

# Mark Harris, Ph.D., MBA

PRINCIPAL HEALTH SCIENTIST



## CONTACT INFORMATION

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## PROFESSIONAL PROFILE

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Dr. Mark Harris is a Principal Health Scientist with ToxStrategies, Inc. He is a toxicologist with 21 years experience in the environmental industry, and specializes in human health risk assessment, regulatory negotiations, risk based site investigations, and PRP investigations. Dr. Harris has studied and evaluated potential health effects of halogenated aromatic hydrocarbons such as polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs) and polychlorinated biphenyls (PCBs) and metals such as chromium. Dr. Harris has extensive experience in dealing with regulatory agencies ranging from implementation of administrative orders to negotiating site cleanup standards. Additionally, he has extensive experience in developing risk based site investigations for both industrial and residential sites and in conducting source identification studies using both chemical fingerprinting techniques and historical records searches.

Dr. Harris has co-authored over 35 scientific journal articles in his career and has participated in numerous technical seminars. He is a peer reviewer for several scientific journals including the *Journal of Soil and Sediment Contamination*, *Integrated Environmental Assessment and Management (IEAM)*, *Journal of Air and Waste Management and Environmental Science and Technology (ES&T)*.

## EDUCATION AND DEGREES EARNED

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Ph.D., Toxicology, Texas A&M University, 1990

MBA, Southern Methodist University, 2000

B.S., Biochemistry, Texas A&M University, 1986

## **CERTIFICATIONS**

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Texas Risk Reduction Program, 2002 (GSI Training Course)  
OSHA Hazardous Waste Operations, 1992  
Hazardous Waste Shipping, DOT Regulation Compliance, 2000  
Spanish Language Immersion, 1997 (Thunderbird University)  
Molecular Endocrinology/Hormone Action, 1988

## **PROFESSIONAL HONORS/AWARDS**

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Outstanding Doctoral Research Award Texas A&M University (1990–1991);  
Outstanding Graduate Student Award, College of Veterinary Medicine, Texas A&M University (1990)  
George T. Edds Award for Graduate Student Research, College of Veterinary Medicine, Texas A&M University (1989)

## **PROFESSIONAL ASSOCIATIONS**

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American Chemical Society (ACS)  
Society of Environmental Toxicology and Chemistry (SETAC)  
Society of Risk Analysis (SRA)

## **SCIENCE ADVISORY PANELS**

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2000 United States Environmental Protection Agency (USEPA) Expert Panel to evaluate Chapter 9 (Toxic Equivalency Factors) and Integrated Risk Characterization and Summary Section of dioxin reassessment, prepared by USEPA, July, 2000

## **PROFESSIONAL EXPERIENCE**

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Evaluated a risk assessment prepared by a regulatory agency involving volatile organic chemicals and metals and potential exposure via inhalation by individuals living and working near a waste handling facility. Prepared a rebuttal expert report describing shortcomings of regulatory agency approach to evaluating potential health risks.

Co-investigator of a study evaluating the mode of action of hexavalent chromium following oral exposure in rodents.

Managed the preparation of a human health risk assessment evaluating exposure via the fish ingestion pathway. The site was a large river in the Northeastern United States. Risks associated with metals, PAHs, pesticides, PCBs and PCDD/Fs were determined.

Co-principle investigator on a large biomonitoring study designed to assess the levels of dioxin-like compounds in the blood serum of workers at a former secondary copper smelting facility. This involved overseeing the development of the study protocol and comprehensive exposure questionnaire, study implementation, development of applicable background blood levels, fingerprinting analyses, data analyses, and interpretation of study findings. In addition, this project involved coordinating with an external science

advisory board and an institutional review board.

Managed the design, implementation and data analysis of a wild and farm raised catfish sampling program in Southern Mississippi. Chemical analyses conducted including PCDD/Fs, dioxin-like PCBs, total PCBs and PBDEs.

Evaluated the human health risk associated with a consumer food product contaminated with a non-food grade lubricant. Conducted assessments specific to children's exposure in multiple countries around the globe in which the food product was sold in order to aid the client with their implementation of a health-protective strategy to eliminate exposure to the contaminated product.

Evaluated PCB surface soil contamination at six softball fields within a larger recreational facility in Texas. Made recommendations regarding the continued use of the softball fields given the presence of PCBs. Additionally, developed a statistically based soil sampling plan for other areas of the park that were found to contain PCBs.

Reviewed PCDD/F and metal analyses of soils collected outside of a major industrial facility in Southern Mississippi following the landfall of Hurricane Katrina to determine if these chemicals/metals posed any threat to human health and the environment.

Managed a large multi-site RI/FS/Remediation in the Northeastern United States, which resulted in the expedited closure of 18 industrial sites that contained varying quantities and concentrations of hexavalent chromium. This project involved characterizing impacted environmental media including soils, groundwater, surface water, sediments and air, the conduct of a site specific exposure assessment, the development of site specific hexavalent chromium cleanup standards, and the development and implementation of various innovative remediation technologies for addressing hexavalent chromium.

Conducted a county wide PRP search for industrial dischargers into a former publicly owned treatment works (POTW) to assist the client with the cost of investigation and remediation of the POTW and surrounding land. This project involved the review of historical records, search of various electronic databases, and interviews with knowledgeable individuals from the time period the POTW operated.

Participated in a third party review of a human health risk assessment on a former pentachlorophenol wood preservative site in Arkansas. Reviewed the calculations, assumed exposure pathways and conclusions, and made recommendations to the client for modifications to improve the assessment.

Assisted a client of the West Coast in an environmental-damage lawsuit brought the National Oceanic Atmospheric Administration (NOAA) involving the discharge of PCBs into a POTW. Specifically, this effort involved the utilizing historical data to estimate the amount of PCBs discharge by the client into the POTW that actually reached the environment.

Assisted in the development of chemical fingerprints for various sources of polychlorinated dibenzo-p-dioxins in a large urban river in the eastern United States.

Developed a surface water sampling plan and prepared a preliminary human health risk assessment for pathogens (bacteria, viruses and parasites) discharged from a combined sewer overflow in a large urban river in the eastern United States.

Provided an expert report evaluating potential health effects associated with alleged exposure to benzene and hydrogen sulfide by employees of a waste water treatment plant.

Prepared an expert report evaluating PCDD/Fs concentrations in surface soils adjacent to a large lake in East Texas. Compared the PCDD/F data to known local background concentrations of PCDD/Fs to demonstrate that the surface soils adjacent to the lake were not impacted by industrial operations.

## PUBLICATIONS

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Thompson, C.M., D.M. Proctor, L.C. Haws, C.D. Hebert, S.D. Grimes, H.G. Shertzer, A.K. Kopec, J.G. Hixon, T.R. Zacharewski and **M.A. Harris**. Investigation of the Mode of Action Underlying the Tumorigenic Response Induced in B6C3F1 Mice Exposed Orally to Hexavalent Chromium. *Toxicol Sci.* Jun 28, 2011. doi: 10.1093/toxsci/kfr164.

Thompson, C.M., L.C. Haws, **M.A. Harris**, N.M. Gatto and D.M. Proctor. 2011. Application of the U.S. EPA Mode of Action Framework for Purposes of Guiding Future Research: A Case Study Involving the Oral Carcinogenicity of Hexavalent Chromium. *Toxicol Sci.* 119(1): 20-40.

Tachovsky, J.A., J.D. Urban, D.S. Wikoff, L.C. Haws and **M.A. Harris**. 2010. Reduction of a large fish tissue analyte database: identifying and assessing data specific to a remediation site for risk assessment application. *Chemosphere.* 80(5): 481-8.

Urban, J., J.A. Tachovsky, L. Haws, D. Wikoff Staskal, and **M. Harris**. 2010. Response to Mugdan et al.'s comment on Urban et al. "Assessment of Human Health Risks Posed by Consumption of Fish from the Lower Passaic River, New Jersey." *Science of the Total Environment.* 408(6): 1468-1470.

Urban, J.D., J.A. Tachovsky, L.C. Haws, D.F. Staskal, and **M.A. Harris**. 2010. Response to Buchanan et al.'s comment on Urban et al. "Assessment of Human Health Risks Posed by Consumption of Fish from the Lower Passaic River, New Jersey." *Science of the Total Environment.* 408(8): 2004-2007.

Scott, L.L.F., Staskal, D.F., Williams ES, Luksemburg WJ, Urban JD, Nguyen LM, Haws LC, Birnbaum LS, Paustenbach DJ, **Harris MA**. 2009. Levels of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls in southern Mississippi catfish and estimation of potential health risks. *Chemosphere.* 74(7): 1002-10.

Urban, J.D., J.A. Tachovsky, D.F. Staskal, L.C. Haws, and **M.A. Harris**. 2009. Assessment of Human Health Risks Posed by Consumption of Fish from the Lower Passaic River, New Jersey. *Sci Total Environ.* 408(2): 209-24.

Haws, L.C., **M.A. Harris**, L.L.F. Scott, E.S. Williams, and D.J. Paustenbach. 2008. Assessment of the Potential Human Health Risks Posed by Benzene in a Commercial Beverage. *J. Food Sci.*, vol 73(4) pp 33-41.

Donovan, E., K. Unice, J.D. Roberts, **M. Harris**, and B. Finley. 2008. Risk of Gastrointestinal Disease Associated with Exposure to Pathogens in the Water of the Lower Passaic River. *Appl Environ Microbiol.* 74:994-1003.

Donovan, E.P., D.F. Staskal, K.M. Unice, J.D. Roberts, L.C. Haws, B.L. Finley, and **M.A. Harris**. 2008. Risk of Gastrointestinal Disease Associated with Exposure to Pathogens in the Sediments of the Lower Passaic River. *Appl Environ Microbiol.* 74:1004-1018.

Henry, K.S., J.C. Petura, S. Brooks, S. Dentico, S.A. Kessel, and **M. Harris**. 2007. Preventing Surface Deposition of Chromium with Asphalt caps at Chromite Ore Processing Residue Sites: A Case Study. *Canadian Geotechnical Journal.* 44:814-839.

Ferriby, L.L., J.S. Knutsen, **M. Harris**, K.M. Unice, P. Scott, P. Nony, L.C. Haws, and D. Paustenbach. 2007. Evaluation of PCDD/F and dioxin-like PCB serum concentration data from the 2001-2002 National Health and Nutrition Examination Survey of the United States Population. *J Exp Anal Env Epidemiol.* 17: 358-371.

Paustenbach, D.J., K. Fehling, P. Scott, **M. Harris**, and B. Kerger. 2006. Identifying a soil clean-up criteria for

dioxin in urban residential soils: How have 20 years of research and risk assessment experience affected the analysis? *J Toxicol Environ Health, Part B*. 9:87–145.

Haws, L., S. Su, M. **Harris, M.** DeVito, N. Walker, W. Farland, B. Finley, and L. Birnbaum. 2006. Development of a refined database of mammalian relative potency estimates for dioxin-like compounds. *Toxicol Sci*. 89(1):4–30.

Proctor, D., J. Panko, E. Liebig, K. Mundt, M. Buczynski, R. Barnhart, **M. Harris**, R. Morgan, B. Finley, and D. Paustenbach. 2002. Workplace concentrations of airborne hexavalent chromium for the Painesville, Ohio chromate production plant. *Appl Occ Environ Hyg J*. 18(6):430–449.

Scott, P., J. Petura, and **M. Harris**. 2002. Derivation of a liquid to solid ratio for ASTM method D3987 85 for soils containing chromite ore processing residue using selected unsaturated zone models. *Soil Sed Contam*. 12(4):443–480.

Finley, B.L., D.M. Proctor, **M. Harris**, and J.F. Fowler. 2000. Letter to the editor. *American J Contact Derm*. 123–125.

Scott, P., B. Finley, **M. Harris**, and D. Rabbe. 1997. Determination of background airborne hexavalent chromium concentrations in industrial areas. *J Air Waste Manage Assoc*. 47:592–600.

Costa, M., A. Zhitkovich, **M. Harris**, D. Paustenbach, and M. Gargas. 1997. DNA-Protein crosslinks produced by various chemicals in cultured human lymphocytes. *J Toxicol Environ Health*. 50:433–449.

Gargas, M., R. Norton, **M. Harris**, D. Paustenbach, and B. Finley. 1994. Urinary excretion of chromium following ingestion of chromite ore processing residue in humans: implications for biomonitoring. *Risk Anal*. 14(6):1019–1024.

**Harris, M.**, T. Zacharewski, and S. Safe. 1993. Comparative potencies of Aroclors 1232, 1248, 1254, and 1260 in male wistar rats—Assessment of the toxic equivalency factor (TEF) approach for polychlorinated biphenyls (PCBs). *Fund Appl Toxicol*. 20:456–463.

Copeland, T.L., D.J. Paustenbach, **M.A. Harris**, and J. Otani. 1993. Comparing the results of a Monte Carlo analysis with EPA's reasonable maximum exposed individual (RMEI): a case study of a former wood treatment site. *Reg Toxicol Pharmacol*. 18:275–312.

Zacharewski, T., **M. Harris**, L. Biegel, V. Morrison, M. Merchant, and S. Safe. 1992. 6-Methyl-1,3,8-trichlorodibenzofuran (MCDF) as an antiestrogen in human and rodent cancer cell lines: evidence for the role of the Ah receptor. *Toxicol Appl Pharmacol*. 113:311–318.

Wenning, R.J., **M.A. Harris**, M.J. Unga, D.J. Paustenbach, and H. Bedbury. 1992. Chemometric comparison of polychlorinated dibenzo-p-dioxin and dibenzofuran residues in surficial sediments from Newark Bay, New Jersey and other industrialized waterways. *Arch Environ Contam Toxicol*. 22:397–413.

Wenning, R.J., **M.A. Harris**, D.J. Paustenbach, and H. Bedbury. 1992. Potential sources of 1,2,8,9-tetrachlorodibenzo-p-dioxin in the aquatic environment. *Ecotoxicol. Environ Safety*. 23(2):133–146.

Safe, S., B. Astroff, **M. Harris**, T. Zacharewski, R. Dickerson, M. Romkes, and L. Biegel. 1991. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and related compounds as antioestrogens: characterization and mechanism of action. *Pharmacol Toxicol*. 69:400–409.

Safe, S., **M. Harris**, L. Biegel, and T. Zacharewski. 1991. Mechanism of Action of TCDD as an antiestrogen

in transformed human breast cancer and rodent cell lines. Banbury Report 35: Biological Basis for Risk Assessment of Dioxins and Related Compounds Cold Spring Harbor Laboratory Press. 367–377.

Zacharewski, T., **M. Harris**, and S. Safe. 1991. Evidence for a possible mechanism of action of the 2,3,7,8-tetrachlorodibenzo-p-dioxin-mediated decrease of nuclear estrogen receptor levels in wild-type and mutant Hepa 1c1c7 cells. *Biochem Pharmacol.* 41:1931–1939.

Piskorska-Pliszczynska, J., B. Astroff, T. Zacharewski, **M. Harris**, R. Rosengren, V. Morrison, L. Safe, and S. Safe. 1991. Mechanism of action of 2,3,7,8-tetrachlorodibenzo-p-dioxin antagonists: characterization of 6-[125I] methyl-8-iodo-1,3-dichlorodibenzofuran-Ah receptor complexes. *Arch Biochem Biophys.* 284(1):193–200.

Randerath, K., K.L. Putman, E. Randerath, **M. Harris**, T. Zacharewski, and S. Safe. 1990. Effects of 2,3,7,8-TCDD and related compounds on the levels of age-dependent I-spot DNA adducts in the liver of female and male Sprague-Dawley rats. *Chemosphere.* 20(7-9):1049–1052.

Randerath, K., K.L. Putman, E. Randerath, T. Zacharewski, **M. Harris**, and S. Safe. 1990. Effects on 2,3,7,8-tetrachlorodibenzo-p-dioxin on I-compounds in hepatic DNA of Sprague-Dawley rats: sex specific effects and structure-activity relationships. *Toxicol Appl Pharmacol.* 103:271–280.

**Harris, M.**, J. Piskorska-Pliszczynska, T. Zacharewski, and S. Safe. 1990. Human breast cancer cell lines as models for investigating the effects of TCDD and related compounds. *Chemosphere.* 20(7–9):1135–1140.

**Harris, M.**, T. Zacharewski, J. Piskorska-Pliszczynska, R. Rosengren, and S. Safe. 1990. Structure-dependent induction of aryl hydrocarbon hydroxylase activity in C57BL/6 Mice by 2,3,7,8-tetrachlorodibenzo-p-dioxin and related congeners: mechanistic studies. *Toxicol Appl Pharmacol.* 105:243–253.

**Harris, M.**, T. Zacharewski, and S. Safe. 1990. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds on the occupied nuclear estrogen receptor in MCF-7 human breast cancer cells. *Cancer Res.* 50:3579–3584.

Safe, S., G. Mason, T. Sawyer, T. Zacharewski, **M. Harris**, C. Yao, B. Keys, K. Farrell, M. Holcomb, D. Davis, L. Safe, J. Piskorska-Pliszczynska, B. Leece, M. Denomme, O. Hutzinger, H. Thoma, B. Chittim, and J. Madge. 1989. Development and validation of in vitro induction assays for toxic halogenated aromatic mixtures: a review. *Toxicol Ind Health.* 5(5):757–775.

Safe, S., T. Zacharewski, L. Safe, **M. Harris**, C. Yao, and M. Holcomb. 1989. Validation of the AHH induction bioassay for the determination of 2,3,7,8-TCDD toxic equivalents. *Chemosphere.* 18(1-6):941–946.

Zacharewski, T., **M. Harris**, and S. Safe. 1989. Induction of cytochrome P450-dependent monooxygenase activities in rat hepatoma H-4-IIIE cells in culture by 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds: mechanistic studies using radiolabeled congeners. *Arch Biochem Biophys.* 272(2):344–355.

Zacharewski, T., **M. Harris**, S. Safe, H. Thoma, G. Hauschulz, E. Knorr, and O. Hutzinger. 1989. Application of the in vitro AHH induction bioassay for determining 2,3,7,8-TCDD equivalents: pyrolyzed flame retardant mixtures. *Chemosphere.* 18(1-6):383–387.

**Harris, M.**, J. Piskorska-Pliszczynska, T. Zacharewski, M. Romkes, and S. Safe. 1989. Structure-dependent induction of aryl hydrocarbon hydroxylase in human breast cancer cell lines and characterization of the Ah receptor. *Cancer Res.* 49:4531–4535.

Biegel, L., **M. Harris**, D. Davis, R. Rosengren, L. Safe, and S. Safe. 1989. 2,2',4,4',5,5'-hexachlorobiphenyl as a 2,3,7,8-tetrachlorodibenzo-p-dioxin antagonist in C57BL/6J mice. *Toxicol Appl Pharmacol.* 97:561–571.

**Harris, M.**, T. Zacharewski, B. Astroff, C. Kamps, and S. Safe. 1989. Characterization of 6-methyl-1,3,8-trichlorodibenzofuran (MCDF) as a 2,3,7,8-TCDD antagonist in male rats: induction of monooxygenases. *Chemosphere.* 19:769–772.

**Harris, M.**, T. Zacharewski, B. Astroff, and S. Safe. 1989. Partial antagonism of 2,3,7,8-tetrachlorodibenzo-p-dioxin mediated induction of aryl hydrocarbon hydroxylase by 6-methyl-1,3,8-trichlorodibenzofuran: mechanistic studies. *Mol Pharmacol.* 35:729–735.

Zacharewski, T., **M. Harris**, S. Safe, H. Thoma, and O. Hutzinger. 1988. Applications of the in vitro aryl hydrocarbon hydroxylase induction assay for determining “2,3,7,8-tetrachlorodibenzo-p-dioxin equivalents”: pyrolyzed brominated flame retardants. *Toxicology.* 51:177–189.

**Harris, M.**, C. Kamps, and S. Safe. 1988. Role of the 4-5S binding protein in the induction of aryl hydrocarbon hydroxylase in the rat. *Carcinogenesis.* 9(8):1475–1479.

#### **BOOK CHAPTERS**

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Proctor, D., **M. Harris**, and D. Rabbe. 2002. Chapter 9: A risk assessment of chromium contaminated soils: ten years of research to characterize the health hazards. *Human and Ecological Risk Assessment: Theory and Practice.* D. Paustenbach (ed.). pp. 485–555.

Sanatamaria, A., L. Ferriby, **M. Harris**, and D. Paustenbach. Use of biomarkers in health risk assessment. In *Toxicologic Biomarkers*, Anthony DeCaprio (ed.). Informa Healthcare. pp. 85–109.

#### **BOOKS EDITED**

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Proctor, D., B. Finley, **M.A. Harris**, D.J. Paustenbach, and D. Rabbe (eds.). *Chromium in Soil: Perspectives in Chemistry, Health, and Environmental Regulation.* 1997. Lewis Publishers, New York.

#### **ABSTRACTS AND PRESENTATIONS**

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Fitzgerald, L., B. Burkhalter, J. Urban, D. Staskal, **M. Harris**, and L. Haws. VOC serum levels in the general U.S. population: An analysis of the 2003-2004 NHANES dataset. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Haws, L., D. Proctor, C. Thompson, and **M. Harris**. Research Plan to Fill Data gaps in the Mode of Action for Cancer Risk Assessment of Hexavalent Chromium in Drinking Water. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Kim, S., C.M. Thompson, A.K. Kopec, **M.A. Harris**, and T.R. Zacharewski. Comparison of basal and CrVI-mediated solute carrier gene expression in rodent duodenal epithelium. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Proctor, D., C. Thompson, L. Haws, and **M. Harris**. Use of Mode of Action and Pharmacokinetic Findings to Inform the Cancer Risk Assessment of Ingested Cr(VI): A Case Study. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

Urban, J., L. Fitzgerald, B. Burkhalter, D. Staskal, **M. Harris**, and L. Haws. BTEX serum levels in the general U.S. population: An analysis of 2003-2004 NHANES dataset. Presented at the Society of Toxicology's 50th Annual Meeting, March 6-10, 2011. Washington, D.C.

**Harris, M.**, J.A. Tachovsky, D. Staskal-Wikoff, L. Aylward, B. Burkhalter, T. Simon, L. Haws. Serum concentrations of dioxin-like compounds in a population in midland michigan: an evaluation of the impact of soil exposures. Presented at Dioxin 2010, September 12-17, 2010, San Antonio, TX.

**Harris, M.**, J.A. Tachovsky, D. Staskal-Wikoff, T. Simon, B. Burkhalter, J. Urban, and L. Haws. Assessment of the Impact of Various Soil Cleanup Levels on Serum Concentrations of Dioxin-Like Compounds in Humans. Presented at the 49th Annual Meeting of Society of Toxicology. March 7-11, 2010. Salt Lake City, Utah.

Haws, L., J.A. Tachovsky, D. Staskal-Wikoff, L. Aylward, B. Burkhalter, J. Urban, T. Simon, **M. Harris**. An evaluation of the influence of different soil cleanup levels on the concentration of dioxin-like compounds in human serum. Presented at Dioxin 2010, September 12-17, 2010, San Antonio, TX.

Staskal-Wikoff, D., B. Burkhalter, H. Stapleton, **M. Harris**. PBDEs in Newark Bay sediments. Presented at Dioxin 2010, September 12-17, 2010, San Antonio, TX.

Tachovsky, A., D. Staskal, J. Urban, **M.A. Harris**, and L. Haws. Assessment of Environmental Data Collected in a Community With Numerous Petroleum Refining and Petrochemical Facilities. Presented at the 49th Annual Meeting of Society of Toxicology. March 7-11, 2010. Salt Lake City, Utah.

Urban, J., B. Burkhalter, J.A. Tachovsky, L. Haws, **M. Harris**. Evaluation of polychlorinated naphthalenes (PCNs) in newark bay sediment. Presented at Dioxin 2010, September 12-17, 2010, San Antonio, TX.

Haws, LC, DeVito, MJ, Walker, NJ, Birnbaum, LS, Farland, WH, **Harris, MA**, Tachovsky, JA, Unice, KM, Scott, PK, Staskal-Wikoff, DF. Development of distributions of relative potency estimates to quantitatively assess uncertainty inherent in the TEFs for dioxin-like compounds: a proposed consensus-based weighting. Presented at Dioxin 2009. Beijing, China.

Staskal-Wikoff, DF, **Harris, MA**, Haws, LC, Birnbaum, LS, Tachovsky, JA. Probabilistic evaluation of cancer and non-cancer risk associated with exposure to BDE 209 in automobiles. Presented at Dioxin 2009. Beijing, China.

Urban, J.D., J.A. Tachovsky, D.F. Staskal, L.C. Haws, and **M.A. Harris**. Human Health Risk Assessment of Consumption of Fish from the Lower Passaic River. Presented at the 48th Annual Meeting of Society for Toxicology. March 15-19, 2009. Baltimore, MD.

**Harris, M.A.**, Shay, E., Unice, K.M., Scot, L.F. and Haws, L.C. 2008. Preliminary evaluation of health risks posed by PCDD/Fs and PCBs from the ingestion of fish from the lower Passaic River. Presented at Dioxin 2008, August 17-22, 2008. Birmingham, England.

Staskal, D.F., Tachovsky, J.A., **Harris, M.A.** and Haws, L.C. 2008. Preliminary evaluation of human health risks associated with exposure to PBDEs in the United States. Presented at Dioxin 2008, August 17-22, 2008.

Birmingham, England.

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Staskal D., Urban, J., Scott, L., Scott, P., Tachovsky, A., Unice, K. and **Harris, M.** 2008. A framework for evaluating serum dioxin data derived from biomonitoring studies. Presented at Dioxin 2008, August 17-22, 2008. Birmingham, England.

Haws, L., Unice, K., Tachovsky, A., **Harris, M.**, DeVito, M., Walker, N., Birnbaum, L. Farland, W., Nguyen, L. and Staskal, D. 2008. Assessment of the impact of using weighted distributions of REPs to develop exposure estimates for dioxin-like compounds. Presented at Dioxin 2008, August 17-22, 2008. Birmingham, England.

**Harris, M.A.**, J.A. Tachovsky, E.S. Williams, D.P. Paustenbach, and L.C. Haws. 2008. Assessment of the Health Risks Posed by Benzene in Soft Drinks. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist*. 102:142.

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Scott L.L.F., D.F. Staskal, **M.A. Harris**, B.L. Finley, and L.C. Haws. 2008. Evaluation of Dioxin-Like Compounds in Workers from a Primary Magnesium Production Facility Relative to Levels Observed in the General US Population. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist*. 102:358.

Staskal, D.F., E.P. Donovan, L.C. Haws, J.D. Roberts, K.M. Unice, B.L. Finley, and **M.A. Harris**. 2008. Human Health Risks Associated with Exposure to Pathogens in Waters and Sediments of the Lower Passaic River. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist*. 102:370.

Urban, J.D., L.C. Haws, L.F. Scott, P.S. Scott, D.F. Staskal, A.T. Tachovsky, K.M. Unice, and **M.A. Harris**. 2008. A Framework for Evaluating Serum Dioxin Data Derived from Biomonitoring Studies. Society of Toxicology Annual Meeting. March 16–20, 2008. Seattle, WA. *The Toxicologist*. 102:246.

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Scott, P., L. Haws, L. Scott, and **M. Harris**. 2007. Evaluation of Background Dioxin-like PCB Congener Profiles in Human Serum Collected During NHANES 2001–2002 Using Principal Components Analysis. *Organohalogen Compounds.*, vol 69, pp 2014–2017.

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