INNOVATIVE ENVIRONMENTAL SOLUTIONS IN OUR NEW WORLD

AN AECOM ENVIRONMENTAL WEBINAR SERIES DECEMBER WEBINARS

AECOM Imagine it. Delivered.

Wednesday, December 9, 2020 (3:00 PM EST) AECOM Innovations in Routing and Siting Analysis

OUR SPEAKERS:

MELINDA JENSEN, KRISTI TEYKL, DOUG BALDWIN



MELINDA JENSEN. Mrs. Jensen has over 20 years of experience serving as a Project Manager, Technical Manager, and Quality Assurance/Quality Control Manager for transmission line routing studies and linear corridor EAs and EISs. She is formally trained as an Expert Witness and has served in that capacity in numerous hearings and depositions. She has managed and prepared EAs and EISs in compliance with NEPA and has performed all routing studies in Texas in accordance with Title II. Mrs. Jensen has further experience in natural resources impact analyses and planning for power clients, including an EA/Habitat Conservation Plan for inclusion in a USFWS Section 10(a) permit application for Oncor Electric Delivery.

KRISTI TEYKL. Kristi serves as a Practice Lead for Information Management Solutions at AECOM. With 23 years of experience developing and implementing geospatial data and technology solutions, she is responsible for conceptualization, technical design, advanced spatial analysis, and management of projects with a technology focus for a diverse array of clients. Since 2002, she has provided direct support to numerous T&D siting/routing studies and environmental assessment projects across North America and played an integral role in developing proprietary AECOM GIS solutions to streamline the siting/routing processes. She has extensive training and hands-on experience utilizing GIS and remote sensing technology (including UAS and GeoAI) and her expertise encompasses the spectrum of GIS functionality in support of real-world planning, engineering, and environmental management applications.

DOUG BALDWIN. Doug is a data scientist and GIS specialist. He has worked with a wide variety of groups supporting statistical analysis, app development, and data management tasks. Doug has been at AECOM for 4 years after working as a research assistant at the Pennsylvania State University, where he focused on applying remote sensing, statistics, and machine learning to hydrologic modeling studies.

AECOM has successfully applied innovative GIS solutions to routing and siting projects for greater efficiency in the selection of sound, defensible, and constructible T&D sites and routes. AECOM developed OptiSite and RouteAnalyst, a specialized framework of GIS tools and methodologies that apply a comprehensive, multi-tiered decision support model to assess existing constraints and aid planners and developers in efficiently identifying and analyzing optimum candidate sites and routes. This approach integrates a userdefined spatial assessment to identify environmental, cultural, infrastructure, and engineering considerations, identify minimum impact areas, and identify sites and routes best-suited for a specific type of energy development. The results are key elements that aid our clients in making informed decisions about complex siting considerations. Most critically, these tools offer the flexibility to be used as standalone processes or to augment existing siting methodologies.

This webinar will introduce attendees to AECOM's latest innovations in routing and siting analysis, which offer a number of advantages in comparison to more traditional siting and routing methods, including:

- Lower cost due to systematic, logical and efficient approach
- More rapid and flexible analysis via extensive use of GIS methods
- Ease of scenario evaluation and iteration with computer-based tools
- Open process conducive to client input and public participation
- Use of decision analysis tools at every step to optimize performance





Thursday, December 10, 2020 (12:00 PM EST) Keeping Up with Coal Ash: Polishing Your Crystal Ball: Energy and Environmental Policy Outlook in an Ever-Shifting Political Landscape

OUR SPEAKER: JOHN N. WARD



John N. Ward is President of John Ward Inc. -- a marketing and public affairs consultancy focusing on energy issues. John is chairman of the Government Relations Committee of the American Coal Ash Association, where he was the first recipient of that organization's Champion Award. He is a member of the National Coal Council as appointed by the U.S. Secretary of Energy and was elected vicechairman of that federal advisory committee in 2020. He also serves as executive director of the National Coal Transportation Association. He was formerly Vice President, Marketing and Government Affairs, for Headwaters Incorporated -- a leading provider of pre-combustion and post-combustion clean coal technologies and services. John is a former board member and past president of the American Coal Council. He is also chairman of the coal ash beneficial use advocacy group Citizens for Recycling First.

American Coal Ash Association's longtime Government Relations Committee chairman, John N. Ward, will assess the results of November's elections and outline what to expect from Congress, the White House, and key regulatory agencies in the coming year. A macro view of the political landscape will be accompanied by analysis of what it all means for coal ash disposal and beneficial use policies.





Wednesday, December 16, 2020 (1:00 PM EST) Controlling Aerosols - Including Those Associated with Disease Transmission

OUR SPEAKER: MARTHA BOSS, CIH, CSP, PCQI, CPM



Martha Boss has over 20 years' experience in conducting biological and chemical risk evaluations through industrial hygiene studies to determine contaminant spread, and dispersion analysis; statistical parameters, severity and probability assessments for health risks; and toxicological profiling. Martha is co-editor and author of the 1) Building Vulnerability Assessments; 2) Biological Risk Engineering Handbook and 3) Air Sampling and Industrial Hygiene Engineering texts published by CRC Press. Her work has included constructability and design review to include interface with standard operating procedures for the BSL3+ laboratory constructed to receive unknown biologicals under the auspices of EPA and Homeland Security.

EHS AUDITOR AND IH ASSESSMENT

For the EPA Homeland Security Laboratory, OH; and Pandemic Planning and Re-Occupancy evaluations that included biocide efficacy analysis of decontamination methods for confidential clients and government agencies; with protocol development keyed to WHO staging and attendant CDC requirements. She has also prepared health and safety documents, training materials, and SOPs for the response to the SARS-COV-2 threat at health care facilities (including those required for emergent care), real estate companies, nursing home/assisted living facilities, sports venues, food handling and retail shops, manufacturing plants, educational facilities, amusement parks, sports venues, and major sports teams.

AEROSOLS – ADDRESSING CHEMICAL AND BIOLOGICAL RISKS

Aerosolization is the process of putting solids (particulates, fumes), liquids (vapors, mists), or other gases into an air stream. This familiar process is exemplified by aerosol cans that use pressure differentials to cause their contents to be emitted into the air. The more subtle aerosolization occurs every day, hour, and minute; as our air streams mix. If the new entrained chemicals or biologicals do not trigger our sense of smell or otherwise irritate us; we may be oblivious to the changes in our air. We continue to breath in the air available to us; and may in the process of inhalation, dose our body with contaminants. A knowledge of how aerosolization occurs, and the potential control measures has become increasingly important as we deal with disease, climate, and facility design issues worldwide. We will also discuss the phenomena of agglomeration, which is the propensity of certain particulates to stick together or to align with a combination of liquid and solid particulate. While such phenomena may aid in filtration controls, the risk is that agglomerated particulate may be more respirable. Relative to total airborne particles, the particle size having 50% penetration for the thoracic and respirable fractions are 10 μ m and 4.0 μ m (aerodynamic diameter), respectively. Agglomeration of the chemicals hazards or virus particulate withing the available air stream to humans may be of concern. This webinar will provide real world examples of both the risk and the controls that can be employed to lessen those risks.









Red

blood cell

7 µm



10 µm

About AECOM

AECOM is the world's premier infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to program and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a Fortune 500 firm and its Professional Services business had revenue of approximately \$13.6 billion in fiscal year 2019.

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