

Presenter Bios – Spring 2021 U.S. EPA/AEHS Vapor Intrusion (VI) Workshop: Reducing Vapor Intrusion Uncertainties by More Frequent Simple Measurements and Community Involvement

Theresa Gabris, Geosyntec Consultants, Washington, D.C. (tgabris@Geosyntec.com)

Theresa Gabris is a Professional Geologist based in Washington, D.C. with nearly 10 years of professional experience in contaminant fate and transport and site remediation. At Geosyntec Consultants, she works closely with other vapor intrusion leaders in the firm to advance the state of the science and apply leading-edge characterization technologies and approaches to address her clients' most challenging VI projects. She was an integral member of a team developing techniques such as building pressure cycling (BPC) and high volume sampling (HVS) to rapidly evaluate the VI pathway. She has applied these and other forensic investigation approaches to prioritize sampling over neighborhood-wide plumes, differentiate comingled groundwater sources, identify background indoor air sources, test the effectiveness of mitigation systems, and design investigations for large manufacturing buildings.

Dr. Chase Holton, Geosyntec Consultants, Denver, CO (CHolton@Geosyntec.com)

Dr. Chase Holton is a senior environmental engineer with Geosyntec Consultants in Denver, Colorado. Dr. Holton has over 10 years of environmental research and consulting experience, with expertise in contaminant fate and transport, including assessment and mitigation of the vapor intrusion pathway. He's worked on numerous vapor intrusion projects, across the U.S. and abroad. His research work focuses on improving the understanding and management of the vapor intrusion pathway, including recent or ongoing collaborative projects with U.S. EPA's VI Science Team, U.S. EPA's Office of Research and Development, University of Kentucky, and University of Nevada, Reno. He holds a B.S. in Civil Engineering from Washington State University and a Ph.D. in Environmental Engineering from Arizona State University.

Dr. Andrew Kondash, RTI International, Durham, NC (akondash@rti.org)

Dr. Andrew (AJ) Kondash is a research environmental scientist at RTI International. His background in geochemistry and groundwater hydrology coupled with his expertise in quantitative analysis and managing large datasets led him to work on understanding indicators, tracers, and surrogates for vapor intrusion. He has experience measuring concentrations of naturally occurring radioactive materials in soil and groundwater, with multiple publications examining the mitigation of radioactive materials associated with oil and natural gas development. AJ holds a Ph.D. in Earth and Ocean Science and a master's degree in Environmental Management from Duke University.

Dr. Laurent Levy, Jacobs, Boston, MA (Laurent.Levy@jacobs.com)

Dr. Laurent Levy is a senior technologist at Jacobs. His primary role is to develop client site strategies and cleanup solutions within Jacobs' vapor intrusion practice. He has close to twenty years of experience working with industrial and federal clients, attorneys, and regulators on a variety of topics, including vapor intrusion investigations and risk assessments, subsurface environmental investigations and cleanup, contaminant fate and transport studies, and environmental litigation support. He holds an undergraduate degree from Ecole Centrale Paris, an engineering school located in France, as well as a Ph.D. in Civil and Environmental Engineering from the Massachusetts Institute of Technology (MIT). He is a registered Professional Engineer in Massachusetts.

Chris Lutes, Jacobs, Raleigh, NC (Christopher.Lutes@jacobs.com)

Chris Lutes of Jacobs is a nationally recognized expert in vapor intrusion (VI). He has worked on commercial and military VI projects in more than 18 states and several countries. He served on an ANSI/AARST committee that wrote a mitigation standard for 1-4 family residences. He coauthored four EPA engineering issues on VI: mitigation, air cleaners, passive samplers and excavation applications. He has conducted EPA research studies on uses of radon as a tracer in VI, temporal variability, soil vapor extraction and passive sampling. Mr. Lutes has an M.S. in Environmental Science and Engineering from UNC-Chapel Hill and a B.S. in Chemistry from UVA.

Mathew Plate, U.S. EPA Region 9 Quality Assurance Branch, San Francisco, CA
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Mathew Plate is an environmental scientist with the U.S. EPA in San Francisco. He has worked on environmental monitoring projects for over 30 years. For over 20 years he has worked for EPA Region 9 supporting vapor intrusion and air monitoring projects and programs and assisted in developing EPA guidance for vapor intrusion and air monitoring. Mr. Plate has participated in several research studies to better understand vapor intrusion and to develop monitoring techniques. Mathew Plate has a B.S. in Biological Sciences from the University of California Irvine.

Dr. Brian Schumacher, U.S. EPA Office of Research and Development, Center for Environmental Measurement & Modeling (CEMM), Athens, GA (schumacher.brian@epa.gov)

Dr. Brian Schumacher directs the Ecosystems Processes Division within the Center for Environmental Measurement and Modeling of the United States Environmental Protection Agency's Office of Research and Development. Brian was hired by the U.S. EPA in 1991 to take the lead and address ways to improve the sampling and analysis of soils contaminated with volatile organic compounds (VOCs). This research has led to his natural progression into the arena of vapor intrusion (VI). Dr. Schumacher has conducted research in numerous areas related to VI including: soil gas sampling methodologies; spatial and temporal variability of VOCs; passive VI sampling; influence of an installed mitigation system on the fluctuation of VOC and radon concentrations; preferential pathways; and looking for simple, efficient, and rapid methods to determine the potential for VI into a home or building. His current research is focused on wrapping up a study on the effectiveness of a soil vapor extraction system in reducing/preventing VI into neighboring buildings. Brian has also initiated a new study of VI into large buildings that will examine spatial and temporal variability in a cold climate and subslab sampling techniques. An initial investigation of per- and polyfluorinated alkyl substances (PFAS) and their potential for VI is also underway.

Dr. Henry Schuver, U.S. EPA Office of Resource Conservation and Recovery, Washington, DC
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Dr. Henry Schuver, DrPH, authored the USEPA RCRA corrective action Environmental Indicators (EI) for both Groundwater Migration and Human Exposures in 1999. The Human Exposures EI created the expectation that all Resource Conservation and recovery Act (RCRA) cleanups will include an assessment of the potential for Vapor Intrusion. Since then he has been leading efforts to make the assessment of Vapor Intrusion exposures more accurate and practical. He is also responsible for other emerging science issues, including per- and polyfluorinated alkyl substances (PFAS), in USEPA's RCRA Cleanup Program in Washington DC.

Robert Truesdale, RTI International, Durham, NC (rst@rti.org)

Robert Truesdale is a Senior Research Geologist with RTI International. Mr. Truesdale has supported U.S. EPA research on multimedia environmental pollution issues for over 40 years, with work ranging from sampling and analysis to modeling and risk assessment. One of the principal technical authors of EPA's *Soil Screening Guidance*, Mr. Truesdale has been involved in vapor intrusion (VI) research and regulatory development since 2000, including work for the Indiana Department of Environmental Management and EPA's ORCR, ORD, and OUST. He has managed and organized 14 consecutive VI technical workshops and three stakeholder forums for EPA ORCR and ORD. He received a B.A. in Geology from Duke University in 1975 and a M.S. in Geologic Sciences from the University of Maine in 1977, where he conducted research on diatoms as indicators of the impact of climate change on Antarctic paleoecology. He has worked at RTI since 1978.

John H. Zimmerman, U.S. EPA ORD Center for Environmental Measurement & Modeling (CEMM), Durham NC (zimmerman.johnh@epa.gov)

John H. Zimmerman is a research physical scientist with the U.S. EPA (RTP, NC). He has worked on and lead research activities focused on development, evaluation, and verification of methodologies for collection, transportation, and analysis of VOCs in soils, water and air for over 30 years. The recent focus of his research has been on solvent vapor intrusion (SVI) issues related to large buildings and an investigation of per- and polyfluorinated alkyl substances (PFAS) and their potential to be compounds of concern for VI.