicine. <http://chem.sis.nlm.nih.gov/chemidplus/>. June 07, 2010.
- Chernoff N, Carver BD. 1976. Fetal toxicity of toxaphene in rats and mice. *Bull Environ Contam Toxicol* 15:660-664.
- Chernoff N, Kavlock RJ. 1982. An *in vivo* teratology screen utilizing pregnant mice. *J Toxicol Environ Health* 10:541-550.
- Chernoff N, Setzer RW, Miller DB, et al. 1990. Effects of chemically-induced maternal toxicity on prenatal development in the rat. *Teratology* 42:651-658.
- Choi H, Kim Y, Song M, et al. 2011. Identification of hepatotoxicity related genes induced by toxaphene in HepG2 cells. *Mol Cell Toxicol* 7:53-60.
- Chu I, Secours V, Villeneuve DC, et al. 1988. Reproduction study of toxaphene in the rat. *J Environ Sci Health (B)* 23:101-126.
- Chu I, Villeneuve DC, Sun CW, et al. 1986. Toxicity of toxaphene in the rat and beagle dog. *Fundam Appl Toxicol* 7:406-418.
- Claborn HV, Mann HD, Ivey MC, et al. 1963. Excretion of toxaphene and strobane in the milk of dairy cows. *J Agric Food Chem* 11:286-289.
- Clark JM, Matsumura F. 1979. Metabolism of toxaphene by aquatic sediment and a camphor-degrading pseudomonad. *Arch Environ Contam Toxicol* 8:285-298.
- Clark JR, Devault D, Bowden RJ, et al. 1984. Contaminant analysis of fillets from Great Lakes Coho salmon, 1980. *J Great Lakes Res* 10:38-47.
- Clewell HJ, Andersen ME. 1985. Risk assessment extrapolations and physiological modeling. *Toxicol Ind Health* 1(4):111-131.
- Cohn WJ, Boylan, JJ, Blanke RV, et al. 1978. Treatment of chlordecone toxicity with cholestyramine: Results of a controlled clinical trial. *New Engl J Med* 298:243-248.
- Coelhan M, Parlar H. 1996. The nomenclature of chlorinated bornanes and camphenes relevant to toxaphene. *Chemosphere* 32(2):217-228.
- Cole RH, Frederick RE, Healy RP, et al. 1984. Preliminary findings of the priority pollutant monitoring project of the nationwide urban runoff program. *J Water Pollut Control Fed* 56:898-908.

## 9. REFERENCES

- Cooper CM. 1991. Persistent organochlorine and current use insecticide concentrations in major watershed components of Moon Lake, Mississippi, USA. *Arch Hydrobiol* 121:103-113.
- Cooper CM, Dendy FE, McHenry JR, et al. 1987. Residual pesticide concentrations in Bear Creek, Mississippi, 1976-1979. *J Environ Qual* 16:69-72.
- Cotham WE, Bidleman TF. 1991. Estimating the atmospheric deposition of organochlorine contaminants to the Arctic. *Chemosphere* 22:165-188.
- Crist HL, Harless RL, Moseman RF, et al. 1980. Application of dehydrochlorination to the determination of toxaphene in soil and identification of the major gas chromatographic peak. *Bull Environ Contam Toxicol* 24:231-237.
- Crowder LA, Dindal EF. 1974. Fate of chlorine-36-labeled toxaphene in rats. *Bull Environ Contam Toxicol* 12:320-327.
- Crowder LA, Whitson RS. 1980. Fate of toxaphene, methyl parathion, and chlordimeform combinations in the mouse. *Bull Environ Contam Toxicol* 24:444-451.
- Crowder LA, Lanzaro GC, Whitson RS. 1980. Behavioral effects of methyl parathion and toxaphene exposure in rats. *J Environ Sci Health B* 15:365-378.
- Dart RC, ed. 2004. Medical toxicology. 3rd ed. Philadelphia, PA: Lippincott Williams & Wilkins, 1489-1496.
- de Boer J, Wester PG. 1993. Determination of toxaphene in human milk from Nicaragua and in fish and marine mammals from the Northeastern Atlantic and the North Sea. *Chemosphere* 27:1879-1890.
- de Boer J, De Geus HJ, Brinkman DA. 1997. Multidimensional gas chromatographic analysis of toxaphene. *Environ Sci Technol* 31(3):873-879.
- de Geus HJ, Besselink H, Brouwer A, et al. 1999. Environmental occurrence, analysis, and toxicology of toxaphene compounds. *Environ Health Perspect* 107(Suppl 1):115-144.
- Dehn PF, Allen-Mocherie S, Karek J, et al. 2005. Organochlorine insecticides: Impacts on human HepG2 cytochrome P4501A, 2B activities and glutathione levels. *Toxicol in Vitro* 19(2):261-273.
- Deichmann WB, Keplinger ML. 1970. Protection against the acute effects of certain pesticides by pretreatment with aldrin, dieldrin, and DDT. In: Deichmann WB, Radomski JL, Penalver RA, eds. Proceedings of the Inter-American Conference on Toxicology and Occupational Medicine, 6th and 7th Pesticide Symposia. Coral Gables, FL: Halos and Associates, 121-123.
- Delorme PD, Muir CG, Lockhart WL, et al. 1993. Depuration of toxaphene in lake trout and white suckers in a natural ecosystem following a single I.P. dose. *Chemosphere* 27:1965-1973.
- De Roos AJ, Zahm SH, Cantor KP, et al. 2003. Integrative assessment of multiple pesticides as risk factors for non-Hodgkin's lymphoma among men. *Occup Environ Med* 60(9):E11.
- Dille JR, Smith PW. 1964. Central nervous system effects of chronic exposure to organophosphate insecticides. *Aerospace Med* 35:475-478.

## 9. REFERENCES

- DiPietro JA, Haliburton JC. 1979. Toxaphene toxicosis in swine. *J Am Vet Med Assoc* 175:452-453.
- DOE. 2010. Chlorinated camphene. Protective Action Criteria (PAC) with AEGLs, ERPGs, & TEELs: Rev. 25 for chemicals of concern (08/2009). U.S. Department of Energy. <http://orise.orau.gov/emi/scapa/chem-pacs-teels/default.htm>. June 16, 2010.
- Donald DB, Stern GA, Muir DC, et al. 1998. Chlorobornanes in water, sediment, and fish from toxaphene treated and untreated lakes in western Canada. *Environ Sci Technol* 32(10):1391-1397.
- Donigian AS Jr, Carsel RF. 1987. Modeling the impact of conservation tillage practices on pesticide concentrations in ground and surface waters. *Environ Toxicol Chem* 6:241-250.
- Dreisbach RH. 1983. Dermatitis due to contact with chemicals. In: *Handbook of poisoning: Prevention, diagnosis, and treatment*. Los Altos, CA: Lange Medical Publications, 88-89.
- Drenth H, Van Oevelen CJC, Buitenhuis CJK, et al. 1998. Induction of hepatic cytochrome P450 activities by toxaphene in the rat. *Organohalogen Compounds* 35:255-258.
- Durant CJ, Reimold RJ. 1972. Effects of estuarine dredging of toxaphene-contaminated sediments in Terry Creek, Brunswick, GA-1971. *Pestic Monit J* 6:94-96.
- EPA. 1974. Case study no. 10. Toxaphene. In: *Production, distribution, use and environmental impact potential of selected pesticides*. EPA540174001. PB238795.
- EPA. 1976a. Criteria document for toxaphene. U.S. Environmental Protection Agency, Office of Water Planning and Standards. EPA440976014. PB253677.
- EPA. 1976b. Analysis and GC-MS characterization of toxaphene in fish and water. Duluth, MN: U.S. Environmental Protection Agency, Office of Research and Development. EPA600376076. PB257773.
- EPA. 1976c. A quantitative method for toxaphene by GC-CI-MS specific ion monitoring. Athens, GA: U.S. Environmental Protection Agency, Office of Research and Development. EPA600476010. PB251931.
- EPA. 1976d. Chemical and photochemical transformation of selected pesticides in aquatic systems. Athens, GA: U.S. Environmental Protection Agency, Office of Research and Development, 1-7, 47, 140. EPA600376067.
- EPA. 1977. The degradation of selected pesticides in soil: A review of the published literature. Cincinnati, OH: U.S. Environmental Protection Agency. EPA600977022. PB272353.
- EPA. 1979a. Water-related environmental fate of 129 priority pollutants. Vol. I: Introduction and technical background, metals and inorganics, pesticides and PCBs. Washington, DC: U.S. Environmental Protection Agency, Office of Water Planning and Standards. EPA440479029a.
- EPA. 1979b. Review of the environmental effects of pollutants: X. Toxaphene. Cincinnati, OH: U.S. Environmental Protection Agency, Office of Research and Development. EPA600179044.
- EPA. 1980. Toxaphene: Ambient water quality criteria for toxaphene. U.S. Environmental Protection Agency, Office of Water Regulations and Standards. EPA440580076.

## 9. REFERENCES

- EPA. 1981. Aquatic fate process data for organic priority pollutants. Washington, DC: U.S. Environmental Protection Agency, 109-110. EPA440481014.
- EPA. 1982a. Toxaphene: Intent to cancel or restrict registrations of pesticide products containing toxaphene; denial of applications for registration of pesticide products containing toxaphene; determination concluding the rebuttable presumption against registration; availability of decision document. U.S. Environmental Protection Agency. Fed Regist 47:53784-53793.
- EPA. 1982b. Method development for determination of polychlorinated hydrocarbons in municipal sludge. Cincinnati, OH: U.S. Environmental Protection Agency, Office of Research and Development. EPA600482035.
- EPA. 1984a. Method T04: Method for the determination of organochlorine pesticides and polychlorinated biphenyls in ambient air. In: Compendium of methods for the determination of toxic organic compounds in ambient air. Research Triangle Park, NC: U.S. Environmental Protection Agency, Quality Assurance Division, Environmental Monitoring Systems Laboratory, ORD. EPA600484041.
- EPA. 1984b. Atmospheric transport of toxaphene to Lake Michigan. U.S. Environmental Protection Agency, Office of Research and Development, Duluth, MN. EPA600384101.
- EPA. 1984c. Method 608: Organochlorine pesticides and PCBs. U.S. Environmental Protection Agency. Fed Regist 49:89-104.
- EPA. 1985. Drinking water criteria document for toxaphene (final draft). Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Criteria and Assessment Office. ECAO-CIN-426. PB86118049.
- EPA. 1986. Superfund record of decision (EPA Region 4) Gallaway Ponds site, Gallaway, Tennessee, September 1986. Washington, DC: U.S. Environmental Protection Agency. EPARODRO486013.
- EPA. 1987a. Health advisories for 16 pesticides (toxaphene). Washington, DC: U.S. Environmental Protection Agency, Office of Drinking Water. PB87200178.
- EPA. 1987b. Superfund record of decision (EPA region 6): Crystal City Airport, Zavala County, Texas (first remedial action), September 1987. U.S. Environmental Protection Agency, Washington, DC. EPARODRO687023.
- EPA. 1989. Pesticides and containers. Recommended procedures for the disposal of pesticides. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 165.7-165.9.
- EPA. 1990a. Interim methods for development of inhalation reference concentrations. Washington, DC: U.S. Environmental Protection Agency, Office of Health and Environmental Assessment, Office of Research and Development, Environmental Criteria and Assessment Office. EPA600890066A.
- EPA. 1990b. Notice of intent to remove certain active ingredients from reregistration list B and to cancel pesticides containing those ingredients. U.S. Environmental Protection Agency. Fed Regist 55:31164-31174.

## 9. REFERENCES

- EPA. 1992a. Method 617: The determination of organohalide pesticides and PCBs in municipal and industrial wastewater. In: Methods for the determination of nonconventional pesticides in municipal and industrial wastewater. Washington, DC: U.S. Environmental Protection Agency, 139-168. EPA821R92002.
- EPA. 1992b. Method 1656. The determination of organo-halide pesticides in municipal and industrial wastewater. In: Methods for the determination of nonconventional pesticides in municipal and industrial wastewater. Washington, DC: U.S. Environmental Protection Agency, 637-677. EPA821R92002.
- EPA. 1996. Method 4040. Soil screening for toxaphene by immunoassay. SW-846 on-line. Test method for evaluating solid waste physical/chemical methods. U.S. Environmental Protection Agency. <http://www.epa.gov/osw/hazard/testmethods/sw846/pdfs/4040.pdf>. September 09, 2010.
- EPA. 1997. Special report on environmental endocrine disruption: An effects assessment and analysis. Washington, DC: U.S. Environmental Protection Agency, Risk Assessment Forum. EPA630R96012.
- EPA. 1998. Announcement of the drinking water contaminant candidate list. U.S. Environmental Protection Agency. Fed Regist 63(40):10274-10287. <http://www.gpoaccess.gov/fr/index.html>. June 17, 2010.
- EPA. 2005. Toxic chemical release inventory reporting forms and instructions: Revised 2004 version. Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986). U.S. Environmental Protection Agency. Office of Environmental Information. EPA260B05001.
- EPA. 2006a. National recommended water quality criteria. Washington, DC: U.S. Environmental Protection Agency, Office of Water. <http://www.epa.gov/waterscience/criteria/wqcriteria.html>. May 11, 2009.
- EPA. 2006b. Title 42-The public health and welfare. Chapter 85-Air pollution prevention and control. Sec. 7412. Hazardous air pollutants. U.S. Environmental Protection Agency. United States Code 42 USC 7412. <http://www.gpoaccess.gov/uscode/index.html>. June 23, 2010.
- EPA. 2007a. Method 8081B. Organochlorine pesticides by gas chromatography. SW-846 On-line. Test methods for evaluating solid waste physical/chemical methods. U.S. Environmental Protection Agency. <http://www.epa.gov/osw/hazard/testmethods/sw846/pdfs/8081b.pdf>. September 9, 2010.
- EPA. 2007b. Method 8270D. Semivolatile organic compounds by gas chromatography/mass spectrometry (GC/MS). SW-846 On-line. Test methods for evaluating solid waste physical/chemical methods. U.S. Environmental Protection Agency. <http://www.epa.gov/osw/hazard/testmethods/sw846/pdfs/8270d.pdf>. September 9, 2010.
- EPA. 2008. Acute exposure guideline levels (AEGLs). Second AEGL chemical priority list. Washington, DC: U.S. Environmental Protection Agency, Office of Pollution and Prevention and Toxics. [http://www.epa.gov/oppt/aegl/pubs/priority\\_2.htm](http://www.epa.gov/oppt/aegl/pubs/priority_2.htm). May 19, 2009.
- EPA. 2009a. Appendix IX to Part 264-Ground-water monitoring list. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 264, Appendix IX. [http://edocket.access.gpo.gov/cfr\\_2009/julqtr/pdf/40cfr264AppIX.pdf](http://edocket.access.gpo.gov/cfr_2009/julqtr/pdf/40cfr264AppIX.pdf). June 18, 2010.

## 9. REFERENCES

- EPA. 2009b. Designation of hazardous substances. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 116.4. [http://edocket.access.gpo.gov/cfr\\_2009/julqtr/pdf/40cfr116.4.pdf](http://edocket.access.gpo.gov/cfr_2009/julqtr/pdf/40cfr116.4.pdf). June 18, 2010.
- EPA. 2009c. 2009 Edition of the drinking water standards and health advisories. Washington, DC: U.S. Environmental Protection Agency, Office of Water. EPA822R09011. <http://epa.gov/waterscience/criteria/drinking/dwstandards2009.pdf>. December 17, 2009.
- EPA. 2009d. National primary drinking water regulations. Washington, DC: U.S. Environmental Protection Agency. Office of Ground Water and Drinking Water. EPA816F09004. <http://www.epa.gov/safewater/consumer/pdf/mcl.pdf>. August 7, 2009.
- EPA. 2009e. Superfund, emergency planning, and community right-to-know programs. Designation, reportable quantities, and notifications. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 302.4. <http://www.epa.gov/lawsregs/search/40cfr.html>. May 20, 2009.
- EPA. 2009f. Superfund, emergency planning, and community right-to-know programs. Extremely hazardous substances and their threshold planning quantities. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 355, Appendix A. <http://www.epa.gov/lawsregs/search/40cfr.html>. May 20, 2009.
- EPA. 2009g. Superfund, emergency planning, and community right-to-know programs. Toxic Chemical Release Reporting. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 372.65. <http://www.epa.gov/lawsregs/search/40cfr.html>. May 11, 2009.
- EPA. 2009h. Table 1 to § 68.130-List of regulated toxic substances and threshold quantities for accidental release prevention. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 68.130. [http://edocket.access.gpo.gov/cfr\\_2009/julqtr/pdf/40cfr68.130.pdf](http://edocket.access.gpo.gov/cfr_2009/julqtr/pdf/40cfr68.130.pdf). June 17, 2010.
- EPA. 2009i. Table 117.3 - Reportable quantities of hazardous substances designated pursuant to section 311 of the clean water act. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 117.3. [http://edocket.access.gpo.gov/cfr\\_2009/julqtr/pdf/40cfr117.3.pdf](http://edocket.access.gpo.gov/cfr_2009/julqtr/pdf/40cfr117.3.pdf). June 18, 2010.
- EPA. 2009j. Toxic pollutants. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 401.15. [http://edocket.access.gpo.gov/cfr\\_2009/julqtr/pdf/40cfr401.15.pdf](http://edocket.access.gpo.gov/cfr_2009/julqtr/pdf/40cfr401.15.pdf). June 18, 2010.
- EPA. 2010b. Compiled AEGLS values. AEGL Chemicals. U.S. Environmental Protection Agency. [http://www.epa.gov/oppt/aegl/pubs/compiled\\_aegls\\_may2010.pdf](http://www.epa.gov/oppt/aegl/pubs/compiled_aegls_may2010.pdf). June 16, 2010.
- EPA. 2010c. Drinking water contaminants. List of contaminants and their MCLs. U.S. Environmental Protection Agency. <http://www.epa.gov/safewater/contaminants/index.html>. July 22, 2010.
- EPA. 2010d. The national listing of fish advisories. U.S. Environmental Protection Agency. <http://oaspub.epa.gov/nlfwa/nlfwa.advrpt>. September 02, 2010.
- EPA. 2010a. Method 8276. Toxaphene and toxaphene congeners by gas chromatography/negative ion mass spectrometry (GC/NIMS). Revision 0, March 2010. U.S. Environmental Protection Agency. [http://www.epa.gov/osw/hazard/testmethods/sw846/new\\_meth.htm](http://www.epa.gov/osw/hazard/testmethods/sw846/new_meth.htm). September 09, 2010.

## 9. REFERENCES

- EPA. 2012. Method 525.3. Determination of semivolatile organic chemicals in drinking water by solid phase extraction and capillary column gas chromatography/mass spectrometry (GC/MS). Cincinnati, OH: U.S. Environmental Protection Agency, Office of Research and Development. EPA600R12010.
- Epstein SS, Arnold E, Andrea J, et al. 1972. Detection of chemical mutagen by the dominant lethal assay in the mouse. *Toxicol Appl Pharmacol* 23:288-325.
- Evans MS, Noguchi GE, Rice CP. 1991. The biomagnification of polychlorinated biphenyls, toxaphene, and DDT compounds in a Lake Michigan offshore food web. *Arch Environ Contam Toxicol* 20:87-93.
- Fattah KMA, Crowder LA. 1980. Plasma membrane ATPases from various tissues of the cockroach (*Periplaneta americana*) and mouse influenced by toxaphene. *Bull Environ Contam Toxicol* 24:356-363.
- Faust SD, Suffet IH. 1966. Recovery, separation, and identification of organic pesticides from natural and potable waters. *Residue Rev* 15:44-116.
- FDA. 1988. Food and Drug Administration Pesticide Program. Residues in foods-1987. Food and Drug Administration Program. *J Assoc Off Anal Chem* 71(6):156A-174A.
- FDA. 1989. Residues in foods-1988. Food and Drug Administration Pesticide Program. *J Assoc Off Anal Chem* 72:133A-152A.
- FDA. 1990. Residues in foods 1989. Food and Drug Administration. *J Assoc Off Anal Chem* 73:127A-146A.
- FDA. 1991. FDA monitoring program. Residues in foods-1990. Food and Drug Administration. *J Assoc off Anal Chem* 74(5):121A-141A.
- FDA. 1992. Residue monitoring 1991. FDA Monitoring Program. Food and Drug Administration. *J AOAC Int* 75(5):135A-157A.
- FDA. 1993. FDA Monitoring Program. Food and Drug Administration. *J AOAC Int* 76(5):127A-148A.
- FDA. 1994a. Method 302: Method I for nonfatty foods. In: Pesticide analytical manual. Volume I. Multiresidue methods. Food and Drug Administration.
- FDA. 1994b. Method 304: Method for fatty foods. In: Pesticide analytical manual. Volume I. Multiresidue methods. Food and Drug Administration.
- FDA. 1994c. Pesticide program: Residue monitoring. Food and Drug Administration . *J AOAC Int* 77(5):163A-185A.
- FDA. 1995. FDA Monitoring Program. Food and Drug Administration. *J AOAC Int* 78(5):119A-141A.
- FDA. 2010a. Bottled water. U.S. Food and Drug Administration. Code of Federal Regulations 21 CFR 165.110. [http://edocket.access.gpo.gov/cfr\\_2010/aprqrtr/pdf/21cfr165.110.pdf](http://edocket.access.gpo.gov/cfr_2010/aprqrtr/pdf/21cfr165.110.pdf). June 18, 2010.
- FDA. 2010b. Everything added to food in the United States (EAFUS). U.S. Food and Drug Administration. <http://www.accessdata.fda.gov/scripts/fcn/fcnNavigation.cfm?rpt=eafusListing>. June 18, 2010.

## 9. REFERENCES

- Fisk AT, Rosenberg B, Cymbalisty CD, et al. 1999. Octanol/water partition coefficients of toxaphene congeners determined by the "slow-stirring" method. *Chemosphere* 14:2549-2562.
- Fomon SJ. 1966. Body composition of the infant: Part I: The male reference infant. In: Falkner F, ed. *Human development*. Philadelphia, PA: WB Saunders, 239-246.
- Fomon SJ, Haschke F, Ziegler EE, et al. 1982. Body composition of reference children from birth to age 10 years. *Am J Clin Nutr* 35(Suppl 5):1169-1175.
- Ford WM, Hill EP. 1990. Organochlorine residues in Mississippi raccoons. *J Wildl Manage* 54:591-594.
- Ford WM, Hill EP. 1991. Organochlorine pesticides in soil sediments and aquatic animals in the upper steele bayou watershed of Mississippi. *Arch Environ Contam Toxicol* 20:161-167.
- Foreid S, Rundberget T, Severinsen T, et al. 2000. Determination of toxaphenes in fish and marine mammals. *Chemosphere* 41(4):521-528.
- Fowler B. 2000. The determination of toxaphene in environmental samples by negative ion electron capture high resolution mass spectrometry. *Chemosphere* 41(4):487-492.
- Fowler B, Hoover D, Hamilton MC. 1993. The quantification of toxaphene in environmental samples. *Chemosphere* 27(10):1891-1905.
- Gaines JB. 1969. Acute toxicity of pesticides. *Toxicol Appl Pharmacol* 14:515-534.
- Garcia M, Mourelle M. 1984. Gamma-glutamyl transpeptidase: A sensitive marker in DDT and toxaphene exposure. *J Appl Toxicol* 4:246-248.
- Gartrell MJ, Craun JC, Podrebarac DS, et al. 1986a. Pesticides, selected elements, and other chemicals in infant and toddler total diet samples, October 1980-March 1982. *J Assoc Off Anal Chem* 69:123-145.
- Gartrell MJ, Craun JC, Podrebarac DS, et al. 1986b. Pesticides, selected elements, and other chemicals in adult total diet samples, October 1980-March 1982. *J Assoc Off Anal Chem* 69:146-161.
- Gauthier M, Roberge CJ, Pelletier M, et al. 2001. Activation of human neutrophils by technical toxaphene. *Clin Immunol* 98(1):46-53.
- Gertig H, Nowaczyk W. 1975. The influence of carathane and toxaphene on the activity of some enzymes in rat's tissues in the studies *in vivo*. *Pol J Pharmacol Pharm* 27:357-364.
- Gibson JR, Jones GA, Dorough HW, et al. 1974. Chlorinated insecticide residues in Kentucky burley tobacco, crop years 1963-72. *Pestic Monit J* 7:205-213.
- Gill US, Schwartz HM, Wheatley B, et al. 1996. Congener specific analysis of toxaphene in serum using ECNI-MS. *Chemosphere* 33(6):1021-1025.
- Giwercman A, Carlsen E, Keiding N, et al. 1993. Evidence for increasing incidence of abnormalities of the human testis: A review. *Environ Health Perspect Suppl* 101(2):65-71.

## 9. REFERENCES

- Glassmeyer ST, De Vault DS, Myers TR, et al. 1997. Toxaphene in Great Lakes fish: A temporal, spatial, and trophic study. *Environ Sci Technol* 31(1):84-88.
- Glassmeyer ST, Shanks KE, Brice KA, et al. 1998. Toxaphene quantitation: Improvements and application to ambient atmospheric samples. In: *Organohalogen compounds. Analysis, chlorinated bornanes, chiral contaminants, polymer additives and monomers*, 269-273.
- Glassmeyer ST, Shanks KE, Hites RA. 1999. Automated toxaphene quantitation by GC/MS. *Anal Chem* 71(7):1448-1453.
- Glotfelty DE, Leech MM, Jersey J, et al. 1989a. Volatilization and wind erosion of soil surface applied atrazine, simazine, alachlor, and toxaphene. *J Agric Food Chem* 37(2):546-551.
- Glotfelty DE, Williams GH, Freeman HP, et al. 1989b. Regional atmospheric transport and deposition of pesticides in Maryland. In: Kurtz D, ed. *Proceedings of the symposium on long-range transport of organic pollutants*. Lewis Publishers.
- Gomes ED. 1977. Determination of toxaphene by basic alcoholic hydrolysis and florisil separation. *Bull Environ Contam Toxicol* 17:456-462.
- Gooch JW, Matsumura F. 1985. Evaluation of the toxic components of toxaphene in Lake Michigan lake trout. *J Agric Food Chem* 33:844-848.
- Gooch JW, Matsumura F. 1987. Toxicity of chlorinated bornane (toxaphene) residues isolated from Great Lakes trout (*Salvelinus namaycush*). *Arch Environ Contam Toxicol* 16:349-355.
- Goodman JI, Brusick DJ, Busey WM, et al. 2000. Reevaluation of the cancer potency factor of toxaphene: Recommendations from a peer review panel. *Toxicol Sci* 55:3-16.
- Gouteux B, Lebeuf M, Hammill MO, et al. 2005. Comparison of toxaphene congeners levels in five seal species from eastern Canada: What is the importance of biological factors? *Environ Sci Technol* 39(6):1448-1454.
- Gouteux B, Lebeuf M, Muir DC, et al. 2003. Levels and temporal trends of toxaphene congeners in beluga whales (*Delphinapterus leucas*) from the St. Lawrence Estuary, Canada. *Environ Sci Technol* 37(20):4603-4609.
- Gouteux B, Lebeuf M, Trottier S, et al. 2002. Analysis of six relevant toxaphene congeners in biological samples using ion trap MS/MS. *Chemosphere* 49(2):183-191.
- Graham M, Cossette L, Gelinas S, et al. 2003. *In vitro* modulation of prolactin mRNA by toxaphene and 3,3',4,4'-tetrachlorobiphenyl. *Environ Res* 92(3):207-212.
- Granstrom ML, Ahlert RC, Wiesenfeld J. 1984. The relationships between the pollutants in the sediments and in the water of the Delaware and Raritan Canal. *Water Sci Technol* 16:375-380.
- Graupner AJ, Dunn CL. 1960. Determination of toxaphene by a spectrophotometric diphenylamine procedure. *J Agric Food Chem* 8:286-289.
- Grayson M, ed. 1981. *Kirk-Othmer encyclopedia of chemical technology*. Vol. 13, 3rd ed. New York, NY: John Wiley & Sons, 414.

## 9. REFERENCES

- Griffin DE, Hill WE. 1978. *In vitro* breakage of plasmid DNA mutagens and pesticides. *Mutat Res* 52:161-169.
- Griffith FD Jr, Blanke RV. 1974. Microcoulometric determination of organochlorine pesticides in human blood. *J Assoc Off Anal Chem* 57:595-603.
- Gunderson EL. 1995. FDA total diet study, July 1986-April 1991, dietary intakes of pesticides, selected elements, and other chemicals. *J AOAC Int* 78(6):1353-1363.
- Guzelian PS, Henry CJ, Olin SS, eds. 1992. Similarities and differences between children and adults: Implications for risk assessment. Washington, DC: International Life Sciences Institute Press.
- Hall LW, Ziegenfuss MC, Anderson RD, et al. 1995. Use of estuarine water column test for detecting toxic conditions in ambient areas of the Chesapeake Bay watershed. *Environ Toxicol Chem* 14(2):267-278.
- Hall LW, Ziegenfuss MC, Fischer SA, et al. 1993. The influence of contaminant and water quality conditions on larval striped bass in the Potomac River and Upper Chesapeake Bay in 1990: An *in situ* study. *Arch Environ Contam Toxicol* 24:1-10.
- Harder HW, Christensen D, Matthews JR, et al. 1980. Rainfall input of toxaphene to a South Carolina estuary. *Estuaries* 3:142-147.
- Hargrave BT, Harding GC, Vass WP, et al. 1992. Organochlorine pesticides and polychlorinated biphenyls in the Arctic Ocean food web. *Arch Environ Contam Toxicol* 22:41-54.
- Hargrave BT, Muir DCG, Bidleman TF, et al. 1993. Toxaphene in amphipods and zooplankton from the Arctic Ocean. *Chemosphere* 27(10):1949-1963.
- Harner T, Wideman JL, Jantunen LM, et al. 1999. Residues of organochlorine pesticides in Alabama soils. *Environ Pollut* 106(3):323-332.
- Haun EC, Cueto C Jr. 1967. Fatal toxaphene poisoning in a 9-month-old infant. *Amer J Dis Child* 113:616-618.
- HazDat. 2007. Toxaphene. HazDat Database: ATSDR's Hazardous Substance Release and Health Effects Database. Atlanta, GA: Agency for Toxic Substances and Disease Registry.
- Head SL, Burse VW. 1987. Organochlorine recovery from small adipose samples with the universal trace residue extractor (Unitrex). *Bull Environ Contam Toxicol* 39:848-856.
- Hedley AJ, Hui LL, Kypke K, et al. 2010. Residues of persistent organic pollutants (POPs) in human milk in Hong Kong. *Chemosphere* 79(3):259-265.
- Hedli CC, Snyder R, Kinoshita FK, et al. 1998. Investigation of hepatic cytochrome P-450 enzyme induction and DNA adduct formation in male CD/1 mice following oral administration of toxaphene. *J Appl Toxicol* 18(3):173-178.

## 9. REFERENCES

- Heikes DL, Craun JC. 1992. Rapid multiresidue procedure for the determination of pesticides in anhydrous lanolin and lanolin-containing pharmaceutical preparations utilizing gel permeation chromatography cleanup with gas chromatographic and mass spectrometric techniques. *J Agric Food Chem* 40:1586-1590.
- Henry KS, Kannan K, Nagy BW, et al. 1998. Concentrations and hazard assessment of organochlorine contaminants and mercury in smallmouth bass from a remote lake in the Upper Peninsula of Michigan. *Arch Environ Contam Toxicol* 34(1):81-86.
- Hercules Research Center. 1966. Toxaphene residue in dog tissues-two-year feeding study-1965. Current activity report. Wilmington, Delaware.
- Hinck JE, Norstrom RJ, Orazio CE, et al. 2009. Persistence of organochlorine chemical residues in fish from the Tombigbee River (Alabama, USA): Continuing risk to wildlife from a former DDT manufacturing facility. *Environ Pollut* 157(2):582-591.
- Ho JS, Tang PH, Eichelberger JW, et al. 1995. Liquid solid disk extraction followed by SFE and GC-ion-trap MS for the determination of trace organic pollutants in water. *J Chromatogr Sci* 33(1):1-8.
- Hoar SK, Blair A, Holmes FF, et al. 1986. Agricultural herbicide use and risk of lymphoma and soft-tissue sarcoma. *J Am Med Assoc* 256(9):1141-1147.
- Hodges LC, Bergerson JS, Hunter DS, et al. 2000. Estrogenic effects of organochlorine pesticides on uterine leiomyoma cells *in vitro*. *Toxicol Sci* 54(2):355-364.
- Hoel DG, Davis DL, Miller AB, et al. 1992. Trends in cancer mortality in 15 industrialized countries, 1969-1986. *J Natl Cancer Inst* 84(5):313-320.
- Hoff RM, Bidleman TF, Eisenreich SJ. 1993a. Estimation of PCC loadings from the atmosphere to the Great Lakes. *Chemosphere* 27:2047-2055.
- Hoff RM, Muir DCG, Grift NP, et al. 1993b. Measurement of PCCs in air southern Ontario. *Chemosphere* 27:2057-2062.
- Hoh E, Hites RA. 2004. Sources of toxaphene and other organochlorine pesticides in North America as determined by air measurements and potential source contribution function analyses. *Environ Sci Technol* 38(15):4187-4194.
- Holland MG. 2002. Insecticides: Organochlorines, pyrethrins, and DEET. In: Goldfrank LR, Flomenbaum NE, Lewin NA, et al., eds. *Goldfrank's toxicologic emergencies*. 7th ed. New York, NY: McGraw-Hill Medical Publishing Division, 1366-1378.
- Hooper NK, Ames BN, Saleh MA, et al. 1979. Toxaphene, a complex mixture of polychloroterpenes and a major insecticide. *Science* 205:591-593.
- Hou L, Andreotti G, Baccarelli AA, et al. 2013. Lifetime pesticide use and telomere shortening among male pesticide applicators in the Agricultural Health Study. *Environ Health Perspect* 121:919-924.
- Houk VS, DeMarini DM. 1987. Induction of prophage lambda by chlorinated pesticides. *Mutat Res* 182(4):193-201.

## 9. REFERENCES

- Howard PH, ed. 1991. Handbook of environmental fate and exposure data for organic chemicals: Volume III; Pesticides. Chelsea, MI: Lewis Publishers, Inc., 630-639.
- Howdeshell MJ, Hites RA. 1996. Historical input and degradation of toxaphene in Lake Ontario sediment. *Environ Sci Technol* 30(1):220-224.
- HSDB. 2010. Toxaphene. Hazardous Substances Data Bank. National Library of Medicine. <http://toxnet.nlm.nih.gov/cgi-bin/sis/search>. June 2, 2010.
- Hsu JP, Schattenberg HJ, Garza MM. 1991. Fast turnaround multiresidue screen for pesticides in produce. *J Assoc Off Anal Chem* 74:886-892.
- Hunt DF, Shabanowitz J, Harvey TM, et al. 1985. Scheme for the direct analysis of organics in the environment by tandem mass spectrometry. *Anal Chem* 57:525-537.
- \*Hyde KM, Crandall JC, Kortman KE, et al. 1978. EEG, ECG, and respiratory response to acute insecticide exposure. *Bull Environ Contam Toxicol* 19:47-55.
- IARC. 1979. Toxaphene (polychlorinated camphenes). In: IARC monographs on the evaluation of the carcinogenic risk of chemicals to humans Vol. 20:1-40; 327-348. International Agency for Research on Cancer, World Health Organization, Lyon.
- IARC. 2009. Agents reviewed by the IARC Monographs. Volumes 1-100A. Lyon, France: International Agency for Research on Cancer. <http://monographs.iarc.fr/ENG/Classification/ClassificationsCASOrder.pdf>. May 19, 2009.
- Industrial Biotech. 1965. Two-year chronic oral toxicity of toxaphene on beagle dogs. Report to Hercules Powder Company, Inc. by Industrial Biotech Laboratories, Inc., Northbrook, IL.
- Industrial Biotech. 1973. Acute dermal toxicity studies with four samples in female albino rabbits. Report to Hercules Powder Company, Inc. by Industrial Biotech Laboratories, Inc., Northbrook, IL. Project No. 72-26. IBT No. 601-02771.
- International Research and Development Corporation. 1973. Primary skin irritation study in the albino rabbit. Report to Hercules Incorporated, Wilmington, DE, Mattawan, MI.
- IRIS. 2012. Toxaphene. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. <http://www.epa.gov/ncea/iris/subst/0346.htm>. April 29, 2014.
- IRPTC. 1985. Treatment and disposal methods for waste chemicals. Geneva, Switzerland: International register of potentially toxic chemicals. United Nations Environmental Programme, 292-293.
- Ismail RJ, Bonner FL. 1974. New, improved thin layer chromatography for polychlorinated biphenyls, toxaphene, and chlordane components. *J Assoc Off Anal Chem* 57:1026-1032.
- IUPAC. 1979. IUPAC reports on pesticides. 7 Toxaphene (Camphechlor). A special report. *Pure Appl Chem* 51:1583-1601.
- James RR, Hites RA. 2002. Atmospheric transport of toxaphene from the southern United States to the Great Lakes Region. *Environ Sci Technol* 36(16):3474-3481.

## 9. REFERENCES

- James RR, McDonald JG, Symonik DM, et al. 2001. Volatilization of toxaphene from Lakes Michigan and Superior. *Environ Sci Technol* 35(18):3653-3660.
- Jansson B, Wideqvist U. 1983. Analysis of toxaphene (PCC) and chlordane in biological samples by NCI mass spectrometry. *Int J Environ Anal Chem* 13:309-322.
- Jansson B, Andersson R, Asplund L, et al. 1991. Multiresidue method for the gas-chromatographic analysis of some polychlorinated and polybrominated pollutants in biological samples. *Fresenius J Anal Chem* 340:439-445.
- Jantunen LM, Bidleman TF. 2003. Air-water gas exchange of toxaphene in Lake Superior. *Environ Toxicol Chem* 22(6):1229-1237.
- Jaquess AB, Winterlin W, Peterson D. 1989. Feasibility of toxaphene transport through sandy soil. *Bull Environ Contam Toxicol* 42:417-423.
- Jarnuzi G, Wakimoto T. 1991. Determination of chlorinated pinene originated from pulp mill. *Anal Sci* 7(Suppl):1177-1180.
- Jarnuzi G, Matsuda M, Wakimoto T. 1992a. Environmental contamination by toxaphene and toxaphene-like compounds generated during chlorobleaching process: II. Congener pattern of toxaphene-like compounds in striped mullet. *J Environ Chem* 2(3):557-568.
- Jarnuzi G, Matsuda M, Wakimoto T. 1992b. Environmental pollution of toxaphene and toxaphene-like compounds generated in chlorobleaching process: II. Concentration and congeners pattern of polychlorinated pinenes in fish. *Kankyo Kagaku* 2:364-365.
- Jeffery WH, Ahlin TA, Goren C, et al. 1976. Loss of warfarin effect after occupational insecticide exposure. *J Am Med Assoc* 236:2881-2882.
- Johanson CE. 1980. Permeability and vascularity of the developing brain: Cerebellum vs cerebral cortex. *Brain Res* 190(1):3-16.
- Johnston BL, Eden WG. 1953. The toxicity of aldrin, dieldrin, and toxaphene to rabbits by skin absorption. *J Econ Entomol* 46:702-703.
- Jones KH, Sanderson DM, Noakes DN. 1968. Acute toxicity data for pesticides (1968). *World Rev Pest Control* 7:135-143.
- Jorgensen ECB, Autrup H, Hansen JC. 1997. Effect of toxaphene on estrogen receptor functions in human breast cancer cells. *Carcinogenesis* 18(8):1651-1654.
- Jury WA, Russo D, Streile G, et al. 1990. Evaluation of volatilization by organic chemicals residing below the soil surface. *Water Resour Res* 26(1):13-20.
- Kamel F, Umbach DM, Bedlack RS, et al. 2012. Pesticide exposure and amyotrophic lateral sclerosis. *Neurotoxicology* 33(3):457-462.
- KAN-DO Office and Pesticides Team. 1995. Accumulated pesticide and industrial chemical findings from a ten year study of ready-to-eat foods. *J Assoc Off Anal Chem* 78:614-630.

## 9. REFERENCES

- Kang KS, Wilson MR, Hayashi T, et al. 1996. Inhibition of gap junctional intercellular communication in normal human breast epithelial cells after treatment with pesticides, PCBs, and PBBs, alone or in mixtures. *Environ Health Perspect* 104(2):192-200.
- Kannan K, Battula S, Loganathan BG, et al. 2003. Trace organic contaminants, including toxaphene and trifluralin, in cotton field soils from Georgia and South Carolina, USA. *Arch Environ Contam Toxicol* 45(1):30-36.
- Kavlock RJ, Chernoff N, Rogers E, et al. 1982. An analysis of fetotoxicity using biochemical endpoints of organ differentiation. *Teratology* 26:183-194.
- Keating MI. 1979. Excretion of toxaphene and dioxathion in the milk of dairy cows. *Bull Anim Health Prod Afr* 27:279-286.
- Kelly TJ, Mukund R, Spicer CW, et al. 1994. Concentrations and transformations of hazardous air pollutants. *Environ Sci Technol* 28(8):378A-387A.
- Kennedy GL Jr, Frawley MP, Calandra JC. 1973. Multigeneration reproductive effects of three pesticides in rats. *Toxicol Appl Pharmacol* 25:589-596.
- Kennicutt MC II, Wade TL, Presley BJ, et al. 1994. Sediment contaminants in Casco Bay, Maine: Inventories, sources, and potential for biological impact. *Environ Sci Technol* 28(1):1-15.
- Keplinger ML. 1963. Use of humans to evaluate safety of chemicals. *Arch Environ Health* 6:342-349.
- Keplinger ML, Deichmann WB. 1967. Acute toxicity of combinations of pesticides. *Toxicol Appl Pharmacol* 10:586-595.
- Keplinger ML, Deichmann WB, Sala F. 1970. Effects of combinations of pesticides on reproduction in mice. In: Deichmann WB, Radomski JL, Penalver RA, eds. Collection of papers, Inter-American Conference on Toxicology and Occupational Medicine, 6th and 7th Pesticide Symposia. Coral Gables, FL, 125-138.
- Kim BK, Jung JW, Yang SR, et al. 2004. Endocrinic effects of toxaphene and chlordane in human hepatoma cell (HepG2 cell) transfected with estrogen receptor and luciferase reporter gene. *J Toxicol Public Health* 20(3):205-211.
- \*Kinoshita FK, Frawley JP, DuBois KP. 1966. Quantitative measurement of induction of hepatic microsomal enzymes by various dietary levels of DDT and toxaphene in rats. *Toxicol Appl Pharmacol* 9:505-513.
- Kitchin KT, Brown JL. 1994. Dose-response relationship for rat liver DNA damage caused by 49 rodent carcinogens. *Toxicology* 88(1-3):31-49.
- Klaung. 2013. Current research. Studies on the mechanisms of action by which toxaphene and other chlorinated insecticides induce liver tumors in rodents. Klaunig Lab.  
<http://www.klauniglab.com/research/projects/>. October 03, 2013.
- Knippling EF, Westlake WE. 1966. Insecticide use in livestock production. *Residue Rev* 13:1-32.

## 9. REFERENCES

- Koller LD, Exon JH, Norbury KC. 1983. Induction of humoral immunity to protein antigen without adjuvant in rats exposed to immunosuppressive chemicals. *J Toxicol Environ Health* 12:173-181.
- Komori M, Nishio K, Kitada M, et al. 1990. Fetus-specific expression of a form of cytochrome P-450 in human livers. *Biochemistry* 29(18):4430-4433.
- Korte R, Scheuner I, Parlar H. 1979. Toxaphene (camphechlor): A special report. *Pure Appl Chem* 51:1583-1601.
- Korytar P, van Stee LL, Leonards PE, et al. 2003. Attempt to unravel the composition of toxaphene by comprehensive two-dimensional gas chromatography with selective detection. *J Chromatogr A* 994(1-2):179-189.
- Krishnan K, Andersen ME. 1994. Physiologically based pharmacokinetic modeling in toxicology. In: Hayes AW, ed. *Principles and methods of toxicology*. 3rd ed. New York, NY: Raven Press, Ltd., 149-188.
- Krishnan K, Andersen ME, Clewell HJ, et al. 1994. Physiologically based pharmacokinetic modeling of chemical mixtures. In: Yang RSH, ed. *Toxicology of chemical mixtures: Case studies, mechanisms, and novel approaches*. San Diego, CA: Academic Press, 399-437.
- Kucklick JR, Baker JE. 1998. Organochlorines in Lake Superior's food web. *Environ Sci Technol* 32(9):1192-1198.
- Kutz FW, Wood PH, Bottimore DP. 1991. Organochlorine pesticides and polychlorinated biphenyls in human adipose tissue. *Rev Environ Contam Toxicol* 120:1-82.
- Kutz FW, Yobs AR, Yang HSC. 1976. National pesticide monitoring programs. In: Lee RE, ed. *Air pollution from pesticides and agricultural processes*. Cleveland, OH: CRC Press, 95-136.
- Kuz'minskaya UA, Alekhina SM. 1976. Effect of chlorocamphene on the isoenzyme spectrum of lactate dehydrogenase. *Environ Health Perspect* 13:127-132.
- Kuz'minskaya UA, Ivanitskiĭ VA. 1979. Study of some biological indices of the state of the sympathoadrenaline system under the effect of polychlorocamphene. *Environ Health Perspect* 30:91-95.
- Lacayo RM, van Bavel B, Mattiasson B. 2004. Degradation of toxaphene in water during anaerobic and aerobic conditions. *Environ Pollut* 130(3):437-443.
- Lacayo-Romero M, van Bavel B, Mattiasson B. 2006. Degradation of toxaphene in aged and freshly contaminated soil. *Chemosphere* 63(4):609-615.
- Lackey RW. 1949. Observations on the acute and chronic toxicity of toxaphene in the dog. *J Ind Hyg Toxicol* 31:117-120.
- Lahaniatis ES, Bergheim W, Kettrup A. 1992. Thermal degradation of polychlorinated bornates. In: Proceedings of the international symposium on ecological approaches of environmental chemicals, April 15-17, 1991, Debrecen, Hungary. GSF-Bericht, Issue No. 4. Debrecen, Hungary: Institute for Ecological Chemistry, 262-267.

## 9. REFERENCES

- Lamb JC, Neal BH, Goodman JI. 2008. Risk assessment of toxaphene and its breakdown products: Time for a change? *Crit Rev Toxicol* 38(9):805-815.
- Lamb JC, Walker CL, Neal BH, et al. 2010. Inhibition of gap junction intercellular communication (GJIC) in mouse liver cells by technical toxaphene and toxaphene congeners. Society of Toxicology Annual Meeting, Salt Lake City, Utah.
- Lau B, Weber D, Andrews P. 1996. GC analysis of toxaphene: A comparative study of different mass spectrometric techniques. *Chemosphere* 32(6):1021-1041.
- Lavastre V, Roberge CJ, Pelletier M, et al. 2002. Toxaphene, but not beryllium, induces human neutrophil chemotaxis and apoptosis via reactive oxygen species (ROS): Involvement of caspases and ROS in the degradation of cytoskeletal proteins. *Clin Immunol* 104(1):40-48.
- Lawrence LJ, Casida JE. 1984. Interactions of lindane, toxaphene and cyclodienes with brain-specific tert-butylbicyclicphosphorothionate receptor. *Life Sci* 35:171-178.
- Lee WJ, Sandler DP, Blair A, et al. 2007. Pesticide use and colorectal cancer risk in the Agricultural Health Study. *Int J Cancer* 121:339-346.
- Leeder JS, Kearns GL. 1997. Pharmacogenetics in pediatrics: Implications for practice. *Pediatr Clin North Am* 44(1):55-77.
- Leikin JB, Paloucek FP, eds. 2002. Leikin and Paloucek's poisoning and toxicology handbook. Hudson, OH: Lexi-Comp, Inc., 1199.
- Leung HW. 1993. Physiologically-based pharmacokinetic modelling. In: Ballentyne B, Marrs T, Turner P, eds. General and applied toxicology. Vol. 1. New York, NY: Stockton Press, 153-164.
- Livingston AL. 1978. Forage plant estrogens. *J Toxicol Environ Health* 4(2-3):301-324.
- Lockhart WL, Wagemann R, Tracey B, et al. 1992. Presence and implications of chemical contaminants in the fresh-waters of the Canadian Arctic. *Sci Total Environ* 122:165-243.
- Lorber MM, Mulkey LA. 1982. An evaluation of three pesticide runoff loading models. *J Environ Qual* 11:519-529.
- Lowe JI, Wilson PD, Rick AJ, et al. 1971. Chronic exposure of oysters to DDT, toxaphene and parathion. In: Proceedings of the National Shellfisheries Association. Vol. 61. Plymouth, MA: MPG Communications, 71-79.
- Luke MA, Froberg JE, Masumoto HT. 1975. Extraction and clean-up of organochlorine, organophosphate, organonitrogen, and hydrocarbon pesticides in produce for determination by gas-liquid chromatography. *J Assoc Off Anal Chem* 58:1020-1026.
- Ma J, Venkatesh S, Li YF, et al. 2005a. Tracking toxaphene in the North American Great Lakes basin. 1. Impact of toxaphene residues in United States soils. *Environ Sci Technol* 39(21):8123-8131.
- Ma J, Venkatesh S, Li YF, et al. 2005b. Tracking toxaphene in the North American Great Lakes basin. 2. A strong episodic long-range transport event. *Environ Sci Technol* 39(21):8132-8141.

## 9. REFERENCES

- MacEachen DC, Cocks N. 2002. A GCMSD/ECD method for the simultaneous determination of toxaphene and toxaphene congeners. *Chemosphere* 49(3):313-314.
- MacLeod M, Woodfine D, Brimacombe J, et al. 2002. A dynamic mass budget for toxaphene in North America. *Environ Toxicol Chem* 21(8):1628-1637.
- Maiorino RM, Whiting FM, Brown WH, et al. 1980. Quantitative determination of toxaphene in blood by florisil extraction and gas chromatography. *J Anal Toxicol* 4:192-198.
- Maiorino RM, Whiting FM, Brown WH, et al. 1984. Metabolism of toxaphene by the isolated perfused bovine liver. *Arch Environ Contam Toxicol* 13:565-572.
- Maruya KA, Lee RF. 1998. Aroclor 1268 and toxaphene in fish from a southeastern U.S. estuary. *Environ Sci Technol* 32(8):1069-1075.
- Matsumura F, Tanaka K. 1984. Molecular basis of neuroexcitatory actions of cyclodiene-type insecticides. In: Narahashi T, ed. *Cellular and molecular neurotoxicology*. New York, NY: Raven Press 225-240.
- Matsumura F, Howard RW, Nelson JO. 1975. Structure of the toxic fraction A of toxaphene. *Chemosphere* 5:271-276.
- Mattraw HC, Jr. 1975. Occurrence of chlorinated hydrocarbon insecticides, Southern Florida--1968-72. *Pestic Monit J* 9:106-114.
- Mayr U, Butsch A, Schneider S. 1992. Validation of two *in vitro* test systems for estrogenic activities with zearalenone, phytoestrogens and cereal extracts. *Toxicology* 74(2-3):135-149.
- McConnell LL, Kucklick JR, Bidleman, TF, et al. 1993. Long-range atmospheric transport of toxaphene-to Lake Baikal. *Chemosphere* 27:2027-2036.
- McDonald JG, Hites RA. 2003. Radial dilution model for the distribution of toxaphene in the United States and Canada on the basis of measured concentrations in tree bark. *Environ Sci Technol* 37(3):475-481.
- McDowell LL, Willis GH, Murphree CE, et al. 1981. Toxaphene and sediment yields in runoff from a Mississippi Delta watershed. *J Environ Qual* 10:120-125.
- McGee LC, Reed HL, Fleming JP. 1952. Accidental poisoning by toxaphene: Review of toxicology and case reports. *JAMA* 149:1124-1126.
- McLean JE, Sims RC, Doucette WJ, et al. 1988. Evaluation of mobility of pesticides in soil using U.S. EPA methodology. *J Environ Eng* 114:689-703.
- Mehendale HM. 1978. Pesticide-induced modification of hepatobiliary function: Hexachlorobenzene, DDT, and toxaphene. *Food Cosmet Toxicol* 16:19-25.
- Meister RT, ed. 1988. Farm chemicals handbook. Willoughby, OH: Meister Publishing Co., C224-C225.

## 9. REFERENCES

- Miller MA. 1993. Maternal transfer of organochlorine compounds in salmonies to their eggs. *Can J Fish Aquat Sci* 50:1405-1413.
- Mills PK, Yang R, Riordan D. 2005. Lymphohematopoietic cancers in the United Farm Workers of America (UFW), 1988-2001. *Cancer Causes Control* 16(7):823-830.
- Minyard JP, Roberts WE. 1991. State findings on pesticide residues in foods-1988 and 1989. *J Assoc Off Anal Chem* 74(3):438-452.
- Mirsatari SG, McChesney MM, Craigmill AC, et al. 1987. Anaerobic microbial dechlorination: An approach to on-site treatment of toxaphene-contaminated soil. *J Environ Sci Health B* 22:663-690.
- Miskimmin BM, Muir DC, Schindler DW, et al. 1995. Chlorobornanes in sediments and fish 30 years after toxaphene treatment of lakes. *Environ Sci Technol* 29(10):2490-2495.
- Mohammed A, Andersson O, Biessmann A, et al. 1983. Fate and specific tissue retention of toxaphene in mice. *Arch Toxicol* 54:311-321.
- \*Mohammed A, Eklund A, Ostlund-Lindqvist A, et al. 1990a. Distribution of toxaphene, DDT, and PCB among lipoprotein fractions in rat and human plasma. *Arch Toxicol* 64:567-571.
- Mohammed A, Eklund A, Ostlund-Lindqvist A, et al. 1990b. Tissue accumulation of lipoprotein associated toxaphene in normolipidemic and hypolipidemic mice. *Arch Toxicol* 64:38-42.
- Mohammed A, Hallberg E, Rydstrom J, et al. 1985. Toxaphene: Accumulation in the adrenal cortex and effect on ACTH-stimulated corticosteroid synthesis in the rat. *Toxicol Lett* 24:137-143.
- Montgomery JH, Welkom LM. 1990. Groundwater chemicals desk reference. Chelsea, MI: Lewis Publishers, Introduction, 507-509.
- \*Moorthy KS, Trottman CH, Spann CH, et al. 1987. *In vivo* effects of toxaphene on calmodulin-regulated calcium-pump activity. *J Toxicol Environ Health* 20:249-259.
- Morrow W, Trottman CH, Prasada Rao KS, et al. 1986. Effects of toxaphene and toxaphene fractions on rat brain synaptosomal adenosine triphosphatases. *Indian J Comp Anim Physiol* 4:1-8.
- Morselli PL, Franco-Morselli R, Bossi L. 1980. Clinical pharmacokinetics in newborns and infants: Age-related differences and therapeutic implications. *Clin Pharmacokin* 5(6):485-527.
- Mortelmans K, Haworth S, Lawlor T, et al. 1986. *Salmonella* mutagenicity tests. 2. Results from the testing of 270 chemicals. *Environ Mutagen* 8(Suppl 7):1-119.
- \*Mourelle M, Garcia M, Aguilar C. 1985. ATPase activities in liver plasma membranes of rats treated with DDT and toxaphene. *J Appl Toxicol* 5:39-41.
- Muir DCG, de Boer J. 1993. Toxaphene: Analytical chemistry working group on analytical chemistry of toxaphene, toxaphene workshop, Burlington, Ontario, Canada, February 4-6, 1993. *Chemosphere* 27(10):1827-1834.
- Muir DCG, de Boer J. 1995. Recent developments in the analysis and environmental chemistry of toxaphene with emphasis on the marine environment. *Anal Chem* 14(2):56-66.

## 9. REFERENCES

- Muir DCG, Braune B, DeMarch B, et al. 1999. Spatial and temporal trends and effects of contaminants in the Canadian Arctic marine ecosystem: A review. *Sci Total Environ* 230:83-144.
- Muir DCG, Grift NP, Ford CA, et al. 1990. Evidence for long-range transport of toxaphene to remote arctic and subarctic waters from monitoring of fish tissues. In: *Long range transportation of pesticides*. Chelsea, MI: Lewis Publishers, 329-346.
- Muir DCG, Norstrom RJ, Simon M. 1988a. Organochlorine contaminants in arctic food chains: Accumulation of specific polychlorinated biphenyls and chlordane related compounds. *Environ Sci Technol* 22:1071-1079.
- Muir DCG, Wagemann R, Grift NP, et al. 1988b. Organochlorine chemical and heavy metal contaminants in white-beaked dolphins (*Lagenorhynchus albirostris*) and pilot whales (*Globicephalia melaena*) from the coast of Newfoundland, Canada. *Arch Environ Contam Toxicol* 17:613-629.
- Muir DCG, Wagemann R, Hargrave BT, et al. 1992. Arctic marine ecosystem contamination. *Sci Total Environ* 122:75-134.
- Muirhead-Thomson. 1971. Toxaphene: The elimination of entire fish populations. In: *Pesticides of freshwater fauna*. New York, NY: Academic Press, 72-74.
- Munn S, Keefe TJ, Savage EP. 1985. A comparative study of pesticide exposures in adults and youth migrant field workers. *Arch Environ Health* 40:215-220.
- Murphy TJ, Mullin MD, Meyer JA. 1987. Equilibration of polychlorinated biphenyls and toxaphene with air and water. *Environ Sci Technol* 21(2):155-162.
- Musial CJ, Uthe JF. 1983. Widespread occurrence of the pesticide toxaphene in Canadian east coast marine fish. *Int J Environ Anal Chem* 14:117-126.
- Mussalo-Rauhamaa H, Pyysalo H, Antervo K. 1988. Relation between the content of organochlorine compounds in Finnish human milk and characteristics of the mothers. *J Toxicol Environ Health* 25(1):1-20.
- Nash RG, Woolson EA. 1967. Persistence of chlorinated hydrocarbon insecticides in soils. *Science* 157:924-927.
- Nash RG, Woolson EA. 1968. Distribution of chlorinated insecticides in cultivated soil. *Soil Sci Soc Am Proc* 32:525-527.
- Nash RG, Beall L, Harris WG. 1977. Toxaphene and 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT) losses from cotton in an agroecosystem chamber. *J Agric Food Chem* 25:336-341.
- NAS/NRC. 1989. Report of the oversight committee. In: *Biologic markers in reproductive toxicology*. Washington, DC: National Academy of Sciences, National Research Council, National Academy Press, 15-35.
- NCI. 1979. Bioassay of toxaphene for possible carcinogenicity. National Cancer Institute. National Institutes of Health. [http://ntp.niehs.nih.gov/ntp/htdocs/LT\\_rpts/tr037.pdf](http://ntp.niehs.nih.gov/ntp/htdocs/LT_rpts/tr037.pdf). June 22, 2010.

## 9. REFERENCES

- Nelson JO, Matsumura F. 1975. Separation and comparative toxicity of toxaphene components. *J Agric Food Chem* 23:984-990.
- Newsome WH, Andrews P. 1993. Organochlorine pesticide and polychlorinated biphenyl congeners in commercial fish from the Great Lakes. *J Assoc Off Anal Chem Int* 76:707-710.
- Newsome WH, Ryan JJ. 1999. Toxaphene and other chlorinated compounds in human milk from northern and southern Canada: A comparison. *Chemosphere* 39(3):519-526.
- Niethammer KR, White DH, Baskett TS, et al. 1984. Presence and biomagnification of organochlorine chemical residues in Oxbow Lakes of northwestern Louisiana. *Arch Environ Contam Toxicol* 13:63-74.
- NIOSH. 1992. NIOSH recommendations for occupational safety and health: Compendium of policy documents and statements. National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. <http://www.cdc.gov/niosh/pdfs/92-100.pdf>. June 18, 2010.
- NIOSH. 2005. Chlorinated camphene. NIOSH pocket guide to chemical hazards. Atlanta, GA: National Institute for Occupational Safety and Health. NIOSH Publication 2005-149. <http://www.cdc.gov/niosh/npgd0113.html>. June 16, 2010.
- NIOSH/OSHA. 1978. Occupational health guideline for chlorinated camphene. In: Occupational health guidelines for chemical hazards. National Institute for Occupational Safety and Health/Occupational Safety and Health Administration. <http://www.cdc.gov/niosh/docs/81-123/pdfs/0113.pdf>. June 16, 2010.
- NOAA. 1974. Toxaphene interactions in estuarine ecosystems. Rockville, MD: U.S. Department of Commerce. National Oceanic and Atmospheric Administration. NOAA-74121103. COM-75-10104.
- NRC. 1993. National Research Council. Pesticides in the diets of infants and children. Washington, DC: National Academy Press.
- NTP. 2005. Toxaphene. Report on carcinogens, eleventh edition. Research Triangle Park, NC: National Toxicology Program. <http://ntp.niehs.nih.gov/ntp/roc/toc11.html>. June 16, 2010.
- Oetjen K, Karl H. 1998. Levels of toxaphene indicator compounds in fish meal, fish oil and fish feed. *Chemosphere* 37(1):1-11.
- Ohsawa T, Knox JR, Khalifa S, et al. 1975. Metabolic dechlorination of toxaphene in rats. *J Agric Food Chem* 23:98-106.
- Olson KL, Matsumura F, Boush G M. 1980. Behavioral effects on juvenile rats from perinatal exposure to low levels of toxaphene, and its toxic components, toxicant A, and toxicant B. *Arch Environ Contam Toxicol* 9:247-257.
- Olson KR, ed. 1990. Poisoning and drug overdose by the faculty and staff of the San Francisco Bay Area Regional Poison Control Center. 1st ed. San Mateo CA: Appleton and Lange, 129-130, 418.
- O'Neil MJ, Heckelman PE, Koch CB, et al. 2006. Toxaphene. In: The Merck index An encyclopedia of chemicals, drugs, and biologicals. 14th ed. Whitehouse Station, NJ: Merck Research Laboratories, 9551.

## 9. REFERENCES

- Onuska FL, Terry KA, Seech A, et al. 1994. Determination of toxaphene in soil by electron-capture negative-ion mass spectrometry and capillary column gas chromatography. *J Chromatogr* A665:125-132.
- Ortega P, Hayes WJ Jr, Durham WF. 1957. Pathological changes in the liver of rats after feeding low levels of various insecticides. *AMA Arch Pathol* 64:614-622.
- OSHA. 2009. Air contaminants. Occupational Safety and Health Administration. Code of Federal Regulations 29 CFR 1910.1000. [http://edocket.access.gpo.gov/cfr\\_2009/julqtr/pdf/29cfr1910.1000.pdf](http://edocket.access.gpo.gov/cfr_2009/julqtr/pdf/29cfr1910.1000.pdf). June 18, 2010.
- OTA. 1990. Neurotoxicity: Identifying and controlling poisons of the nervous system. Washington, DC: Office of Technology Assessment. OTABA438.
- Owen GM, Brozek J. 1966. Influence of age, sex and nutrition on body composition during childhood and adolescence. In: Falkner F, ed. *Human development*. Philadelphia, PA: WB Saunders, 222-238.
- Paasivirta J, Rantio T. 1991. Chloroterpene and other organochlorines in Baltic, Finnish and Arctic wildlife. *Chemosphere* 22:47-55.
- Paasivirta J, Sinkkonen S, Nikiforov V, et al. 2009. Long-range atmospheric transport of three toxaphene congeners across Europe. Modeling by chained single-box FATEMOD program. *Environ Sci Pollut Res Int* 16(2):191-205.
- Palmer BD, Huth LK, Pieto DL, et al. 1998. Vitellogenin as a biomarker for xenobiotic estrogens in an amphibian model system. *Environ Toxicol Chem* 17(1):30-36.
- Paris DF, Lewis DL. 1973. Chemical and microbial degradation of ten selected pesticides in aquatic systems. *Residue Rev* 45:95-124.
- Paris DF, Lewis DL, Barnett JT. 1977. Bioconcentration of toxaphene by microorganisms. *Bull Environ Contam Toxicol* 17:564-572.
- Parr JF, Smith S. 1976. Degradation of toxaphene in selected anaerobic soil environments. *Soil Sci* 121:52-57.
- Patel M, Berner J, Sjodin A, et al. 2004. Detection of toxaphene congeners in native Alaskan women. *J Toxicol Clin Toxicol* 42(5):804-805.
- Peakall DB. 1976. Effects of toxaphene on hepatic enzyme induction and circulating steroid levels in the rat. *Environ Health Perspect* 13:117-120.
- \*Peakall DB. 1979. Effect of toxaphene on pyruvic and lactic acid levels in the rat. *Environ Health Perspect* 30:97-98.
- Pearson RF, Swackhamer DL, Eisenreich SJ, et al. 1997. Concentrations, accumulations, and inventories of toxaphene in sediments of the Great Lakes. *Environ Sci Technol* 31(12):3523-3529.
- Penumarthy L, Oehme FW, Spaulding JE, et al. 1976. Toxaphene: Livestock toxicity and tissue residues. *Vet Toxicol* 18:60-65.

## 9. REFERENCES

- Petrasek AC, Kugelman IJ, Austern BM, et al. 1983. Fate of organic compounds in wastewater treatment plants. *J Water Pollut Control Fed* 55:1286-1296.
- Petrick G, Schulz DE, Duinker JC. 1988. Clean-up of environment samples by high-performance liquid chromatography for analysis of organochlorine compounds by gas chromatography with electron-capture detection. *J Chromatogr* 435:241-248.
- Petty JD, Huckins JN, Martin DB. 1995. Use of semipermeable membrane devices (SPMDS) to determine bioavailable organochlorine pesticide residues in streams receiving irrigation drainwater. *Chemosphere* 30(10):1891-1903.
- Plumb RH. 1987. A comparison of ground water monitoring data from CERCLA and RCRA sites. *Ground Water Monit Rev* 7:94-100.
- Polder A, Foreid S, Odland JO, et al. 1998. PCBs, toxaphenes, and other chlorinated pesticides in human milk from the Archangels district, Russia. *Organohalogen Compounds* 38:155-158.
- Polder A, Odland JO, Tkachev A, et al. 2003. Geographic variation of chlorinated pesticides, toxaphenes and PCBs in human milk from sub-arctic and arctic locations in Russia. *Sci Total Environ* 306(1-3):179-195.
- Polder A, Thomsen C, Lindstrom G, et al. 2008. Levels and temporal trends of chlorinated pesticides, polychlorinated biphenyls and brominated flame retardants in individual human breast milk samples from Northern and Southern Norway. *Chemosphere* 73(1):14-23.
- Pollock GA, Hillstrand R. 1982. The elimination, distribution and metabolism of <sup>14</sup>C-toxaphene in the pregnant rat. *J Environ Sci Health B* 17:635-648.
- \*Pollock GA, Kilgore WW. 1980a. Toxicities and description of some toxaphene fractions: Isolation and identification of a highly toxic component. *J Toxicol Environ Health* 6:115-126.
- Pollock GA, Kilgore WW. 1980b. The excretion and storage of <sup>14</sup>C-toxaphene and two isolated <sup>14</sup>C-toxaphene fractions. *J Toxicol Environ Health* 6:127-140.
- \*Pollock GA, Krasnec JP, Niemann BR. 1983. Rat hepatic microsomal enzyme induction by pretreatment with toxaphene and toxaphene fractions. *J Toxicol Environ Health* 11:355-363.
- Pulster EL, Smalling KL, Zolman E, et al. 2009. Persistent organochlorine pollutants and toxaphene congener profiles in bottlenose dolphins (*Tursiops truncatus*) frequenting the Turtle/Brunswick River Estuary (TBRE) in coastal Georgia, USA. *Environ Toxicol Chem* 28(7):1390-1399.
- Purdue MP, Hoppin JA, Blair A, et al. 2006. Occupational exposure to organochlorine insecticides and cancer incidence in the Agricultural Health Study. *Int J Cancer* 120:642-649.
- Raff JD, Hites RA. 2004. Transport of suspended-sediment-bound toxaphene in the Mississippi River. *Environ Sci Technol* 38(10):2785-2791.
- Ramamoorthy K, Wang F, Chen IC, et al. 1997. Estrogenic activity of a dieldrin/toxaphene mixture in the mouse uterus, MCF-7 human breast cancer cells, and yeast-based estrogen receptor assays: No apparent synergism. *Endocrinology* 138(4):1520-1527.

## 9. REFERENCES

- Rantio T, Paasivirta J, Lahtipera. 1993. Studies on toxaphene in the environment. I. Experiences on analytical behavior of PCCs. Studies including pulp mill wastes. *Chemosphere* 27:2003-2010.
- Rao KS, Trottman CH, Morrow W, et al. 1986. Toxaphene inhibition of calmodulin-dependent calcium ATPase activity in rat brain synaptosomes. *Fundam Appl Toxicol* 6:648-653.
- Rapaport RA, Eisenreich SJ. 1986. Atmospheric deposition of toxaphene to eastern North America derived from peat accumulation. *Atmos Environ* 20:2367-2379.
- Rehmann K, Schramm KW, Kettrup AA. 1999. Applicability of a yeast oestrogen screen for the detection of oestrogen-like activities in environmental samples. *Chemosphere* 38(14):3303-3312.
- RePORTER. 2013. Toxaphene. National Institutes of Health, Research Portfolio Online Reporting Tools. <http://projectreporter.nih.gov/reporter.cfm>. October 15, 2013.
- Rhee JW, Aks SE. 2007. Organochlorine insecticides. In: Shannon MW, Borron SW, Burns MJ, et al., eds. *Haddad and Winchester's clinical management of poisoning and drug overdose*. Philadelphia, PA: Saunders Elsevier, 1231-1236.
- Rice CP, Samson PJ, Noguchi GE. 1986. Atmospheric transport of toxaphene to Lake Michigan. *Environ Sci Technol* 20:1109-1116.
- Ritter WF. 1990. Pesticide contamination of ground water in the USA: A review. *J Environ Sci Health B* 25:1-30.
- Roy RR, Albert RH, Wilson P, et al. 1995. U.S. Food and Drug Administration Pesticide Program: Incidence/level monitoring of domestic and imported pears and tomatoes. *J AOAC Int* 78:930-940.
- Ruelle R, Keenlyne KD. 1993. Contaminants in Missouri river pallid sturgeon. *Bull Environ Contam Toxicol* 50:898-906.
- Ruppe S, Neumann A, Braekvelt E, et al. 2004. Anaerobic transformation of compounds of technical toxaphene. 2. Fate of compounds lacking geminal chlorine atoms. *Environ Toxicol Chem* 23(3):591-598.
- Ruppe S, Neumann A, Vetter W. 2003. Anaerobic transformation of compounds of technical toxaphene. 1. Regiospecific reaction of chlorobornanes with geminal chlorine atoms. *Environ Toxicol Chem* 22:2614-2621.
- Ruth JH. 1986. Odor thresholds and irritation levels of several chemical substances: A review. *Am Ind Hyg Assoc* 47(3):142-151.
- Saleh MA, Blancato JN. 1993. Gamma aminobutyric acid radioreceptor assay: A confirmatory quantitative assay for toxaphene in environmental and biological samples. *Chemosphere* 27:1907-1914.
- Saleh MA, Casida JE. 1977. Consistency of toxaphene composition analyzed by open tubular column gas-liquid chromatography. *J Agric Food Chem* 25:63-68.
- Saleh MA, Casida JE. 1978. Reduction dechlorination of the toxaphene component 2,2,5-endo,6-exo,8,9,10-heptachlorobornane in various chemical, photochemical, and metabolic systems. *J Agric Food Chem* 26:583-599.

## 9. REFERENCES

- Saleh MA, Skinner RJ, Casida JE. 1979. Comparative metabolism of 2,2,5-endo,6-exo,8,9,10-hepta-chlorobornane and toxaphene in six mammalian species and chickens. *J Agric Food Chem* 27:731-737.
- Samosh LV. 1974. Chromosome aberrations and character of satellite associations after accidental exposure of the human body to polychlorocamphene. *Cyto Genet (Engl)* 8:24-27.
- Sanborn JR, Metcalf RL, Bruce WN, et al. 1976. The fate of chlordane and toxaphene in a terrestrial aquatic model ecosystem. *Environ Entomol* 5:533-538.
- Sandanger TM, Odland JO, Tkachev A, et al. 2003. Persistent organic pollutants in plasma of delivering women in Arkhangelsk. *Sci Tot Environ* 306:171-178.
- Sanders HJ. 1975. New weapons against insects. *Chem Eng News* 53:18-31.
- Santolucito JA. 1975. The use of quantitative EEG for detecting low-level prolonged exposure to pesticides. In: International symposium, recent advances in the assessment of the health effects of environmental pollution: Proceedings, Paris (France), June 24-28, 1974. Vol. 4. Luxembourg: Commission of the European Communities, 2387-2394.
- Santos FJ, Galceran MT, Caixach J, et al. 1997. Characterization of toxaphene by high resolution gas chromatography combined with high resolution mass spectrometry and tandem mass spectrometry. *Rapid Commun Mass Spectrom* 11(4):341-348.
- Schattenberg HJ, Hsu JP. 1992. Pesticide residue survey of produce from 1989 to 1991. *J AOAC Int* 75(5):925-933.
- Schenker MB, Albertson TE, Saiki CL. 1992. Pesticides. In: Rom W, ed. Environmental and occupational medicine. Boston, MA: Little Brown and Company, 893-894.
- Schimmel SC, Patric MJ, Forester J. 1977. Uptake and toxicity of toxaphene in several estuarine organisms. *Arch Environ Contam Toxicol* 5:353-367.
- Schmitt CJ, Zajicek JL, Peterman PH. 1990. National contaminant biomonitoring program: Residues of organochlorine chemicals in USA freshwater fish, 1976-1984. *Arch Environ Contam Toxicol* 19:748-781.
- Schmitt CJ, Zajicek JL, Ribick MA. 1985. National pesticide monitoring program: Residues of organochlorine chemicals in freshwater fish, 1980-1981. *Arch Environ Contam Toxicol* 14:225-260.
- Schneider AR, Stapleton HM, Cornwell J, et al. 2001. Recent declines in PAH, PCB, and toxaphene levels in the northern Great Lakes as determined from high resolution sediment cores. *Environ Sci Technol* 35(19):3809-3815.
- Schrader TJ, Boyes BG, Matula TI, et al. 1998. *In vitro* investigation of toxaphene genotoxicity in *S. typhimurium* and Chinese hamster V79 lung fibroblasts. *Mutat Res* 413(2):159-168.
- Schroeder JC, Olshan AF, Baric R, et al. 2001. Agricultural risk factors for t(14;18) subtypes of non-Hodgkin's lymphoma. *Epidemiology* 12(6):701-709.

## 9. REFERENCES

- Seiber JN, Landrum PF, Madden SC, et al. 1975. Isolation and gas chromatographic characterization of some toxaphene components. *J Chromatogr* 114:361-368.
- Seiber JN, Madden SC, McChesney MM, et al. 1979. Toxaphene dissipation from treated cotton field environments: Component residual behavior on leaves and in air, soil, and sediments determined by capillary gas chromatography. *J Agric Food Chem* 27:284-191.
- Setchell BP, Waites GMH. 1975. The blood-testis barrier. In: Creep RO, Astwood EB, Geiger SR, eds. *Handbook of physiology: Endocrinology V*. Washington, DC: American Physiological Society, 143-172.
- Shafer HH, Cooke M, Deroos F, et al. 1981. Wall-coated open tubular capillary column gas chromatograph-Fourier transform IR and gas chromatography-mass spectrometry identifying toxic organic pollutants. *Appl Spectrosc* 35:469-472.
- Shanks KE, McDonald JG, Hites RA. 1999. Are pulp and paper mills sources of toxaphene to Lake Superior and northern Lake Michigan? *J Great Lakes Res* 25(2):383-394.
- Shoeib M, Brice KA, Hoff RM. 1999. Airborne concentrations of toxaphene congeners at Point Petre (Ontario) using gas-chromatography-electron capture negative ion mass spectrometry (GC-ECNIMS). *Chemosphere* 39(5):849-871.
- Shoeib M, Brice KA, Hoff RM. 2000. Studies of toxaphene in technical standard and extracts of background air samples (Point Petre, Ontario) using multidimensional gas chromatography-electron capture detection (MDGC-ECD). *Chemosphere* 40(2):201-211.
- Sigworth EA. 1965. Identification and removal of herbicides and pesticides. *J Am Water Works Assoc* 57:1016-1022.
- Simon T, Manning R. 2006. Development of a reference dose for the persistent congeners of weathered toxaphene based on *in vivo* and *in vitro* effects related to tumor promotion. *Regul Toxicol Pharmacol* 44:268-281.
- Skopp S, Oehme M, Chu FL, et al. 2002a. Analysis of "total toxaphene" and selected single congeners in biota by ion trap HRGC-EI-MS/MS using congener-optimized parent ion dissociations. *Environ Sci Technol* 36(12):2729-2735.
- Skopp S, Oehme M, Furst P. 2002b. Enantiomer ratios, patterns and levels of toxaphene congeners in human milk from Germany. *J Environ Monit* 4:389-394.
- Smith CN, Carsel RF. 1984. Foliar washoff of pesticides (FWOP) model: Development and evaluation. *J Environ Sci Health B* 19:323-342.
- Smith S, Willis GH. 1978. Disappearance of residual toxaphene in a Mississippi delta soil. *Soil Sci* 126:87-93.
- Sobti RC, Krishan A, Davies J. 1983. Cytokinetic and cytogenetic effect of agricultural chemicals on human lymphoid cells *in vitro*. II. Organochlorine pesticides. *Arch Toxicol* 52:221-231.
- \*Soto AM, Chung KL, Sonnenchein C. 1994. The pesticides endosulfan, toxaphene, and dieldrin have estrogenic effects on human estrogen-sensitive cells. *Environ Health Perspect* 102(4):380-383.

## 9. REFERENCES

- Soto AM, Sonnenschein C, Chung KL, et al. 1995. The E-SCREEN assay as a tool to identify estrogens: An update on estrogenic environmental pollutants. *Environ Health Perspect* 103(Suppl 7):113-122.
- Soubaneh YD, Lebeuf M, Gouteux B, et al. 2008. Investigations on the sorption of a toxaphene model congener, the B7-1450, on marine sediments. *Chemosphere* 71(6):1019-1027.
- SRI. 1993. 1993 Directory of chemical producers: United States of America. Menlo Park, CA: SRI International.
- Stanley CW, Barney JE, Helton MR, et al. 1971. Measurement of atmospheric levels of pesticides. *Environ Sci Technol* 5:430-435.
- Staples CA, Werner AF, Hoogheem TJ. 1985. Assessment of priority pollutant concentrations in the United States using Storet database. *Environ Toxicol Chem* 4:131-142.
- Stapleton HM, Skubinna J, Baker JE. 2002. Seasonal dynamics of PCB and toxaphene bioaccumulation within a Lake Michigan food web. *J Great Lakes Res* 28(1):52-64.
- Steele LA, Nelson HA, Furr AA, et al. 1980. Toxaphene residues in the bovine after oral exposure. *Vet Hum Toxicol* 22:312-314.
- Steinberg M, Kinoshita FK, Ballantyne M. 1998. Mutagenicity studies with toxaphene congeners. *Organohalogen Compounds* 35:243-246.
- Steinel HH, Arlauskas A, Baker RS. 1990. SCE induction and cell-cycle delay by toxaphene. *Mutat Res* 230:29-33.
- Stelzer A, Chan H. 1999. The relative estrogenic activity of technical toxaphene mixture and two individual congeners. *Toxicology* 138(2):69-80.
- Stern GA, Muir DCG, Westmore JB, et al. 1993. Mass-spectrometric studies of the toxaphene components 2-exo, 3-endo, 5-exo, 6-endo, 8,8,10,10-octachlorobornane (T2) and 2-exo, 3-endo, 5-exo, 6-endo, 8,8,10,10-nonachlorobornane (T12). *Biol Mass Spectrom* 22:19-30.
- Stockholm Convention. 2008. What are POPs? Stockholm Convention. <http://chm.pops.int/Convention/ThePOPs/tabid/673/language/en-US/Default.aspx>. June 8, 2010.
- Storm DL. 1994. Chemical monitoring of California's public drinking water sources: Public exposures and health impacts. In: Wang RGM. Water contamination and health. New York, NY: Marcel Dekker, 67-124.
- Swackhamer DL, Hites RA. 1988. Occurrence and bioaccumulation of organochlorine compounds in fishes from Siskiwit Lake, Isle Royale, Lake Superior. *Environ Sci Technol* 22:543-548.
- Swackhamer DL, Charles MJ, Hites RA. 1987. Quantitation of toxaphene in environmental samples using negative ion chemical ionization mass spectrometry. *Anal Chem* 59:913-917.
- Swackhamer DL, McConnell LL, Gregor DJ. 1993. Workgroup report on environmental transport and fate. *Chemosphere* 27:1835-1840.

## 9. REFERENCES

- Swackhamer DL, Pearson RF, Schottler SP. 1998. Toxaphene in the Great Lakes. *Chemosphere* 37(9-12):2545-2561.
- Swackhamer DL, Schottler S, Pearson RF. 1999. Air-water exchange and mass balance of toxaphene in the Great Lakes. *Environ Sci Technol* 33(21):3864-3872.
- Swann RL, Laskowski DA, McCall PJ, et al. 1983. A rapid method for the estimation of the environmental parameters octanol/water partition coefficient, soil sorption constant, water to air ratio, and water solubility. *Residue Rev* 85:17-28.
- Swoboda AR, Thomas GW, Cady FB, et al. 1971. Distribution of DDT and toxaphene in Houston black clay on three watersheds. *Environ Sci Technol* 5:141-145.
- Taylor JR, Calabrese VP, Blanke RB. 1979. Organochlorine and other insecticides. In: Vinken PJ, Bruyn GW, eds. *Intoxications of the nervous system*. New York, NY: North-Holland Pub. Co, 391-455.
- Tewari SN, Sharma IC. 1977. Isolation and determination of chlorinated organic pesticides by thin-layer chromatography and the application to toxicological analysis. *J Chromatogr* 131:275-284.
- Thomas K, Colborn T. 1992. Organochlorine endocrine disruptors in human tissue. In: Colborn T, Clement C, eds. *Chemically induced alterations in sexual and functional development: The wildlife/human connection*. Princeton, NJ: Princeton Scientific Publishing, 365-394.
- Thomas TC, Nishioka YA. 1985. Sampling of airborne pesticides using chromosorb 102. *Bull Environ Contam Toxicol* 35:460-465.
- \*Thunberg T, Ahlborg UG, Wahlstrom B. 1984. Comparison between the effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin and 6 other compounds on the vitamin A storage, the UDP-glucuronosyltransferase and the aryl hydrocarbon hydroxylase activity in the rat liver. *Arch Toxicol* 55:16-19.
- TRI12 2013. TRI explorer: Providing access to EPA's toxics release inventory data. Washington, DC: Office of Information Analysis and Access. Office of Environmental Information. U.S. Environmental Protection Agency. Toxics Release Inventory. <http://www.epa.gov/triexplorer/>. October 8, 2013.
- Triolo AJ, Lang WR, Coon JM, et al. 1982. Effect of the insecticides toxaphene and carbaryl on induction of lung tumors by benzo[a]pyrene in the mouse. *J Toxicol Environ Health* 9:637-650.
- Trosko JE, Jone C, Chang CC. 1987. Inhibition of gap junctional-mediated intercellular communication *in vitro* by aldrin, dieldrin, and toxaphene: A possible cellular mechanism for their tumor-promoting and neurotoxic effects. *Mol Toxicol* 1(1):83-93.
- Trottman CH, Desaiah D. 1979. Adenosine triphosphatase activities in brain, kidney and liver of mice treated with toxaphene. *J Environ Sci Health B* 14:393-404.
- Trottman CH, Desaiah D. 1980. Induction of rat hepatic microsomal enzymes by toxaphene pretreatment. *J Environ Sci Health B* 15(1):121-134.
- Trottman CH, Prasada Rao KS, Morrow W, et al. 1985. *In vitro* effects of toxaphene on mitochondrial calcium ATPase and calcium uptake in selected rat tissues. *Life Sci* 36:427-433.

## 9. REFERENCES

- Troxler WL, Goh SK, Dicks LWR. 1993. Treatment of pesticide contaminated soils with thermal desorption technologies. *Air Waste* 43:1610-1619.
- Tryphonas H, Arnold DL, Bryce F, et al. 2001. Effects of toxaphene on the immune system of cynomolgus (*Macaca fascicularis*) monkeys. *Food Chem Toxicol* 39(9):947-958.
- Tryphonas H, Bryce F, Huang J, et al. 2000. Effects of toxaphene on the immune system of cynomolgus (*Macaca fascicularis*) monkeys. A pilot study. *Food Chem Toxicol* 38(1):25-33.
- Tuerk KJ, Kucklick JR, Becker PR, et al. 2005. Persistent organic pollutants in two dolphin species with focus on toxaphene and polybrominated diphenyl ethers. *Environ Sci Technol* 39(3):692-698.
- USDA. 1995. National Agricultural Pesticide Impact Assessment Program (NAPIAP). Registration notification network (RNN). Vol. 3, No. 11. U.S. Department of Agriculture.
- USITC. 1991. Harmonized tariff schedule of the United States (1991). U.S. International Trade Commission, Washington DC. USITC publication 2333.
- Vander Pol SS, Kucklick JR, Leigh SD, et al. 2010. Separation of 26 toxaphene congeners and measurement in air particulate matter SRMs compared to technical toxaphene SRM 3067. *Anal Bioanal Chem* 397(2):483-492.
- Vaz R, Blomkvist G. 1985. Traces of toxaphene components in Swedish breast milk analyzed by capillary GC using ECD, electron impact and negative ion chemical ionization MS. *Chemosphere* 14:223-231.
- Veith GD, Lee GF. 1971. Water chemistry of toxaphene-role of lake sediments. *Environ Sci Technol* 5:230-234.
- Verschueren K. 1983. Handbook of data on organic chemicals. 2nd ed. New York, NY: Van Nostrand Reinhold Co., 1114-1115.
- Vetter W, Luckas B. 1995. Theoretical aspects of polychlorinated bornanes and the composition of toxaphene in technical mixtures and environmental samples. *Sci Total Environ* 160-161(0):505-510.
- Vetter W, Luckas B. 2000. Enantioselective determination of persistent and partly degradable toxaphene congeners in high trophic level biota. *Chemosphere* 41(4):499-506.
- Vetter W, Scherer G. 1998. Variety, structures, GC properties and persistence of compounds of technical toxaphene (CTTs). *Chemosphere* 37(9-12):2525-2543.
- Vetter W, Costas NP, Bartha R, et al. 2000. Liquid chromatographic profiles of individual compounds of technical toxaphene. *J Chromatogr A* 886(1-2):123-131.
- Vetter W, Gleixner G, Armbruster W, et al. 2005. Congener-specific concentrations and carbon stable isotope ratios ( $\delta^{13}\text{C}$ ) of two technical toxaphene products (Toxaphene and Melipax). *Chemosphere* 58(3):235-241.
- Vetter W, Klober U, Luckas B. 2001. Distribution and levels of eight toxaphene congeners in different tissues of marine mammals, birds and cod livers. *Chemosphere* 43(4-7):611-621.

## 9. REFERENCES

- Vetter W, Oehme M, Lucks, B. 1993. Mass spectrometric and gas chromatographic identification of the two main toxaphene congeners present in marine mammals as minor constituents in the technical product. *Chemosphere* 27(4):597-605.
- Vetter W, Scherer G, Schlabach, et al. 1994. An unequivocal HNMR structural assignment of TOX8 and TOX9, the two most abundant toxaphene congeners in marine animals. *J Anal Chem* 349:552-558.
- Vieira I, Sonnier M, Cresteil T. 1996. Developmental expression of CYP2E1 in the human liver: Hypermethylation control of gene expression during the neonatal period. *Eur J Biochem* 238(2):476-483.
- Villeneuve JP, Cattini C. 1986. Input of chlorinated hydrocarbons through dry and wet deposition to the western Mediterranean. *Chemosphere* 15:115-120.
- Voldner EC, Li YF. 1993. Global usage of toxaphene. *Chemosphere* 27:2073-2078.
- Voldner EC, Schroeder WH. 1989. Modelling of atmospheric transport and deposition of toxaphene into the Great Lakes (North America) ecosystem. *Atmos Environ* 23:1949-1962.
- Voldner EC, Schroeder WH. 1990. Long range atmospheric transport and deposition of toxaphene. In: Kurtz DA, ed. *Long range transport of pesticides*. Chelsea, MI: Lewis Publishers, 223-231.
- Walker JB, Seddon L, McMullen E, et al. 2003. Organochlorine levels in maternal and umbilical cord blood plasma in Arctic Canada. *Sci Tot Environ* 302:27-52.
- Walter B, Ballschmiter K. 1991. Quantitation of campechlor/toxaphene in cod-liver oil by integration of the HRGC ECD-pattern. *Fresenius J Anal Chem* 340:245-249.
- Waritz RS, Steinberg M, Kinoshita FK, et al. 1996. Thyroid function and thyroid tumors in toxaphene-treated rats. *Regul Toxicol Pharmacol* 24(2 Pt 1):184-192.
- Warraki S. 1963. Respiratory hazards of chlorinated camphene. *Arch Environ Health* 7:253-256.
- Wauchope RD, Buttler TM, Hornsby AG, et al. 1992. The SCS/ARS/CES pesticide properties database for environmental decision-making. *Rev Environ Contam Toxicol* 123:34, 149.
- Welch RM, Levin W, Kuntzman R, et al. 1971. Effect of halogenated hydrocarbon insecticides on the metabolism and uterotrophic action of estrogens in rats and mice. *Toxicol Appl Pharmacol* 19(2):234-246.
- Wells WL, Milhorn HT. 1983. Suicide attempt by toxaphene ingestion: A case report. *J Miss State Med Assoc* 24:329-330.
- Wen YH, Chan HM. 2000. A pharmacokinetic model for predicting absorption, elimination, and tissue burden of toxaphene in rats. *Toxicol Appl Pharmacol* 168(3):235-243.
- West JR, Smith HW, Chasis H. 1948. Glomerular filtration rate, effective renal blood flow, and maximal tubular excretory capacity in infancy. *J Pediatr* 32:10-18.
- Whittle DM, Kiriluk RM, Carswell AA, et al. 2000. Toxaphene congeners in the Canadian Great Lakes basin: Temporal and spatial food web dynamics. *Chemosphere* 40(9-11):1221-1226.

## 9. REFERENCES

- WHO. 1974. Evaluation of some pesticides in foods: Camphechlor. Pestic Res Ser No. 3. World Health Organization.
- WHO. 1984. Camphechlor. Environmental Health Criteria 45. Geneva, Switzerland: World Health Organization.
- WHO. 2000. Summary of the guidelines. In: WHO air quality guidelines for Europe. 2nd ed. Geneva, Switzerland: World Health Organization, 32-40.  
[http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0005/74732/E71922.pdf](http://www.euro.who.int/__data/assets/pdf_file/0005/74732/E71922.pdf). June 17, 2010.
- WHO. 2006. Chemical summary tables. In: Guidelines for drinking-water quality, third edition, incorporating first and second addenda. Geneva, Switzerland: World Health Organization, 488-492.  
[http://www.who.int/water\\_sanitation\\_health/dwq/GDWAN4rev1and2.pdf](http://www.who.int/water_sanitation_health/dwq/GDWAN4rev1and2.pdf). May 19, 2009.
- Whysner J, Ross PM, Williams GM. 1996. Phenobarbital mechanistic data and risk assessment: Enzyme induction, enhanced cell proliferation, and tumor promotion. *Pharmacol Ther* 71(1/2):153-191.
- Widdowson EM, Dickerson JWT. 1964. Chemical composition of the body. In: Comar CL, Bronner F, eds. Mineral metabolism: An advanced treatise. Volume II: The elements Part A. New York, NY: Academic Press, 1-247.
- Wideqvist U, Jansson B, Reutergard L, et al. 1984. The evaluation of an analytical method for polychlorinated terpenes (PCC). *Chemosphere* 13:367-379.
- Wiersma GB, Tai H, Sand PF. 1972a. Pesticide residues in soil from eight cities-1969. *Pestic Monit J* 6:126-129.
- Wiersma GB, Tai H, Sand PF. 1972b. Pesticide residue levels in soils, FY 1969-National Soils Monitoring Program. *Pestic Monit J* 6:194-228.
- Williams RR, Bidleman TF. 1978. Toxaphene degradation in estuarine sediments. *J Agric Food Chem* 26:280-282.
- Willis GH, McDowell LL, Harper LA, et al. 1983. Seasonal disappearance and volatilization of toxaphene and DDT from a cotton field. *J Environ Qual* 12:80-85.
- Willis GH, McDowell LL, Smith S, et al. 1980. Toxaphene volatilization from a mature cotton canopy. *Agron J* 72:627-632.
- Witt K, Niessen KH. 2000. Toxaphenes and chlorinated naphthalenes in adipose tissue of children. *J Pediatr Gastroenterol Nutr* 30(2):164-169.
- Worthing CR, ed. 1979. The pesticide manual. A world compendium. 6th ed. The British Crop Protection Council, 119-120.
- Worthing CR, Walker SB, eds. 1987. Camphechlor and hexachlorobenzene. In: The pesticide manual. 8th ed. Thornton Heath, U.K.: The British Crop Protection, 119-120, 459.
- Xia X, Crimmins BS, Hopke PK, et al. 2009. Toxaphene analysis in Great Lakes fish: A comparison of GC-EI/MS/MS and GC-ECNI-MS, individual congener standard and technical mixture for quantification of toxaphene. *Anal Bioanal Chem* 395(2):457-463.

## 9. REFERENCES

- Xu L, Hainzl D, Burhene J, et al. 1994. Corrigendum: HRGC-ECD and HRGC-NICI SIM quantification of toxaphene residues in selected marine organism by environmentally relevant chlorobornanes as standard. *Chemosphere* 28(2):237-243.
- Yang C, Chen S. 1999. Two organochlorine pesticides, toxaphene and chlordane, are antagonists for estrogen-related receptor alpha-1 orphan receptor. *Cancer Res* 59(18):4519-4524.
- Yess NJ, Genderson EL, Roy RR. 1993. U.S. Food and Drug Administration monitoring of pesticide residue in infant foods and adult foods eaten by infants/children. *J Assoc Off Anal Chem Internal* 76(3):492-507.
- Young JC, Freeman AD, Bruce RM, et al. 2009. Comparing the mutagenicity of toxaphene after aging in anoxic soils and accumulating in fish. *Ecotoxicol Environ Saf* 72(1):162-172.
- Zabik ME, Zabik MJ, Booren AM, et al. 1995a. Pesticides and total polychlorinated biphenyls in Chinook salmon and carp harvested from the great lakes: Effects of skin on and skin off processing and selected cooking methods. *J Agric Food Chem* 43:993-1001.
- Zabik ME, Zabik MJ, Booren AM, et al. 1995b. Pesticides and total polychlorinated biphenyls residues in raw and cooked walleye and white bass harvested from the great lakes. *Bull Environ Contam Toxicol* 54:396-402.
- Zahm SH, Weisenburger DD, Saal RC, et al. 1993. The role of agricultural pesticide use in the development of non-Hodgkin's lymphoma in women. *Arch Environ Health* 48(5):353-358.
- Zell M, Ballschmiter K. 1980. Baseline studies of the global pollution. II. Global occurrence of hexachlorobenzene (HCB) and polychlorocamphenes (toxaphene. RTM.) (PCC) in biological samples. *Fresenius Z Anal Chem* 300:387-402.
- Zhu J, Mulvihill MJ, Norstrom RJ, et al. 1994. Characterization of technical toxaphene using combined high performance liquid chromatography, gas chromatography electron capture negative ionization mass spectrometry techniques. *J Chromatog* 669:103-117.
- Ziegler EE, Edwards BB, Jensen RL, et al. 1978. Absorption and retention of lead by infants. *Pediatr Res* 12(1):29-34.
- Zweig G, Pye EL, Sitlani R, et al. 1963. Residues in milk from dairy cows fed low levels of toxaphene in their daily ration. *J Agric Food Chem* 11:70-72.