4. **REFERENCES**

ACGIH. 2015. Appendix E: Threshold limit values for mixtures, Appendix H: Reciprocal calculation method for certain refined hydrocarbon solvent vapor mixtures. In: TLVs and BEIs based on the documentation of the threshold limit values for chemical substances and physical agents and biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, 80-82, 92-96.

Ahlborg UG, Becking GC, Birnbaum LS, et al. 1994. Toxic equivalency factors for dioxin-like PCBs. Report on a WHO-ECEH and IPCS consultation, December 1993. Chemosphere 28(6):1049-1067.

Albert RE, Lewtas J, Nesnow S, et al. 1983. Comparative potency method for cancer risk assessment: Application to diesel particulate emissions. Risk Anal 3(2):101-117.

Alexeeff GV, Faust JB, August LM, et al. 2012. A screening method for assessing cumulative impacts. Int J Environ Res Public Health 9(2):648-659. 10.3390/ijerph9020648.

Andersen ME, Dennison JE. 2004. Mechanistic approaches for mixture risk assessments-present capabilities with simple mixtures and future directions. Environ Toxicol Pharmacol 16(1-2):1-11. 10.1016/j.etap.2003.10.004.

ASTM. 2015. Significance and use. Standard guide for risk-based corrective action applied at petroleum release sites. ASTM International. www.astm.org/Standards/E1739.htm. July 6, 2015.

ATSDR. 1995a. Toxicological profile for automotive gasoline. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp72.pdf. July 2, 2015.

ATSDR. 1995b. Toxicological profile for polycyclic aromatic hydrocarbons. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp69.pdf. July 8, 2015.

ATSDR. 1996. Minimal risk levels for priority substances and guidance for derivation; republication. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. Fed Regist 61(125):33511-33520. http://www.gpo.gov/fdsys/pkg/FR-1996-06-27/pdf/96-12991.pdf. July 8, 2015.

ATSDR. 1998a. Toxicological profile for JP-5 and JP-8. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp121.pdf. July 2, 2015.

ATSDR. 1998b. Toxicological profile for chlorinated dibenzo-p-dioxins. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp104.pdf. July 8, 2015.

ATSDR. 1999. Toxicological profile for total petroleum hydrocarbons (TPH). U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp123.pdf. July 2, 2015. ATSDR. 2000a. Toxicological profile for methylene chloride. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp14.pdf. July 2, 2015.

ATSDR. 2000b. Toxicological profile for polychlorinated biphenyls (PCBs). U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp17.pdf. July 2, 2015.

ATSDR. 2004a. Guidance manual for the assessment of joint toxic action of chemical mixtures. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/interactionprofiles/IP-ga/ipga.pdf. May 8, 2015.

ATSDR. 2004b. Interaction profile for: Benzene, toluene, ethylbenzene, and xylenes (BTEX). U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/interactionprofiles/IP-btex/ip05.pdf. July 2, 2015.

ATSDR. 2005a. Public health assessment guidance manual (update). U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/HAC/PHAmanual/. May 8, 2015.

ATSDR. 2008b. Update to the ATSDR policy guideline for dioxins and dioxin-like compounds in residential soil. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/substances/dioxin/policy/Dioxin_Policy_Guidelines.pdf. July 20, 2015.

ATSDR. 2012a. Toxicological profile for cadmium. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp5.pdf. July 2, 2015.

ATSDR. 2012b. Toxicological profile for 1,4-dioxane. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp187.pdf. July 20, 2015.

ATSDR. 2014. Toxicological profile for trichloroethylene. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. http://www.atsdr.cdc.gov/ToxProfiles/tp19.pdf. July 2, 2015.

ATSDR. 2015. Toxicological profile for JP-5, JP-8, and Jet A fuels. U.S. Department of Health and Human Services, Agency for Toxic Substances Disease Registry. July 20, 2015.

Barton HA, Creech JR, Godin CS, et al. 1995. Chloroethylene mixtures: Pharmacokinetic modeling and in vitro metabolism of vinyl chloride, trichloroethylene, and trans-1,2-dichloroethylene in rat. Toxicol Appl Pharmacol 130(2):237-247. 10.1006/taap.1995.1029.

Berenbaum MC. 1985. The expected effect of a combination of agents: The general solution. J Theor Biol 114:413-431.

Berenbaum MC. 1989. What is synergy? Pharmacol Rev 41:93-141.

Berenbaum MC. 1990. Erratum to What is synergy? [Pharmacol Rev 41:93-141]. Pharmacol Rev 41(3):422.

Birkhoj M, Nellemann C, Jarfelt K, et al. 2004. The combined antiandrogenic effects of five commonly used pesticides. Toxicol Appl Pharmacol 201:10-20.

Birnbaum LS, DeVito MJ. 1995. Use of toxic equivalency factors for risk assessment for dioxins and related compounds. Toxicology 105:391-401.

Bliss CI. 1939. The toxicity of poisons applied jointly. Ann Appl Biol 26:585-615.

Bond JA, Leavens TL, Seaton MJ, et al. 1998. Predicting the toxicity of chemical mixtures. Chemtech July:16-23.

Boobis A, Budinsky R, Collie S, et al. 2011. Critical analysis of literature on low-dose synergy for use in screening chemical mixtures for risk assessment. Crit Rev Toxicol 41(5):369-383. 10.3109/10408444.2010.543655.

Borgert CJ, Price B, Wells CS, et al. 2001. Evaluating chemical interaction studies for mixture risk assessment. Hum Ecol Risk Assess 7(2):259-306. 10.1080/20018091094376.

Borgert CJ, Sargent EV, Casella G, et al. 2012. The human relevant potency threshold: Reducing uncertainty by human calibration of cumulative risk assessments. Regul Toxicol Pharmacol 62(2):313-328. 10.1016/j.yrtph.2011.10.012.

Bosgra S, van Eijkeren JC, Slob W. 2009. Dose addition and the isobole method as approaches for predicting the cumulative effect of non-interacting chemicals: A critical evaluation. Crit Rev Toxicol 39(5):418-426. 10.1080/10408440902787592.

Boström CE, Gerde P, Hanberg A, et al. 2002. Cancer risk assessment, indicators, and guidelines for polycyclic aromatic hydrocarbons in the ambient air. Environ Health Perspect 110(Suppl 3):451-488.

CAL/EPA. 2010. Cumulative impacts: Building a scientific foundation. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. http://oehha.ca.gov/ej/pdf/CIReport123110.pdf. May 8, 2015.

Calabrese EJ. 1991. Pragmatic regulatory approaches for assessing complex mixtures of carcinogens. A. Comparative potency method. In: Multiple chemical interactions. Chelsea, MI: Lewis Publishers, 619-622.

Caldwell JC, Evans MV, Krishnan K. 2012. Cutting edge PBPK models and analyses: Providing the basis for future modeling efforts and bridges to emerging toxicology paradigms. J Toxicol 2012:852384. 10.1155/2012/852384.

Cao Z, Shafer TJ, Crofton KM, et al. 2011. Additivity of pyrethroid actions on sodium influx in cerebrocortical neurons in primary culture. Environ Health Perspect 119(9):1239-1246. 10.1289/ehp.1003394.

Carpenter DO, Arcaro K, Spink DC. 2002. Understanding the human health effects of chemical mixtures. Environ Health Perspect 110(Suppl 1):25-42.

Charles GD, Gennings C, Tornesi B, et al. 2007. Analysis of the interaction of phytoestrogens and synthetic chemicals: An in vitro/in vivo comparison. Toxicol Appl Pharmacol 218:280-288.

Charles GD, Gennings C, Zacharaweski TR, et al. 2002a. An approach for assessing estrogen receptormediated interactions in mixtures of three chemicals: A pilot study. Toxicol Sci 68:349-360.

Charles GD, Gennings C, Zacharewski TR, et al. 2002b. Assessment of interactions of diverse ternary mixtures in an estrogen receptor-alpha reporter assay. Toxicol Appl Pharmacol 180:11-21.

Christiansen S, Scholze M, Dalgaard M, et al. 2009. Synergistic disruption of external male sex organ development by a mixture of four antiandrogens. Environ Health Perspect 117(12):1839-1846. 10.1289/ehp.0900689.

Cizmas L, McDonald TJ, Phillips TD, et al. 2004. Toxicity characterization of complex mixtures using biological and chemical analysis in preparation for assessment of mixture similarity. Environ Sci Technol 38(19):5127-5133.

Cogliano VJ. 1997. Plausible upper bounds: Are their sums plausible? Risk Anal 17(1):77-84.

Courter LA, Luch A, Musafia-Jeknic T, et al. 2008. The influence of diesel exhaust on polycyclic aromatic hydrocarbon-induced DNA damage, gene expression, and tumor initiation in Sencar mice in vivo. Cancer Lett 265(1):135-147. 10.1016/j.canlet.2008.02.017.

CPSC. 2014. Chronic hazard advisory panel on phthalates and phthalate alternatives (with appendices). Bethesda, MD: U.S. Consumer Product Safety Commission. http://www.cpsc.gov/PageFiles/169902/CHAP-REPORT-With-Appendices.pdf. May 8, 2015.

Crofton KM, Craft ES, Hedge JM, et al. 2005. Thyroid-hormone–disrupting chemicals: Evidence for dose-dependent additivity or synergism. Environ Health Perspect 113(11):1549-1554. 10.1289/ehp.8195.

Crump KS. 1984. A new method for determining allowable daily intakes. Fundam Appl Toxicol 4:854-871.

Crump KS. 1995. Calculation of benchmark doses from continuous data. Risk Anal 15:79-89.

Dawson DA. 1994. Chemical mixture toxicity assessment using an alternative-species model: Applications, opportunities, and perspectives. In: Yang SHY, ed. Toxicology of chemical mixtures. Case studies, mechanisms, and novel approaches. San Diego, CA: Academic Press, 539-563.

De Rosa CT, Brown D, Dhara R, et al. 1997c. Appendices for ATSDR interim policy guideline. J Clean Technol Environ Toxicol Occup Med 6(2):139-163.

De Rosa CT, Brown D, Dhara R, et al. 1997a. Dioxin and dioxin-like compounds in soil, Part I: ATSDR interim policy guideline. Agency for Toxic Substances and Disease Registry. Toxicol Ind Health 13(6):759-768.

De Rosa CT, Brown D, Dhara R, et al. 1997b. Dioxin and dioxin-like compounds in soil, Part II: Technical support document for ATSDR Interim Policy Guideline. Toxicol Ind Health 13(6):769-804.

De Rosa CT, Johnson BL, Fay M, et al. 1996. Public health implications of hazardous waste sites: Findings, assessment and research. Food Chem Toxicol 34:1131-1138.

De Rosa CT, Pohl HR, Williams M, et al. 1998. Public health implications of environmental exposures. Environ Health Perspect 106(Supp 1):369-378.

De Rosa CT, Stevens YW, Johnson BL. 1993. Cancer policy framework for: Public health assessment of carcinogens in the environment. Toxicol Ind Health 9(4):559-575.

deFur PL, Evans GW, Cohen Hubal EA, et al. 2007. Vulnerability as a function of individual and group resources in cumulative risk assessment. Environ Health Perspect 115(5):817-824. 10.1289/ehp.9332.

DeMarini DM, Gallagher JE, Houk VS, et al. 1989. Toxicological evaluation of complex industrial wastes: Implications for exposure assessment. Toxicol Lett 49(2-3):199-214.

Dennison JE, Andersen ME, Clewell HJ, et al. 2004. Development of a physiologically based pharmacokinetic model for volatile fractions of gasoline using chemical lumping analysis. Environ Sci Technol 38(21):5674-5681.

Dennison JE, Andersen MEl, Yang RSH. 2003. Characterization of the pharmacokinetics of gasoline using PBPK modeling with a complex mixtures chemical lumping approach. Inhal Toxicol 15:961-986.

DEPA. 2009. Expert workshop on combination effects of chemicals, 28-30 January 2009, Hornbaek, Denmark. Danish Ministry of the Environment, Danish Environmental Protection Agency. http://www.food.dtu.dk/~/media/Institutter/Foedevareinstituttet/Publikationer/Pub-2009/2009%20bilag_2_expertworkshop.ashx?la=da. May 14, 2015.

Dobrev ID, Andersen ME, Yang RS. 2001. Assessing interaction thresholds for trichloroethylene in combination with tetrachloroethylene and 1,1,1-trichloroethane using gas uptake studies and PBPK modeling. Arch Toxicol 75(3):134-144.

Dobrev ID, Andersen ME, Yang RS. 2002. In silico toxicology: Simulating interaction thresholds for human exposure to mixtures of trichloroethylene, tetrachloroethylene, and 1,1,1-trichloroethane. Environ Health Perspect 110(10):1031-1039.

Dobrev ID, Andersen ME, Yang RSH. 2001. Assessing interaction thresholds for trichloroethylene in combination with tetrachloroethylene and 1,1,1-trichloroethane using gas uptake studies and PBPK modeling. Arch Toxicol 75:134-144.

DuBois KP. 1961. Potentiation of the toxicity of organophosphorus compounds. Adv Pest Control Res 4:117-151.

EC. 2012. Toxicity and assessment of chemical mixtures. European Commission. Scientific Committee on Health and Environmental Risks (SCHER), Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), and Scientific Committee on Consumer Safety (SCCS). http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/scher_o_155.pdf. July 10, 2015.

EFSA. 2013. International frameworks dealing with human risk assessment of combined exposure to multiple chemicals. European Food Safety Authority. EFSA J 11(7):3313. http://www.efsa.europa.eu/de/efsajournal/doc/3313.pdf. July 29, 2015. Eide I, Neverdal G, Thorvaldsen B, et al. 2002. Toxicological evaluation of complex mixtures by pattern recognition: Correlating chemical fingerprints to mutagenicity. Environ Health Perspect 110(Suppl 6):985-988.

Eide I, Neverdal G, Thorvaldsen B, et al. 2004. Toxicological evaluation of complex mixtures: Fingerprinting and multivariate analysis. Environ Toxicol Pharmacol 18(2):127-133. 10.1016/j.etap.2004.01.011.

El-Masri HA, Mumtaz MM, Yushak ML. 2004. Application of physiologically-based pharmacokinetic modeling to investigate the toxicological interaction between chlorpyrifos and parathion in the rat. Environ Toxicol Pharmacol 16(1-2):57-71. 10.1016/j.etap.2003.10.002.

El-Masri HA, Tessari JD, Yang RSH. 1996. Exploration of an interaction threshold for the joint toxicity of trichloroethylene and 1,1-dichloroethylene: utilization of a PBPK model. Arch Toxicol 70:527-539.

EPA. 1984. Carcinogen assessment of coke oven emissions. Washington, DC: U.S. Environmental Protection Agency. EPA600682003F. http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=30000WL4.txt. July 2, 2015.

EPA. 1986. Guidelines for the health risk assessment of chemical mixtures. U.S. Environmental Protection Agency. Fed Regist 51:34014-34025.

EPA. 1988. Technical support document on health risk assessment of chemical mixtures. Washington, DC: U.S. Environmental Protection Agency. EPA600890064. http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=435329. July 8, 2015.

EPA. 1989a. Risk assessment guidance for superfund. Volume I. Human health evaluation manual (Part A). Washington, DC: U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. EPA5401859002. http://www.epa.gov/oswer/riskassessment/ragsa/pdf/rags_a.pdf. July 22, 2015.

EPA. 1989b. Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. Washington, DC: U.S. Environmental Protection Agency. EPA625389016.

EPA. 1993. Provisional guidance for quantitative risk assessment of polycyclic aromatic hydrocarbons. U.S. Environmental Protection Agency. EPA600R93089. PB94116571. http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=466885. July 21, 2015.

EPA. 1994. Estimating exposures and risks. Estimating exposure to dioxin-like compounds 3: Sitespecific assessment procedures Washington, DC: U.S. Environmental Protection Agency. EPA600688005Cc.

EPA. 1996. PCBs: Cancer dose-response assessment and application to environmental mixtures. U.S. Environmental Protection Agency. National Center for Environmental Assessment. Office of Research and Development.

EPA. 2000. Supplementary guidance for conducting health risk assessment of chemical mixtures. Washington, DC: U.S. Environmental Protection Agency. EPA630R00002. http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=4486. July 2, 2015. EPA. 2001a. Memorandum thiocarbamates: A determination of the existence of a common mechanism of toxicity and a screening level cumulative food risk assessment. U.S. Environmental Protection Agency. http://epa.gov/pesticides/cumulative/thiocarb.pdf. May 8, 2015.

EPA. 2001b. The determination of whether dithiocarbamate pesticides share a common mechanism of toxicity. U.S. Environmental Protection Agency. http://epa.gov/pesticides/cumulative/dithiocarb.pdf. July 13, 2015.

EPA. 2002b. Guidance on cumulative risk assessment of pesticide chemicals that have a common mechanism of toxicity. U.S. Environmental Protection Agency. http://www.epa.gov/oppfead1/trac/science/cumulative_guidance.pdf. May 8, 2015.

EPA. 2002c. Health assessment document for diesel engine exhaust. Washington, DC: U.S. Environmental Protection Agency. EPA600890057F. http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=300055PV.txt. July 20, 2015.

EPA. 2003. Framework for cumulative risk assessment Washington, DC: U.S. Environmental Protection Agency. EPA600P02001F. http://www2.epa.gov/sites/production/files/2014-11/documents/frmwrk_cum_risk_assmnt.pdf. May 8, 2015.

EPA. 2006a. Approaches for the application of physiologically based pharmacokinetic (PBPK) models and supporting data in risk assessment. Washington, DC: U.S. Environmental Protection Agency, Office of Research and Development. EPA600R05043F.

EPA. 2006b. Organophosphorus cumulative risk assessment-2006 update. U.S. Environmental Protection Agency. http://www.epa.gov/pesticides/cumulative/2006-op/. May 11, 2015.

EPA. 2006c. Cumulative risk from chloroacetanilide pesticides. U.S. Environmental Protection Agency. http://www.epa.gov/pesticides/cumulative/chloro_cumulative_risk.pdf. July 13, 2015.

EPA. 2006d. Triazine cumulative risk assessment. U.S. Environmental Protection Agency. http://www.epa.gov/pesticides/reregistration/REDs/triazine_cumulative_risk.pdf. July 30, 2015.

EPA. 2007a. Guidance for evaluating the oral bioavailability of metals in soils for use in human health risk assessment. U.S. Environmental Protection Agency. OSWER 9285.7-80. http://www.epa.gov/superfund/bioavailability/bio_guidance.pdf. July 22, 2015.

EPA. 2007b. Revised n-methyl carbamate cumulative risk assessment. U.S. Environmental Protection Agency. http://www.epa.gov/oppsrrd1/reregistration/REDs/nmc_revised_cra.pdf. May 14, 2015.

EPA. 2010a. Final report bioavailability of dioxins and dioxin-like compounds in soil. U.S. Environmental Protection Agency. http://www.epa.gov/superfund/health/contaminants/dioxin/pdfs/Final_dioxin_RBA_Report_12_20_10.pd f. May 8, 2015.

EPA. 2010b. Recommended Toxicity Equivalence Factors (TEFs) for human health risk assessments of 2,3,7,8-tetrachlorodibenzo-p-dioxin and dioxin-like compounds. U.S. Environmental Protection Agency. PB2011106152. EPA100R10005. https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1009HJ9.txt. November 19, 2016.

EPA. 2011b. Pyrethroid cumulative risk assessment. U.S. Environmental Protection Agency. EPA-HQ-OPP-2011-0746-0003. http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2011-0746-0003. May 14, 2015.

EPA. 2011c. Summary of results for the 2005 national scale assessment. Technology transfer network air toxics 2005 National-scale air toxics assessment. U.S. Environmental Protection Agency. http://www.epa.gov/ttn/atw/nata2005/05pdf/sum_results.pdf. July 20, 2015.

EPA. 2012a. Benchmark dose technical guidance. Washington, DC: U.S. Environmental Protection Agency. EPA100R12001. http://www2.epa.gov/sites/production/files/2015-01/documents/benchmark_dose_guidance.pdf. July 20, 2015.

EPA. 2012b. EPA'S Reanalysis of key issues related to dioxin toxicity and response to NAS comments, Volume 1. (CAS No. 1746-01-6). In Support of Summary Information on the Integrated Risk Information System (IRIS). Environmental Protection Agency. 344. 14. EPA600R10038F. PB2012108154. http://www.epa.gov/iris/supdocs/dioxinv1sup.pdf. July 15, 2015.

Ermler S, Scholze M, Kortenkamp A. 2011. The suitability of concentration addition for predicting the effects of multi-component mixtures of up to 17 anti-androgens with varied structural features in an in vitro AR antagonist assay. Toxicol Appl Pharmacol 257(2):189-197. 10.1016/j.taap.2011.09.005.

Ermler S, Scholze M, Kortenkamp A. 2013. Seven benzimidazole pesticides combined at sub-threshold levels induce micronuclei in vitro. Mutagenesis 28(4):417-426. 10.1093/mutage/get019.

Ermler S, Scholze M, Kortenkamp A. 2014. Genotoxic mixtures and dissimilar action: concepts for prediction and assessment. Arch Toxicol 88(3):799-814. 10.1007/s00204-013-1170-x.

Evans AM, Rice GE, Wright JM, et al. 2014. Exploratory cumulative risk assessment (CRA) approaches using secondary data. Hum Ecol Risk Assess 20:704-723.

Evans RM, Scholze M, Kortenkamp A. 2012. Additive mixture effects of estrogenic chemicals in human cell-based assays can be influenced by inclusion of chemicals with differing effect profiles. PLoS ONE 7(8):e43606. 10.1371/journal.pone.0043606.

Fattore E, Trossvik C, Hakansson H. 2000. Relative potency values derived from hepatic vitamin A reduction in male and female Sprague-Dawley rats following subchronic dietary exposure to individual polychlorinated dibenzo-p-dioxin and dibenzofuran congeners and a mixture thereof. Toxicol Appl Pharmacol 165:184-194.

Fay RM, Feron VJ. 1996. Complex mixtures: Hazard identification and risk assessment. Food Chem Toxicol 34(11-12):1175-1176.

Feder PI, Ma ZJ, Bull RJ, et al. 2009a. Evaluating sufficient similarity for disinfection by-product (DBP) mixtures: Multivariate statistical procedures. J Toxicol Environ Health A 72(7):468-481. 10.1080/15287390802608965.

Feder PI, Ma ZJ, Bull RJ, et al. 2009b. Evaluating sufficient similarity for drinking-water disinfection by-product (DBP) mixtures with bootstrap hypothesis test procedures. J Toxicol Environ Health A 72(7):494-504. 10.1080/15287390802608981.

Feron VJ, Groten JP, vanZorge JA, et al. 1995. Toxicity studies in rats of simple mixtures of chemicals with the same different target organs. Toxicol Lett 82/83:502-512.

Feron VJ, van Vliet PW, Notten WR. 2004. Exposure to combinations of substances: A system for assessing health risks. Environ Toxicol Pharmacol 18(3):215-222. 10.1016/j.etap.2003.11.009.

Feuston MH, Low LK, Hamilton CE, et al. 1994. Correlation of systemic and developmental toxicities with chemical component classes of refinery streams. Fundam Appl Toxicol 22:622-630.

Finney DJ. 1971. Probit analysis. 3rd ed. London: Cambridge University Press.

Gao X, Son DS, Terranova PF, et al. 1999. Toxic equivalency factors of polychlorinated dibenzo-pdioxins in an ovulation model: Validation of the toxic equivalency concept for one aspect of endocrine disruption. Toxicol Appl Pharmacol 157:107-116.

Gaylor D, Ryan L, Krewski D, et al. 1998. Procedures for calculating benchmark doses for health risk assessment. Regul Toxicol Pharmacol 28:150-164.

Gennings C, Carter W, Campain J, et al. 2002. Statistical analysis of interactive cytotoxicity in human epidermal keratinocytes following exposure to a mixture of four metals. J Agric Biol Environ Stat 7(1):58-73. 10.1198/108571102317475062.

Gennings C, Carter WH, Jr., Carchman RA, et al. 2005. A unifying concept for assessing toxicological interactions: changes in slope. Toxicol Sci 88(2):287-297. 10.1093/toxsci/kfi275.

Gennings C, Carter WH, Jr., Carney EW, et al. 2004. A novel flexible approach for evaluating fixed ratio mixtures of full and partial agonists. Toxicol Sci 80(1):134-150. 10.1093/toxsci/kfh134.

Gray TM, Simpson BJ, Nicolich MJ, et al. 2013. Assessing the mammalian toxicity of high-boiling petroleum substances under the rubric of the HPV program. Regul Toxicol Pharmacol 67(Suppl 2):S4-S9.

Groten JP, Schoen ED, Van BPJ, et al. 1997. Subacute toxicity of a mixture of nine chemicals in rats: Detecting interactive effects with a fractionated two-level factorial design. Fundam Appl Toxicol 36:15-29.

Haddad S, Beliveau M, Tardif R, et al. 2001. A PBPK modeling-based approach to account for interactions in the health risk assessment of chemical mixtures. Toxicol Sci 63(1):125-131.

Haddad S, Charest-Tardif G, Krishnan K. 2000b. Physiologically based modeling of the maximal effect of metabolic interactions on the kinetics of components of complex chemical mixtures. J Toxicol Environ Health A 61(3):209-223.

Haddad S, Charest-Tardif G, Tardif R, et al. 2000a. Validation of a physiological modeling framework for simulating the toxicokinetics of chemicals in mixtures. Toxicol Appl Pharmacol 167(3):199-209. 10.1006/taap.2000.8991.

Haddad S, Tardif R, Charest-Tardif G, et al. 1999a. Physiological modeling of the toxicokinetic interactions in a quaternary mixture of aromatic hydrocarbons. Toxicol Appl Pharmacol 161:249-257.

Haddad S, Tardif R, Viau C, et al. 1999b. A modeling approach to account for toxicokinetic interactions in the calculation of biological hazard index for chemical mixtures. Toxicol Lett 108:303-308.

Hamm JT, Chen CY, Birnbaum LS. 2003. A mixture of dioxins, furans, and non-ortho PCBs based upon consensus toxic equivalency factors produces dioxin-like reproductive effects. Toxicol Sci 74:182-191.

Hansen H, De Rosa CT, Pohl H, et al. 1998. Public health challenges posed by chemical mixtures. Environ Health Perspect 106:1271-1280.

Hass U, Scholze M, Christiansen S, et al. 2007. Combined exposure to anti-androgens exacerbates disruption of sexual differentiation in the rat. Environ Health Perspect 115(Suppl 1):122-128. 10.1289/ehp.9360.

Hermens J, Leeuwangh P, Musch A. 1985. Joint toxicity of mixtures of groups of organic aquatic pollutants to the guppy (Poecilia reticulata). Ecotoxicol Environ Saf 9:321-326.

Hertzberg RC, MacDonell MM. 2002. Synergy and other ineffective mixture risk definitions. Sci Total Environ 288(1-2):31-42.

Hertzberg RC, Teuschler LK. 2002. Evaluating quantitative formulas for dose-response assessment of chemical mixtures. Environ Health Perspect 110(Suppl 6):965-970.

Hertzberg RC, Pan Y, Li R, et al. 2013. A four-step approach to evaluate mixtures for consistency with dose addition. Toxicology 313(2-3):134-144. 10.1016/j.tox.2012.10.016.

Hertzberg RC, Rice G, Teuschler LK. 1999. Methods for health risk assessment of combustion mixtures. In: Hazardous waste incineration: Evaluating the human health and environmental risks. CRC Press LLC, 105-148.

Howdeshell KL, Furr J, Lambright CR, et al. 2007. Cumulative effects of dibutyl phthalate and diethylhexyl phthalate on male rat reproductive tract development: Altered fetal steroid hormones and genes. Toxicol Sci 99(1):190-202. 10.1093/toxsci/kfm069.

Howdeshell KL, Wilson VS, Furr J, et al. 2008. A mixture of five phthalate esters inhibits fetal testicular testosterone production in the Sprague-Dawley rat in a cumulative, dose-additive manner. Toxicol Sci 105(1):153-165. 10.1093/toxsci/kfn077.

IARC. 2010. Some non-heterocyclic polycyclic aromatic hydrocarbons and some related exposures. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. International Agency for Research on Cancer, 1-773. http://monographs.iarc.fr/ENG/Monographs/vol92/mono92.pdf. July 6, 2015.

IARC. 2012a. Coke production. In: Chemical agents and related occupations. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. International Agency for Research on Cancer, 167-178. http://monographs.iarc.fr/ENG/Monographs/vol100F/mono100F-18.pdf. July 6, 2015.

IARC. 2012b. Coke gasification. In: Chemical agents and related occupations. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. International Agency for Research on Cancer, 145-152. http://monographs.iarc.fr/ENG/Monographs/vol100F/mono100F-15.pdf. July 6, 2015. IARC. 2014. Diesel and gasoline engine exhausts. In: Diesel and gasoline engine exhausts and some nitroarenes. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. International Agency for Research on Cancer, 39-467. http://monographs.iarc.fr/ENG/Monographs/vol105/mono105.pdf. July 6, 2015.

nttp://monographs.iarc.if/ENG/Monographs/vol105/mono105.pdf. July 6, 2015.

IRIS. 1998a. Benzo [a] pyrene (BaP); (CASRN 50-32-8). IRIS Summary. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. http://www.epa.gov/iris/subst/0136.htm. July 16, 2015.

IRIS. 1998b. Ethylbenzene; (CASRN 100-41-4). IRIS Summary. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. http://www.epa.gov/iris/subst/0051.htm. July 22, 2015.

IRIS. 2003b. Vinyl chloride; CASRN 75-01-4. Chemical assessment summary. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/1001_summary.pdf. November 22, 2016.

IRIS. 2003c. Xylenes; CASRN 1330-20-7. Chemical assessment summary. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0270_summary.pdf. November 22, 2016.

IRIS. 2007. Toluene; (CASRN 108-88-3). IRIS Summary. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. http://www.epa.gov/iris/subst/0118.htm. July 22, 2015.

IRIS. 2011a. Dichloromethane; CASRN 75-09-2. Chemical assessment summary. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0070_summary.pdf. November 22, 2016.

IRIS. 2011b. Trichloroethylene; CASRN 79-01-6; 09/28/2011. Chemical assessment summary. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0199_summary.pdf. November 22, 2016.

IRIS. 2012. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD); CASRN 1746-01-6. Chemical assessment summary. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/1024_summary.pdf. November 22, 2016.

IRIS. 2015. A-Z List of substances. Washington, DC: Integrated Risk Information System. U.S. Environmental Protection Agency.

http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showSubstanceList. July 21, 2015.

Jarvis IW, Dreij K, Mattsson A, et al. 2014. Interactions between polycyclic aromatic hydrocarbons in complex mixtures and implications for cancer risk assessment. Toxicology 321:27-39. 10.1016/j.tox.2014.03.012.

Johnson BL, DeRosa CT. 1995. Chemical mixtures released from hazardous waste sites: Implications for health risk assessment. Toxicology 105:145-156.

Jonker D, Woutersen RA, Feron VJ. 1996. Toxicity of mixtures of neprotoxicants with similar or dissimilar mode of action. Food Chem Toxicol 34(11-12):1075-1082.

Jonker D, Woutersen RA, Van Bladeren PJ, et al. 1990. 4-Week oral toxicity study of a combination of eight chemicals in rats: Comparison with the toxicity of the individual compounds. Food Chem Toxicol 28:623-631.

Jonker D, Woutersen RA, Van Bladeren PJ, et al. 1993. Subacute (4-wk) oral toxicity of a combination of four nephrotoxins in rats: Comparison with the toxicity of the individual compounds. Food Chem Toxicol 31(2):125-136.

Kjeldsen LS, Ghisari M, Bonefeld-Jorgensen EC. 2013. Currently used pesticides and their mixtures affect the function of sex hormone receptors and aromatase enzyme activity. Toxicol Appl Pharmacol 272(2):453-464. 10.1016/j.taap.2013.06.028.

Kodell RL, Chen JJ. 1994. Reducing conservatism in risk estimation for mixtures of carcinogens. Risk Anal 14(3):327-332.

Konemann H. 1981. Fish toxicity tests with mixtures of more than two chemicals: A proposal for a quantitative approach and experimental results. Toxicology 19:229-238.

Krishnan K, Brodeur J. 1991. Toxicological consequences of combined exposure to environmental pollutants. Arch Complex Environ Stud 3(3):1-20.

Krishnan K, Haddad S, Beliveau M, et al. 2002. Physiological modeling and extrapolation of pharmacokinetic interactions from binary to more complex chemical mixtures. Environ Health Perspect 110(Suppl 6):989-994.

Le Page Y, Scholze M, Kah O, et al. 2006. Assessment of xenoestrogens using three distinct estrogen receptors and the zebrafish brain aromatase gene in a highly responsive glial cell system. Environ Health Perspect 114(5):752-758.

Lemieux CL, Lambert IB, Lundstedt S, et al. 2008. Mutagenic hazards of complex polycyclic aromatic hydrocarbon mixtures in contaminated soil. Environ Toxicol Chem 27(4):978-990. 10.1897/07-157.1.

Lemieux CL, Long AS, Lambert IB, et al. 2015. In vitro mammalian mutagenicity of complex polycyclic aromatic hydrocarbon mixtures in contaminated soils. Environ Sci Technol 49(3):1787-1796. 10.1021/es504465f.

Lewis AS, Sax SN, Wason SC, et al. 2011. Non-chemical stressors and cumulative risk assessment: An overview of current initiatives and potential air pollutant interactions. Int J Environ Res Public Health 8(6):2020-2073. 10.3390/ijerph8062020.

Lewtas J. 1985. Development of a comparative potency method for cancer risk assessment of complex mixtures using short-term in vivo and in vitro bioassays. Toxicol Ind Health 1(4):193-203.

Lewtas J. 1988. Genotoxicity of complex mixtures: strategies for the identification and comparative assessment of airborne mutagens and carcinogens from combustion sources. Fundam Appl Toxicol 10:571-589.

Loewe S, Muischnek H. 1926. Effect of combinations: Mathematical basis of problem. Arch Exp Pathol Pharmakol 114:313-326.

Lutz WK, Vamvakas S, Kopp-Schneider A, et al. 2002. Deviation from additivity in mixture toxicity: Relevance of nonlinear dose-response relationships and cell line differences in genotoxicity assays with combinations of chemical mutagens and gamma-radiation. Environ Health Perspect 110(Suppl 6):915-918.

Macdonell MM, Haroun LA, Teuschler LK, et al. 2013. Cumulative risk assessment toolbox: Methods and approaches for the practitioner. J Toxicology 2013:310904. 10.1155/2013/310904.

Marshall S, Gennings C, Teuschler LK, et al. 2013. An empirical approach to sufficient similarity: Combining exposure data and mixtures toxicology data. Risk Anal 33(9):1582-1595. 10.1111/risa.12015.

MassDEP. 2002. Characterizing risks posed by petroleum contaminated sites: Implementation of the MADEP VPH/EPH approach Policy #WSC-02-411. Massachusetts Department of Environmental Protection. http://www.mass.gov/eea/docs/dep/cleanup/laws/02-411bg.pdf. July 6, 2015.

McKee RH, Schreiner CA, Nicolich MJ, et al. 2013. Genetic toxicity of high-boiling petroleum substances. Regul Toxicol Pharmacol 67(Suppl 2):S75-S85.

Meek ME. 2013. International experience in addressing combined exposures: Increasing the efficiency of assessment. Toxicology 313(2-3):185-189. 10.1016/j.tox.2012.09.015.

Meek ME, Lipscomb JC. 2015. Gaining acceptance for the use of in vitro toxicity assays and QIVIVE in regulatory risk assessment. Toxicology 332:112-123.

Meek ME, Boobis AR, Crofton KM, et al. 2011. Risk assessment of combined exposure to multiple chemicals: A WHO/IPCS framework. Regul Toxicol Pharmacol 60:S1-S14. 10.1016/j.yrtph.2011.03.010.

Morello-Frosch R, Shenassa ED. 2006. The environmental "riskscape" and social inequality: Implications for explaining maternal and child health disparities. Environ Health Perspect 114(8):1150-1153.

Moser VC, Casey M, Hamm A, et al. 2005. Neurotoxicological and statistical analyses of a mixture of five organophosphorus pesticides using a ray design. Toxicol Sci 86(1):101-115. 10.1093/toxsci/kfi163.

Moser VC, Padilla S, Simmons JE, et al. 2012. Impact of chemical proportions on the acute neurotoxicity of a mixture of seven carbamates in preweanling and adult rats. Toxicol Sci 129(1):126-134.

Moser VC, Simmons JE, Gennings C. 2006. Neurotoxicological interactions of a five-pesticide mixture in preweanling rats. Toxicol Sci 92(1):235-245. 10.1093/toxsci/kfj189.

Mumtaz M, Colman J. 1993. The risk assessment of chemical mixtures: Fine tuning the hazard index. In: Dodd DE, Clewell HJ, Mattie DR, eds. Proceedings of the 1992 Conference on Toxicology: Applications of Advances in Toxicology to Risk Assessment. Wright-Patterson Air Force Base, OH: Armstrong Laboratory, Air Force Materiel Command, 266.

Mumtaz MM, Durkin PR. 1992. A weight-of-evidence approach for assessing interactions in chemical mixtures. Toxicol Ind Health 8(6):377-406.

Mumtaz MM, Hertzberg RC. 1993. The status of interactions data in risk assessment of chemical mixtures. In: Saxena J, ed. Hazard assessment of chemicals. Vol. 8. Washington, DC: Taylor & Francis, 47-79.

Mumtaz M, Fisher J, Blount B, et al. 2012. Application of physiologically based pharmacokinetic models in chemical risk assessment. J Toxicology 2012:904603. 10.1155/2012/904603.

Mumtaz MM, DeRosa CT, Durkin PR. 1994a. Approaches and challenges in risk assessment of chemical mixtures. In: Yang RSH, ed. Toxicology of chemical mixtures. Case studies, mechanisms, and novel approaches. San Diego, CA: Academic Press, 565-597.

Mumtaz MM, De Rosa CT, Groten J, et al. 1998. Estimation of toxicity of chemical mixtures through modeling of chemical interactions. Environ Health Perspect 106(Suppl 6):1353-1360.

Mumtaz MM, Durkin PM, Diamond GL, et al. 1994b. Exercises in the use of weight-of-evidence approach for chemical-mixture interactions. In: Hazardous waste and public health: International Congress on the health effects of hazardous waste. Princeton, NJ: Princeton Scientific Publishing Co., 637-642.

Mumtaz MM, Hansen H, Pohl HR. 2011. Mixtures and their risk assessment in toxicology. Metal ions in life sciences 8:61-80.

Mumtaz MM, Poirier KA, Colman JT. 1997. Risk assessment for chemical mixtures: Fine-tuning the hazard index approach. J Clean Technol Environ Toxicol Occup Med 6(2):189-204.

Mumtaz MM, Ruiz P, De Rosa CT. 2007. Toxicity assessment of unintentional exposure to multiple chemicals. Toxicol Appl Pharmacol 223(2):104-113. 10.1016/j.taap.2007.04.015.

Murray FJ, Gray TM, Roberts LG, et al. 2013b. Evaluating the male and female reproductive toxicity of high-boiling petroleum substances. Regul Toxicol Pharmacol 67(Suppl 2):S60-S74.

Murray FJ, Roth RN, Nicolich MJ, et al. 2013a. The relationship between developmental toxicity and aromatic-ring class profile of high-boiling petroleum substances. Regul Toxicol Pharmacol 67(Suppl 2):S46-S59.

NAS. 1974. Water quality criteria, 1972. Section III- Freshwater aquatic life and wildlife: Mixtures of two or more toxicants. National Academy of Sciences, National Academy of Engineering. II-XIX, 1-4, 106-108, 122-123. EPAR373033.

Nesnow S, Mass MJ, Ross JA, et al. 1998. Lung tumorigenic interactions in strain A/J mice of five environmental polycyclic aromatic hydrocarbons. Environ Health Perspect 106(Suppl 6):1337-1346.

Nicolich MJ, Simpson BJ, Murray FJ, et al. 2013. The development of statistical models to determine the relationship between aromatic-ring class profile and repeat-dose and developmental toxicities of highboiling petroleum substances. Regul Toxicol Pharmacol 67(Suppl 2):S10-S29.

NJDEP. 2009. A preliminary screening method to estimate cumulative environmental impacts. New Jersey Department of Environmental Protection.

http://www.state.nj.us/dep/ej/docs/ejc screeningmethods20091222.pdf. July 20, 2015.

Norwegian Scientific Committee for Food Safety. 2013. Combined toxic effects of multiple chemical exposures. Oslo: Vitenskapskomiteen for mattrygghet. Norwegian Scientific Committee for Food Safety. Doc. No.: 11/005-final. http://www.vkm.no/dav/906de6c1a6.pdf. July 21, 2015.

NRC. 1988. Complex mixtures. Methods for in vivo toxicity testing. Washington, DC: National Research Council, National Academy Press. 46-49.

NRC. 1989. Drinking water and health. Vol. 9. Washington, DC: National Academy of Sciences, National Research Council, National Academy Press, Safe Drinking Water Committee. 93-107, 121-132, 168-170.

NRC. 2004b. Summary. Review of the army's technical guides on assessing and managing hazards to deployed personnel. Committee on Air Quality Management in the United States, National Research Council. http://www.nap.edu/download.php?record_id=10974#. July 22, 2015.

NRC. 2008. Summary. In: Phthalates and Cumulative Risk Assessment: The Tasks Ahead. Committee on the Health Risks of Phthalates, National Research Council,. http://www.ncbi.nlm.nih.gov/pubmed/25009926. July 22, 2015.

NRC. 2009. Science and decisions: Advancing risk assessment. Washington, DC: National Research Council. The National Academies Press. https://www.nap.edu/catalog/12209/science-and-decisions-advancing-risk-assessment. July 10, 2015.

Ohio EPA. 2010. Guidance for assessing petroleum hydrocarbons in soil. Ohio Environmental Protection Agency. DERR-00-DI-033. http://www.epa.state.oh.us/portals/30/rules/DI-033.pdf. July 30, 3015.

Oklahoma DEQ. 2012. Land. Risk-based levels for total petroleum hydrocarbons (TPH). Oklahoma Department of Environmental Quality. http://www.deq.state.ok.us/factsheets/land/tph.pdf. July 15, 2015.

O'Neill MS, Jerrett M, Kawachi I, et al. 2003. Health, wealth, and air pollution: Advancing theory and methods. Environ Health Perspect 111(16):1861-1870.

Orton F, Ermler S, Kugathas S, et al. 2014. Mixture effects at very low doses with combinations of antiandrogenic pesticides, antioxidants, industrial pollutant and chemicals used in personal care products. Toxicol Appl Pharmacol 278(3):201-208. 10.1016/j.taap.2013.09.008.

Orton F, Rosivatz E, Scholze M, et al. 2012. Competitive androgen receptor antagonism as a factor determining the predictability of cumulative antiandrogenic effects of widely used pesticides. Environ Health Perspect 120(11):1578-1584. 10.1289/ehp.1205391.

OSHA. 1993. Air contaminants. 29 CFR Part 1910. U.S. Department of Labor. Occupational Safety and Health Administration. Fed Regist 58(124):35338-35351.

OSHA. 2001. Air contaminants. Subpart Z. Toxic and hazardous substances. Occupational Safety and Health Administration. Code of Federal Regulations 29 CFR 1910.1000. http://www.gpo.gov/fdsys/pkg/CFR-2001-title29-vol6/pdf/CFR-2001-title29-vol6-sec1910-1000.pdf. July 14, 2015. Padilla S. 2006. Cumulative effects of organophosphorus or carbamate pesticides. In: Gupta RC, ed. Toxicology of organophosphate and carbamate compounds. Boston, MA: Elsevier Academic Press, 607-615.

Payne J, Rajapakse N, Wilkins M, et al. 2000. Prediction and assessment of the effects of mixtures of four xenoestrogens. Environ Health Perspect 108(10):983-987.

Payne J, Scholze M, Kortenkamp A. 2001. Mixtures of four organochlorines enhance human breast cancer cell proliferation. Environ Health Perspect 109(4):391-397.

Pelekis M, Krishnan K. 1997. Assessing the relevance of rodent data on chemical interactions for health risk assessment purposes: A case study with dichloromethane-toluene mixture. Regul Toxicol Pharmacol 25:79-86.

Plackett RL, Hewlett PS. 1952. Quantal responses to mixtures of poisons. J R Stat Soc Ser B 14(2):141-163.

Pohl HR, Abadin HG. 2008. Chemical mixtures: Evaluation of risk for child-specific exposures in a multi-stressor environment. Toxicol Appl Pharmacol 233(1):116-125. 10.1016/j.taap.2008.01.015.

Pohl H, Holler J. 1995. Halogenated aromatic hydrocarbons and toxicity equivalency factors (TEFs) from the public health assessment perspective. Chemosphere 31(1):2547-2559.

Pohl H, DeRosa C, Holler J. 1995. Public health assessment for dioxins exposure from soil. Chemosphere 31(1):2437-2454. 10.1016/0045-6535(95)00114-N.

Pohl HR, Hansen H, Chou CH. 1997. Public health guidance values for chemical mixtures: Current practice and future directions. Regul Toxicol Pharmacol 26:322-329.

Pohl HR, McClure P, De Rosa CT. 2004. Persistent chemicals found in breast milk and their possible interactions. Environ Toxicol Pharmacol 18(3):259-266.

Pohl HR, Mumtaz MM, Scinicariello F, et al. 2009. Binary weight-of-evidence evaluations of chemical interactions--15 years of experience. Regul Toxicol Pharmacol 54(3):264-271. 10.1016/j.yrtph.2009.05.003.

Pohl HR, Roney N, Wilbur S, et al. 2003. Six interaction profiles for simple mixtures. Chemosphere 53(2):183-197. 10.1016/s0045-6535(03)00436-3.

Rajapakse N, Silva E, Kortenkamp A. 2002. Combining xenoestrogens at levels below individual noobserved-effect concentrations dramatically enhances steroid hormone action. Environ Health Perspect 110(9):917-921.

Rajapakse N, Silva E, Scholze M, et al. 2004. Deviation from additivity with estrogenic mixtures containing 4-nonylphenol and 4-tert-octylphenol detected in the E-SCREEN assay. Environ Sci Technol 38(23):6343-6352.

Rice GE, Teuschler LK, Bull RJ, et al. 2009. Evaluating the similarity of complex drinking-water disinfection by-product mixtures: overview of the issues. J Toxicol Environ Health A 72(7):429-436. 10.1080/15287390802608890.

Rider CV, Boekelheide K, Catlin N, et al. 2014. Cumulative risk: Toxicity and interactions of physical and chemical stressors. Toxicol Sci 137(1):3-11. 10.1093/toxsci/kft228.

Rider CV, Furr J, Wilson VS, et al. 2008. A mixture of seven antiandrogens induces reproductive malformations in rats. Int J Androl 31(2):249-262. 10.1111/j.1365-2605.2007.00859.x.

Roth RN, Simpson BJ, Nicolich MJ, et al. 2013. The relationship between repeat-dose toxicity and aromatic-ring class profile of high-boiling petroleum substances. Regul Toxicol Pharmacol 67(Suppl 2):S30-S45.

Safe SH. 1998. Hazard and risk assessment of chemical mixtures using the toxic equivalency factor approach. Environ Health Perspect 106(Suppl 4):1051-1058.

Seed J, Brown RP, Olin SS, et al. 1995. Chemical mixtures: Current risk assessment methodologies and future directions. Regul Toxicol Pharmacol 22(1):76-94. 10.1006/rtph.1995.1071.

Sexton K. 2012. Cumulative risk assessment: An overview of methodological approaches for evaluating combined health effects from exposure to multiple environmental stressors. Int J Environ Res Public Health 9(2):370-390. 10.3390/ijerph9020370.

Shin HM, Ernstoff A, Arnot JA, et al. 2015. Risk-based high-throughput chemical screening and prioritization using exposure models and in vitro bioactivity assays. Environ Sci Technol 49(11):6760-6771.

Siddens LK, Larkin A, Krueger SK, et al. 2012. Polycyclic aromatic hydrocarbons as skin carcinogens: Comparison of benzo[a]pyrene, dibenzo[def,p]chrysene and three environmental mixtures in the FVB/N mouse. Toxicol Appl Pharmacol 264(3):377-386. 10.1016/j.taap.2012.08.014.

Silva E, Rajapakse N, Kortenkamp A. 2002. Something from "nothing"--eight weak estrogenic chemicals combined at concentrations below NOECs produce significant mixture effects. Environ Sci Technol 36(8):1751-1756.

Silva E, Rajapakse N, Scholze M, et al. 2011. Joint effects of heterogeneous estrogenic chemicals in the E-screen-exploring the applicability of concentration addition. Toxicol Sci 122(2):383-394. 10.1093/toxsci/kfr103.

Simmons JE, Berman E. 1989. Toxicity of complex waste mixtures: A comparison of observed and predicted lethality. J Toxicol Environ Health 27(3):275-286. 10.1080/15287398909531299. http://www.ncbi.nlm.nih.gov/pubmed/2754754.

Smyth HF, Weil CS, West JS, et al. 1969. An exploration of joint toxic action: Twenty-seven industrial chemicals intubated in rats in all possible pairs. Toxicol Appl Pharmacol 14:340-347.

Smyth HF, Weil CS, West JS, et al. 1970. An exploration of joint toxic action. II. Equitoxic versus equivolume mixtures. Toxicol Appl Pharmacol 17:498-503.

Starr JM, Scollon EJ, Hughes MF, et al. 2012. Environmentally relevant mixtures in cumulative assessments: An acute study of toxicokinetics and effects on motor activity in rats exposed to a mixture of pyrethroids. Toxicol Sci 130(2):309-318. 10.1093/toxsci/kfs245.

Stork LG, Gennings C, Carter WH, et al. 2008. Empirical evaluation of sufficient similarity in doseresponse for environmental risk assessment of chemical mixtures. Journal of Agricultural, Biological, and Environmental Statistics 13(3):313-333. 10.1198/108571108X336304.

Su JG, Morello-Frosch R, Jesdale BM, et al. 2009. An index for assessing demographic inequalities in cumulative environmental hazards with application to Los Angeles, California. Environ Sci Technol 43(20):7626-7634. 10.1021/es901041p.

Svendsgaard DJ, Hertzberg RC. 1994. Statistical methods for the toxicological evaluation of the additivity assumption as used in the Environmental Protection Agency Chemical Mixture Risk Assessment Guidelines. In: Yang RSH, ed. Toxicology of chemical mixtures. Case studies, mechanisms, and novel approaches. San Diego, CA: Academic Press, 599-642.

Tajima O, Schoen ED, Feron VJ, et al. 2002. Statistically designed experiments in a tiered approach to screen mixtures of Fusarium mycotoxins for possible interactions. Food Chem Toxicol 40:685-695.

Tan YM, Clewell H, Campbell J, et al. 2011. Evaluating pharmacokinetic and pharmacodynamic interactions with computational models in supporting cumulative risk assessment. Int J Environ Res Public Health 8(5):1613-1630. 10.3390/ijerph8051613.

Tardif R, Charest-Tardif G, Brodeur J, et al. 1997. Physiologically based pharmacokinetic modeling of a ternary mixture of alkyl benzenes in rats and humans. Toxicol Appl Pharmacol 144:120-134.

Teuschler LK. 2007. Deciding which chemical mixtures risk assessment methods work best for what mixtures. Toxicol Appl Pharmacol 223(2):139-147. 10.1016/j.taap.2006.07.010.

Thomas RS, Philbert MA, Auerbach SS, et al. 2013. Incorporating new technologies into toxicity testing and risk assessment: Moving from the 21st century vision to a data-driven framework. Toxicol Sci 136(1):4-18.

Tian D, Zheng W, He G, et al. 2015. Predicting cytotoxicity of complex mixtures in high cancer incidence regions of the Huai River Basin based on GC-MS spectrum with partial least squares regression. Environ Res 137:391-397. 10.1016/j.envres.2014.12.027.

Tilton SC, Siddens LK, Krueger SK, et al. 2015. Mechanism-based classification of PAH mixtures to predict carcinogenic potential. Toxicol Sci 146(1):135-145. 10.1093/toxsci/kfv080.

Total Petroleum Hydrocarbon Criteria Working Group. 1997. Development of fraction specific reference doses (RfDs) and reference concentrations (RfCs) for total petroleum hydrocarbons (TPH). Total Petroleum Hydrocarbon Criteria Working Group series volume 4. Amherst, MA: Chevron, British Petroleum, Total Petroleum Hydrocarbon Criteria Working Group. Amherst Scientific Publishers.

Total Petroleum Hydrocarbon Criteria Working Group. 1998a. Analysis of petroleum hydrocarbons in environmental media. Total Petroleum Hydrocarbon Criteria Working Group series volume 1. Amherst, MA: Total Petroleum Hydrocarbon Criteria Working Group. Amherst Scientific Publishers.

Total Petroleum Hydrocarbon Criteria Working Group. 1998b. Composition of petroleum mixtures. Total Petroleum Hydrocarbon Criteria Working Group series volume 2. Amherst, MA: Total Petroleum Hydrocarbon Criteria Working Group. Amherst Scientific Publishers. Van den Berg M, Birnbaum L, Bosveld ATC, et al. 1998. Toxic equivalency factors (TEFs) for PCBs, PCDDs, PCDFs for humans and wildlife. Environ Health Perspect 106(12):775-792.

Van den Berg M, Birnbaum LS, Denison M, et al. 2006. The 2005 World Health Organization reevaluation of human and mammalian toxic equivalency factors for dioxins and dioxin-like compounds. Toxicol Sci 93(2):223-241. 10.1093/toxsci/kfl055.

van Meeuwen JA, ter Burg W, Piersma AH, et al. 2007. Mixture effects of estrogenic compounds on proliferation and pS2 expression of MCF-7 human breast cancer cells. Food Chem Toxicol 45:2319-2330.

Ventura GT, Hall GJ, Nelson RK, et al. 2011. Analysis of petroleum compositional similarity using multiway principal components analysis (MPCA) with comprehensive two-dimensional gas chromatographic data. J Chromatogr A 1218(18):2584-2592. 10.1016/j.chroma.2011.03.004.

Verhaar HJ, Morroni JR, Reardon KF, et al. 1997. A proposed approach to study the toxicology of complex mixtures of petroleum products: the integrated use of QSAR, lumping analysis and PBPK/PD modeling. Environ Health Perspect 105(Suppl 1):179-195.

Wade MG, Foster WG, Younglai EV, et al. 2002. Effects of subchronic exposure to a complex mixture of persistent contaminants in male rats: systemic, immune, and reproductive effects. Toxicol Sci 67(1):131-143.

Walker NJ, Crockett PW, Nyska A, et al. 2005. Dose-additive carcinogenicity of a defined mixture of "dioxin-like compounds". Environ Health Perspect 113(1):43-48.

Weisman WH. 1998. Total petroleum hydrocarbon criteria working group: A risk based approach for the management of total petroleum hydrocarbons in soil. J Soil Contam 7(1):1-15.

Wetmore BA. 2015. Quantitative in vitro-to-in vivo extrapolation in a high-throughput environment. Toxicology 332:94-101.

Wetmore BA, Wambaugh JF, Ferguson SS, et al. 2012. Integration of dosimetry, exposure, and high-throughput screening data in chemical toxicity assessment. Toxicol Sci 125(1):157-174.

WHO. 1999. Guidelines for community noise. Geneva: World Health Organization. http://whqlibdoc.who.int/hq/1999/a68672.pdf. July 21, 2015.

Wilkinson CF, Christoph GR, Julien E, et al. 2000. Assessing the risks of exposures to multiple chemicals with a common mechanism of toxicity: How to cumulate? Regul Toxicol Pharmacol 31(1):30-43. 10.1006/rtph.1999.1361.

Withey JR, Hall JW. 1975. The joint toxic action of perchloroethylene with benzene or toluene in rats. Toxicology 4:5-15.

Wolansky MJ, Gennings C, DeVito MJ, et al. 2009. Evidence for dose-additive effects of pyrethroids on motor activity in rats. Environ Health Perspect 117(10):1563-1570. 10.1289/ehp.0900667.

Yang RS, Thomas RS, Gustafson DL, et al. 1998. Approaches to developing alternative and predictive toxicology based on PBPK/PD and QSAR modeling. Environ Health Perspect 106(Suppl 6):1385-1393.

Yoon M, Blaauboer BJ, Clewell HJ. 2015. Quantitative in vitro to in vivo extrapolation (QIVIVE): An essential element for in vitro-based risk assessment. Toxicology 332:1-3.

Yu XY, Glantz CS, Yao J, et al. 2013. Enhancing the chemical mixture methodology in emergency preparedness and consequence assessment analysis. Toxicology 313(2-3):174-184. 10.1016/j.tox.2012.10.011.

Yu XY, Petrocchi AJ, Craig DK, et al. 2010. The development and application of the chemical mixture methodology in analysis of potential health impacts from airborne release in emergencies. J Appl Toxicol 30(6):513-524. 10.1002/jat.1558.