Steven L Huntley

8898 Oak Trail Dr.
Santa Rosa, California 95409
(775) 720-5330
shuntley@huntleyenvironmental.com

Professional Biography

Mr. Huntley has over 30 years of experience in environmental consulting in the U.S and Puerto Rico. His primary areas of expertise include human health and ecological risk assessment, toxicology, contaminated sediments, and environmental chemistry/forensics. He has worked on numerous Federal and State hazardous waste sites as well as contaminated aquatic systems throughout the U.S. including the Columbia River, Willamette River, San Francisco Bay, Puget Sound, Hudson River, Housatonic River, River Raisin, Kalamazoo River, Passaic River, Saginaw River, Berry's Creek, Leviathan Creek, Sonoma County Creeks, Hackensack River, Newark Bay, Arthur Kill, Kill van Kull, Flushing River, Calcasieu River, San Diego Bay, and the Gulf of Mexico. His work on hazardous waste sites has included all aspects of the remedial investigation process including the preparation of work plans, site characterization, risk assessment, site closure, and regulatory negotiations. Mr. Huntley has participated in negotiations with the U.S. Environmental Protection Agency (USEPA), various state regulatory agencies, including those in California, Oregon, Florida, New York, New Mexico, and New Jersey as well as federal, state, and tribal trustees. Throughout his career he has served projects in a variety of capacities including project manager, technical lead, and technical expert.

Education

B.S. Environmental Toxicology, University of California-Davis, 1989

Graduate studies in Public Policy and Management and Epidemiology, Muskie School of Public Policy, University of Southern Maine, 1991-1995

Professional Organizations

Society for Environmental Toxicology and Chemistry (SETAC)
Society for Risk Analysis (SRA)
International Society of Environmental Forensics (ISEF)

Employment History

AtkinsRéalis (on-call risk assessor), June 2023 – November 2024

Catalyst Environmental Solutions (on-call risk assessor), July 2019 - Present

Independent Consultant dba Huntley Environmental, March 2015 - Present

Cardno, Inc. (formerly ENTRIX), September 2011 – February 2015

Environmental Resources Management, April 2011 – September 2011

ARCADIS U.S., Inc., (formerly Blasland, Bouck & Lee, Inc.), April 2004 - April 2011

MWH Americas, Inc., June 2003 – April 2004

AMEC Earth & Environmental, Inc. (formerly Ogden Environmental & Energy Services Co., Inc.), February 1999 – June 2003

Maine Bureau of Health, May 1998 – December 1999

Gradient Corporation, August 1997 – May 1998

University of Maine - Orono, 1997 (1-Year Appointment)

ChemRisk Division of McLaren/Hart Environmental Engineering Corporation, July 1989 – August 1997

Expert Witness Experience

- Testified before the Wisconsin Department of Natural Resources' Environmental Quality Committee on groundwater PCB issues.
- Deposed in a litigation case regarding both PCBs and PCDD/Fs generated during a fire at the One Meridian Plaza high-rise office building in Philadelphia, Pennsylvania.
- Authored an expert report on behalf of Amtrak in the case SEPTA, Conrail, and Amtrak v. Penn Central.
- Authored an expert report on behalf of the City of Portland, Oregon regarding sources of PCBs in support of remedial cost allocation for the Swan Island Lagoon portion of the Portland Harbor Superfund Site (PHSS).
- Prepared an expert report on behalf of Allied Engineering & Production Corporation and Stone Boatyard, LLC in the case San Francisco Baykeeper vs. Allied.

Select Project Experience

Third Party Review of Environmental Risk Assessments
Santa Cruz County Health Services Agency
Currently provides technical support to Santa Cruz County Health Services Agency on human health and ecological risk assessment issues including the review of risk assessments, site characterization reports, and remedial action plans prepared by responsible parties, and the preparation of technical comments. In addition to the more classic hazardous waste site projects, over the past five years Mr. Huntley has provided the County with technical review and comments on environmental documents for three segments of the Monterey Bay Sanctuary Scenic Trail Network (Coastal Rail Trail) in Santa Cruz County, specifically Segment 18 in the Watsonville area, Segment 7 in the City of Santa Cruz, and Segment 5 which runs from Wilder Ranch in Santa Cruz to Davenport.

Ecological Assessment of Metals in San Francisco Bay Sediments
Allied Engineering & Production Corporation (Allied) Stone Boatyard, LLC (Stone)
On behalf of Allied and Stone, Mr. Huntley assessed potential ecological impacts associated with metals in nearshore Oakland Harbor Inner Tidal Canal sediments. The assessment was focused on plaintiff allegations in the case San Francisco Baykeeper vs. Allied (Case No.: 3:20-cv-07123-JD) that contamination from the shoreline parcels adversely endangers wildlife and that the metal debris on the shoreline parcels presents an imminent and substantial endangerment to the environment. Mr. Huntley's role in the project included sediment sampling and analysis plan development, analytical data evaluation, ecological risk assessment, and preparation of an expert report which was submitted in the court in February 2023.

Human Health Risk Assessment of Aquatic Herbicides, Hydrilla Eradication Program Environmental Impact Report
California Department of Food and Agriculture
Currently serves as the lead human health risk assessor for the human health risk assessment (HHRA) of potential health risks associated with the possible use of 14 different aquatic herbicides, including inert ingredients and adjuvants, in California fresh waterbodies. Human receptors include adult and child residents, adult and child recreators, adult and child sports anglers, and adult and child Native American anglers. The HHRA is a component of the Environmental Impact Report (EIR) as prepared under the California Environmental Quality Act (CEQA).

Human Health Risk Assessment of Hazardous Air Pollutants in Support of Iroquois Gas Transmission System, L.P. Proposed Enhancement by Compression (ExC) Project
Mott McDonald
On behalf of Iroquois Gas Transmission System, L.P. (Iroquois), evaluated potential health risks associated with potential exposure to airborne hazardous air pollutants (HAPs) released as natural gas combustion emissions at natural gas compressor stations in New York and Connecticut. The HHRA was prepared in support of Iroquois' application to the Federal Energy Regulatory Commission (FERC) for a Certificate of Public Convenience and Necessity under Section 7(c) of the Natural Gas Act for authorization to upgrade existing compressor stations.

Mission Village Development Remedial Action Plan and Soil Management Plan
Newhall, California
Prepared soil and vapor intrusion human health risks assessments for several closure areas for the 1,260-acre Mission Village Development located within the Castaic Junction Oil Field. The Mission Village Development is part of the Newhall Ranch Specific Plan/Resource Management Development Plan that includes the proposed development of 4,671 acres of residential and commercial areas in Newhall, California. Risk assessments were developed in support of requests for "No Further Action" from the Los Angeles County Fire Site Mitigation Unit.

Human Health and Ecological Risk Assessment for the El Estero Drainage
American Tradition LLC, Santa Barbara, California
Prepared a human health and ecological risk assessment in support of the upcoming Habitat Restoration Project for the El Estero Drainage located adjacent to the proposed Fess Parker Waterfront Hotel valet parking lot in Santa Barbara. The focus of the risk assessments was on

post-restoration conditions. For the human health risk assessment, a maintenance worker involved in monitoring and maintenance activities such as non-native plant removal and replanting of native plants was evaluated. For the ecological risk assessment, both terrestrial and aquatic receptors were evaluated, including consideration for southwestern pond turtle, a California Species of Special Concern currently under consideration by the U.S. Fish and Wildlife Service (USFWS) for listing under the federal Endangered Species Act (ESA). Results found that arsenic exceeding background conditions was the only risk driver for human health concerns and that lead at a single sampling location was the only risk driver for ecological concerns.

Four Corners Power Plant and Navajo Mine Energy Project Environmental Impact Statement, Biological Assessment, and Section 7 Consultation
Office of Surface Mining, Reclamation and Enforcement, Farmington, New Mexico
For the Office of Surface Mining Reclamation and Enforcement (OSM), provided technical support and review of proponents' ecological risk assessments in support of the Biological Assessment (BA) for the Section 7 Consultation and preparation of the Environmental Impact Statement (EIS). The evaluation included a detailed assessment of the toxicity of mercury and selenium to the federally listed Colorado pikeminnow and razorback sucker in the adjacent San Juan River. Participated in numerous meetings attended by the proponents, USFWS, OSM, and the Bureau of Indian Affairs (BIA) on population viability analysis modeling to explore relationships between various factors, including mercury exposure and Colorado pikeminnow population sustainability.

Litigation Related to Water Quality in Creeks Impacted by Acid Mine Drainage
Atlantic Richfield Company, California
Evaluated the impacts to water quality in two creeks associated with acid mine drainage (AMD) from the Leviathan Mine, an abandoned copper and sulfur mine in the Sierra Nevada Mountains. Results indicated a strong correlation between pH and dissolved metals concentrations with various benthic invertebrate metrics. Results also identified a strong temporal-spatial component to water quality and habitat improvement over time with respect to response actions taken to reduce the release of AMD to the creeks.

Assessment of Potential Impacts of Community Drinking Water Fluoridation to Federally Listed Salmonids in Sonoma County StreamsSonoma County Department of Health Services, Santa Rosa, California

Project manager, toxicologist, and ecological risk assessor for the assessment of potential impacts to threatened and endangered salmonids present in Sonoma County streams that may be exposed to fluoride as a result of community drinking water fluoridation proposed by the County as a public health intervention to reduce the incidence of dental caries in children. The assessment found that fluoride could enter streams through direct discharge from waste water treatment facilities or through return flows (direct runoff and storm sewer discharge) associated with various activities such as landscape and agricultural irrigation, car washing, etc. Results found that even under the worse-case scenario of high return flows and extremely low natural stream flows during the summer months (e.g., little dilution, if any) there was more than a 6-fold margin of safety protective of salmonids relative to the "no-effect concentration" derived from fluoride toxicity studies published in the scientific literature.

Deepwater Horizon (MC 252) Oil Spill, Gulf of Mexico
British Petroleum, Houston, Texas
Dose-response modeling of laboratory fish toxicity study results for oil spill related product and impacted water. Critical review of Agency-sponsored publications related to spill-related toxicity and ecological impacts.

Cooperative Natural Resource Damage Settlement
Romic Environmental Technologies Corporation, East Palo Alto, California
Managed and provided technical support for a cooperative natural resource damage (NRD) action resulting from a chemical release into wetlands adjacent to San Francisco Bay. Potential resources of concern included wetland habitat, aquatic invertebrates, fish, endangered avian and mammalian resources and recreational use of the wetland. Studies were designed to establish baseline conditions and evaluate potential for injury. Resulting data demonstrated that potential injuries were very limited and provide a basis for a focused cooperative settlement.

Sediment Characterization and Potentially Responsible Party Source Investigations for OU2 (Lower Passaic River Study Area) of the Diamond Alkali Superfund Site
Maxus Energy Corporation and Chemical Land Holdings, Kearny, New Jersey
From 1990 through 1998 served as litigation support project manager for OU2 (Lower Passaic River Study Area) of the Diamond Alkali Superfund Site. During this period, the primary effort was focused on (1) identifying other sources of dioxins and (2) identifying chemicals other than dioxins in Passaic River sediments. The impetus for these efforts was allegations by the New Jersey Department of Environmental Protection (NJDEP) that dioxin was the only contaminant of concern in Passaic River sediments and that the Diamond Alkali site was the only source of dioxin to the river. These investigations included literature searches, field reconnaissance, work plan development, sediment sampling, chemical analysis, chemical fingerprinting and the publishing of results in the peer-reviewed literature. USEPA responded to these initial findings by identifying an additional 13 potentially responsible parties (PRPs). The number of PRPs has since grown to over 300 with approximately 70 participating PRPs.

Characterization and Radioisotope Dating of Estuarine Sediments in OU3 (Newark Bay Study Area) of the Diamond Alkali Superfund Site
Tierra Solutions, East Brunswick, New Jersey
From 2006 through 2010 served as technical lead for data compilation, evaluation, and reporting of Phase II investigation data for OU3 (Newark Bay Study Area) of the Diamond Alkali Superfund Site. Also, served as technical lead for Phase I and Phase II radioisotope dating of Newark Bay Study Area sediments using lead-210, cesium-137, and beryllium-7 methods. Participated in several technical meetings with USEPA Region 2 regarding interpretation of radioisotope chemistry and RI/FS planning.

Westport Slough Risk Assessments
Georgia-Pacific LLC, Westport, Oregon
Provided senior oversight, strategy and technical review for site characterization and human health and ecological risk assessments conducted for metals and PAHs in upland areas and sediments of Westport Slough, a tributary to the Lower Columbia River. The evaluation included a background source evaluation for PAHs to discern whether PAHs in sediments were

associated with a petroleum or combustion source. Results indicated that human health risks were de minimis and potential risks to sediment dwelling organisms were slightly elevated but unlikely to result in population level impacts. Participated in regulatory negotiations with the Oregon Department of Environmental Quality (ODEQ).

Human Health Risk Assessment – City Park Renovations
City of Berkeley, Berkeley, California
Evaluated site data with respect to potential health risks at two parks proposed for renovation by the City of Berkeley. Participated in negotiations between the City and DTSC to arrive at reasonable solutions to proceed with proposed renovations.

Human Health and Ecological Risk Assessment for the RPAC Site
Starlink Logistics Inc. and Rhone-Poulenc, Portland Oregon
Senior risk assessor for the Rhone-Poulenc Agricultural Company (RPAC) site located adjacent to the Willamette River in Portland, Oregon approximately seven miles upstream of its confluence with the Lower Columbia River. Evaluated potential human health and ecological risks associated with potential exposure to a wide range of contaminants in upland site soils, Willamette River sediments, and North Doane Lake sediments including 2,4-D, 2,4,5,-T, dioxins, dichlorobenzene, phenolic compounds, creosols, trichloroethene, lead, and arsenic. Participated in regulatory negotiations with the ODEQ.

Human Health and Ecological Risk Assessment
The Boeing Company, Ventura County, California
On behalf of The Boeing Company, National Atmospheric and Oceanic Administration (NASA), and Department of Energy (DOE), managed risk assessment activities for the Santa Susana Field Laboratory (SSFL) Resource Conservation and Recovery (RCRA) site. The primary chemicals of interest were dioxins, PCBs and perchlorate in soil, and trichloroethene (TCE), N-nitrosodimethylamine (NDMA), and perchlorate in groundwater. Participated in ongoing negotiations with the California Department of Toxic Substances Control (DTSC) on human health and ecological risk assessment methods. Using the Johnson & Ettinger (J&E) vapor intrusion model, developed soil gas screening levels for use in soil gas delineation. Senior review of risk assessment reports. Developed standardized risk assessment methodology (SRAM) for conducting human health and ecological risk assessments at the SSFL.

Critical Review of Dioxin Fingerprinting Report
Georgia-Pacific LLC, Port Angeles, Washington
Conducted a critical review of a report prepared by the Washington State Department of Ecology on a fingerprinting evaluation of potential dioxin sources in soils of Port Angeles, Washington. Prepared and submitted comments in response to a regulatory 45-day public comment period.

Human Health Risk Assessment – Dioxins in Columbia River Fish
Northwest Pulp and Paper Association, Vancouver, Washington
Technical lead in the assessment of potential health risks associated with the consumption of fish caught from the Lower Columbia River. A statistically based fish sampling program was employed to assess the extent of dioxin contamination in five fish species including salmonids and sturgeon. Regional fish consumption rates were used to assess potential health risks to several

sub-populations of anglers including recreational and Native American anglers. Upper-bound cancer risks were found to be less than the 1 x 10^{-6} for the most sensitive angler population.

Dioxin Source Evaluation
General Motors, Saginaw, Michigan
Evaluated the potential for the formation of dioxins from the historical burning of PCBs. Statistical analyses, including PCA and PVA, were used in combination with historical PCB usage, other potential sources impacting Saginaw River sediments, spatial and temporal trends, and wind direction. Results indicated that the historical combustion of PCBs was not a discernible contributor to dioxins in river sediments.

Ecological Risk Assessment at Former Oil Production Facility
Confidential Client, Southern Louisiana
Project manager and technical lead for ecological risk assessment conducted in defense of Louisiana Legacy Act litigation focused on impacts to marsh sediments. Results showed that Plaintiff's ecological risk assessment grossly over-stated risks to mammalian and avian receptors and was conducted in a manner inconsistent with USEPA or Louisiana ecological risk assessment guidelines. The primary site-related chemicals evaluated were barium and mercury.

Risk Assessments for Chlorinated VOCs and Perchlorate
United Technologies Corporation, San Jose, California
Provided oversight, direction, and senior review for the preparation of a site-wide human health risk assessment work plan and the development of health-based screening levels (HBSLs) for perchlorate, chlorinated volatile organic compounds (VOCs), including TCE and perchloroethene (PCE), and other compounds in soil, soil gas and groundwater. Provided toxicology support to the client on ongoing regulatory and toxicology issues related to perchlorate. Participated in negotiations with the California Regional Water Quality Control Board (RWQCB) and DTSC on risk assessment methodologies and perchlorate toxicity values. Conducted a review of historical risk assessments to ensure current site characterization and risk assessment activities are supported by historical data and risk assessments. Over a period of approximately five years monitored regulatory activities related to perchlorate toxicity including review of recent epidemiology studies and draft Public Health Goal (PHG) documents for perchlorate developed by the California Office of Health Hazard Assessment (OEHHA), and regular attendance at meetings of the Perchlorate Community Advisory Group (PCAG), a citizen's action group created to monitor regulatory and remedial activities related to the Olin groundwater perchlorate plume in Morgan Hill, California.

Human Health Risk Assessment in Support of Site Redevelopment
City of Folsom, Folsom, California
Retained by the City of Folsom to provide risk assessment support related to the City's desire to acquire and develop a portion (Area 40) of the Aerojet Superfund Site as a community park. Evaluated site data and conducted an initial risk assessment on potential ambient air exposures to TCE and PCE migrating from groundwater. The primary exposure pathways evaluated were future indoor air exposures, which were evaluated using the J&E vapor intrusion model, and ambient air exposures which were evaluated using ASTM methods. Participated in several meetings with the City and Aerojet to evaluate future development options.

Human Health Pesticide Exposure Study
U.S. Department of Justice, Puerto Rico
On behalf of the U.S. Department of Justice and the U.S. Environmental Protection Agency, coordinated the development of pesticide air sampling protocol including the Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) for an exposure study of pesticide drift in a small community in Puerto Rico. The development of these plans involved extensive toxicological evaluation of pesticides used by a local mango grower as well as the evaluation of sampling and analytical methods for the selected pesticides of concern. Managed air sample collection at the mango orchard using high volume air samplers for collecting pesticide vapors and Teflon pads for collecting pesticide droplets. Results indicated that potential human exposure to pesticide vapors was substantially greater than potential exposure from pesticide droplets.

Natural Resource Damage Assessment – Calcasieu River
CITGO, Lake Charles, Louisiana
Technical lead for the assessment of sediment toxicity potentially related to a 2006 oil spill into the Calcasieu River from the wastewater treatment plant at CITGO's manufacturing facility in Lake Charles.

Human Health Risk Assessment for Former Oil and Gas Production Facility
Plains Exploration and Production Company, Los Angeles, California
Managed the preparation of the human health risk assessment and the development of soil and soil gas cleanup levels for a former oil and gas production facility in Southern California. The primary concern as this site was the potential impact of petroleum hydrocarbons on groundwater. Soil cleanup levels were developed using a combination of the VLEACH soil to groundwater leaching model and the J&E vapor intrusion model.

Copper Toxicity Assessment for Residential Exposure near an Operating Copper Mine
Phelps Dodge, Hurley, New Mexico
Evaluated the potential adverse effects of residential exposure to soil impacted by elevated copper concentrations in residential neighborhoods related to historical copper mining and smelting activities. The focus of this work was on the potential non-lethal effects (stomach irritation) associated with incidental soil ingestion in children. The probabilistic exposure model that incorporated physiological parameters resulted in a proposed cleanup level of 12,000 mg/kg. The New Mexico Environment Department (NMED) subsequently adopted a final copper cleanup level of 5,000 mg/kg which was slightly higher than the 2,000 mg/kg cleanup level originally proposed by NMED.

Assessment of Metals Bioavailability and Toxicity in Hudson River Sediments
Atlantic Richfield Company, New York
In support of the remedial investigation / feasibility study (RI/FS) for a former Anaconda copper wire manufacturing facility, the potential ecological effects associated with benthic invertebrate exposure to metals (primarily copper and lead) in Hudson River sediments were evaluated through an assessment of bioavailability using acid volatile sulfide (AVS) and simultaneously extracted metals (SEM) data as well as total organic carbon (TOC) data. As corroborated with benthic community data and sediment pore water data, the analysis demonstrated that default

sediment criteria were overly conservative and that site-specific cleanup levels based on AVS/SEM and TOC were protective of the benthic community.

Human Health Risk Assessment – Office Building Fire
City of Berkeley, Berkeley, California
Assessed potential health risks to employees associated with short-term exposure to dioxins generated during an office fire. The project included the collection of surface wipe samples, dioxin analysis, data evaluation, risk assessment and risk communication. In addition to dioxins, potential risks to lead and asbestos were evaluated.

Human Health Risk Assessment Work Plan
Georgia-Pacific, LLC, Fort Bragg, California
Provided senior technical support and review of human health risk assessment work plan including negotiations with the DTSC, RWQCB and other agencies. Prepared a livestock risk assessment focused on human consumption of meat and dairy products related to a nearby ranch potentially impacted by dioxins.

Kalamazoo River PCB Litigation
Hunton & Williams LLP, New York, New York
On behalf of Georgia-Pacific LLC, managed and provided senior technical support for the evaluation of CERCLA liability of a former paper recycling mill and a former producer of carbonless copy paper (CCP) in the case *Georgia-Pacific Consumer Products LLC et al. vs. NCR Corporation et al*. The evaluation of CERCLA liability included the evaluation of historical documents dating back to the 1940s, evaluation of radioisotope data for Lake Allegan sediments, evaluation of PCBs deposited in disposal areas that were created in 1954, and evaluation of the historical distribution of PCBs in Bryant Mill Pond. Results indicated that the PCBs were discharged to Portage Creek and Kalamazoo River by the St. Regis Paper Company prior to July 1, 1956 and that the source of discharged PCBs was CCP and CCP broke.

Human Health Risk Assessment – VOCs in Groundwater
Chevron EMC, Corcoran, California
Prepared a livestock risk assessment work plan to evaluate potential exposure to future occupants of the property who may consume livestock products produced on the property. Primary chemicals of concern are arsenic, nitrate, and pesticides. Revised a groundwater risk assessment for the site focused on potential future domestic use of groundwater. Primary chemicals of concern were arsenic and nitrate.

Evaluation of Carcinogenic Potential of 1,4-Dioxane
U.S. Air Force, Raytheon Corporation, Southwestern United States
Evaluated the carcinogenic potential of 1,4-dioxane. Results strongly suggest that 1,4-dioxane is not carcinogenic below the threshold for metabolic saturation, which is only reached following exposures substantially greater than typical environmental exposures.

PCB Source Evaluation
Confidential Client, Quebec, Canada
Conducted an analysis of PCB Aroclor and congener data to assess the potential for off-site PCB sources potentially impacting soils at a former caulk manufacturing facility. The focus of the evaluation was on a former rail way through the site. Review of the Aroclor and congener data identified the presence of only a single source.

PCB Forensic Analysis
Piper Rudnick, LLP, Baltimore, Maryland
On behalf of Amtrak, provided forensic analysis of historical PCB contamination at the Paoli Railyard in Paoli, Pennsylvania. Evaluation was in support of litigation, and included review of historical use by opposing parties and differentiation between Aroclor 1254 and Aroclor 1260 patterns in soil and sediments. Prepared an expert report which was submitted in the case.

Human Health Risk Assessment
Black and Veatch, Overland Park, Kansas
Project manager and consultant to major energy resource company proposing installation of a coal-fired cogeneration power plant. Issues addressed for public hearings were the potential formation of toxic compounds by chlorination of river water (i.e., dioxin, chloroform), health risks associated with toxic air contaminants, and health risks associated with electromagnetic fields.

Assessment of Proposition 65 Labeling Requirements for Dioxin
Simpson Paper Company, Sacramento, California
Reviewed and evaluated labeling requirements related to the discharge of dioxin-containing effluents from pulp and paper mills under California's Proposition 65. Assessment included comprehensive examination of allowable level for reproductive effects from exposure to dioxin and resulted in the proposal of more scientifically based guidelines.

Forensic Evaluation of Dioxin Sediment Data
Confidential Client, West Virginia
On behalf of a major chemical manufacturer, evaluated sediment dioxin data with respect to potential anthropogenic sources and background conditions. An expert report was prepared in defense of toxic tort litigation. Results of the evaluation demonstrated that dioxins detected in sediments were not related to the facility but were consistent with background conditions.

Assessment of Physical and Chemical Hazards
A.O. Smith Harvestore, Northeastern United States
Directed the assessment of physical and chemical hazards associated with the consumption of water possibly containing glass flakes as a result of spalling from glass-lined storage tanks. Scanning electron microscopy was used to evaluate the number and size distribution of glass flakes among sediments on tank floors and in water samples. The hazard to human health was determined to be negligible due to the size and morphological characteristics as well as the number of glass flakes actually found in water samples.

Determination of Dioxin Background in Soil and Sediment
Georgia-Pacific LLC, Fort Bragg, California
Managed a project to differentiate site-related dioxins from background or ambient conditions. The only known source of dioxins at the site other than background was the combustion of wood in a hog fuel boiler furnace. This evaluation integrated PVA results with cumulative probabilities of concentration to differentiate site-related soil and ash dioxin congener profiles and congener concentrations from background congener profiles and concentrations.

Dioxin Sampling Plan and Human Health Risk Assessment
Mineral Technologies, Inc., Cloquet, Minnesota
Managed a project involving potential occupational exposure to dioxins and furans from inhalation of pulp and paper mill fly ash and flue gases. An extensive sampling plan was implemented in order to characterize dioxin and particulate concentrations in flue gas and ambient air and dioxin concentrations in fly ash and product. Using congener-specific analytical results, process data, and site-specific meteorological data, exposure point concentrations were determined by modeling emissions and dispersion. Human health risks were assessed for workers at the plant.

Evaluation of Dioxin Sources and Dioxin Background in Soils
Temple Inland, Inc. (Gaylord Container Corporation), Antioch, California
Applied pattern recognition techniques, including PCA, to dioxin congener data to evaluate potential impacts to properties located adjacent to a former pulp and paper mill located in northern California. Results showed that the congener distributions in non-mill property soils were consistent with ambient conditions and significantly different from a unique congener pattern identified for the mill. The lead regulatory agency providing oversight for this project approved our approach and agreed with the conclusions.

Peer-Reviewed Publications

Jenkins, K.D., Branton, M.A., Huntley, S.L. 2012. CYP1A expression fails to demonstrate exposure-response relationship. PNAS 109(12): E678.

Huntley, S.L., Anderson, P.D., Magee, B.H. 2010. Application of dioxin epidemiology data for deriving toxicity values for 2,3,7,8-TCDD for use in risk assessments. Organohalogen Compounds 72:1072-1074.

Huntley, S.L., Carlson-Lynch, H., Johnson, G.W., Paustenbach, D.J., Finley, B.L. 1998. Identification of historical PCDD/F sources in Newark Bay Estuary subsurface sediments using polytopic vector analysis and radioisotope dating techniques. Chemosphere 36(6):1167-1185.

Walker, W.J., and Huntley, S.L. 1997. A literature review of formation and release of PCDD/Fs from gas manufacturing: A previously unidentified source? Chemosphere 35(7):1409-1422.

Huntley, S.L., Iannuzzi, T.J., Ducey, J.G., Carlson-Lynch, H., Schmidt, C.W. and Finley, B.L. 1997. Combined sewer overflows (CSOs) as sources of sediment contamination in the lower Passaic River, New Jersey. II. Polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, and polychlorinated biphenyls. Chemosphere 34(2):233 250.

Iannuzzi, T.J., Huntley, S.L., Schmidt, C.W., and Finley, B.L. 1997. Combined sewer overflows (CSOs) as sources of sediment contamination in the lower Passaic River, New Jersey. I. Priority pollutants and inorganic chemicals. Chemosphere 34(2):213 231.

Shear, N.M., Schmidt, C.W. Huntley, S.L., Crawford, D.W., and Finley, B.L. 1996. Evaluation of potential impact of combined sewer overflows on sediments of the lower Passaic River. Marine Poll. Bull. 32(3):288-304.

Iannuzzi, T.J., Huntley, S.L., and Finley, B.L. 1996. Comments on "Levels of polychlorinated dibenzo-p-dioxins and dibenzofurans in crab tissues from Newark/Raritan system" and "Mass profile monitoring in trace analysis: identification of polychlorodibenzothiophenes in crab tissues collected from the Newark/Raritan system." Environ. Sci. Technol. 30(2):721-722.

Iannuzzi, T.J., Bonnevie, N.L., Huntley, S.L., Wenning, R.J., Tull, J.D. and Sheehan, P.J. 1995. Comments on the use of equilibrium partitioning to establish sediment quality criteria for nonionic chemicals. Environ. Toxicol. Chem. 14(8):1257-1259.

Huntley, S.L., Wenning, R.J., Su, S., Bonnevie, N., and Paustenbach, D.J. 1995. Geochronology and sedimentology of the lower Passaic River, New Jersey. Estuaries 18(2):351-361.

Huntley, S.L., Bonnevie, N.L., and Wenning, R.J. 1995. Polycyclic aromatic hydrocarbon and petroleum hydrocarbon contamination in sediment from the Newark Bay Estuary, New Jersey. Arch. Environ. Contam. Toxicol. 28:93-107.

Iannuzzi, T.J., Huntley, S.L., Bonnevie, N.L., Finley, B.L., and Wenning, R.J. 1995. Distribution and possible sources of polychlorinated biphenyls in dated sediments from the Newark Bay Estuary, New Jersey. Arch. Environ. Contam. Toxicol. 28:108-117.

Gillis, C.A., Bonnevie, N.L., Su, S.H., Ducey, J.G., Huntley, S.L., and Wenning, R.J. 1995. DDT, DDD, and DDE contamination of sediment in the Newark Bay Estuary, New Jersey. Arch. Environ. Contam. Toxicol. 28:85-92.

Huntley, S.L., Wenning, R.J., Paustenbach, D.J., Wong, A.S. and Luksemburg, W.J. 1994. Potential sources of polychlorinated dibenzothiophenes in the Passaic River, New Jersey. Chemosphere 29(2):257-272.

Michaud, J.M., Huntley, S.L., Sherer, R.A., Gray, M.N., and Paustenbach, D.J. 1994. PCB and dioxin re-entry criteria for building surfaces and air. J. Exposure Anal. Environ. Epidem. 4(2):197-227.

Bonnevie, N.L., Huntley, S.L., Found, B.W. and Wenning, R.J. 1994. Trace metal contamination in surficial sediments from Newark Bay, New Jersey. Sci. Total Environ. 144:1-16.

Wenning, R.J., Bonnevie, N.L., and Huntley, S.L. 1994. Accumulation of metals, polychlorinated biphenyls, and polycyclic aromatic hydrocarbons in sediments from the lower Passaic River, New Jersey. Arch. Environ. Contam. Toxicol. 27:64-81.

Huntley, S.L., Bonnevie, N.L., Bedbury, H. and Wenning, R.J. 1993. The distribution of polycyclic aromatic hydrocarbons (PAHs) in three New Jersey waterways. Bull. Environ. Contam. Toxicol. 51:865-872.

Bonnevie, N.L., Wenning, R.J., Huntley, S.L., Bedbury. H. 1993. Distribution of inorganic compounds in sediments from three waterways in Northern New Jersey. Bull. Env. Contam. Toxicol. 51:672-680.

Parsons, A.H., Huntley, S.L., Ebert, E.S., Algeo, E.R., and Keenan, R.E. 1991. Risk assessment for dioxin in Columbia River fish. Chemosphere 23(11-12):1709-1717.

Presentations at Scientific Conferences

Huntley, S.L. 2013. Radioisotope dating of sediments using Cs-137 time markers: Where exactly is the 1954 horizon? Presented at the 34th Annual Meeting of the Society of Environmental Toxicology and Chemistry. Nashville, Tennessee, November 17-21.

Huntley S.L. 2011. Exploratory evaluation on the utility of polytopic vector analysis (PVA) as a tool for differentiating background concentrations of metals from site-related metals concentrations. Presented at the 32nd Annual Meeting of the Society of Environmental Toxicology and Chemistry. Boston, Massachusetts, November 13-17.

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