Air Quality Monitoring during Railroad Tunnel Construction Activities in an Urban Environment

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To address identified NEPA requirements, a comprehensive air quality monitoring program was designed and implemented during the construction activities related to the expansion of the Virginia Avenue Tunnel in Washington, DC. The urban setting presented certain challenges to the monitoring program due to the presence of other potential sources of the compounds of interest listed in the NEPA documentation. This presentation will focus on the permit, technological, logistical, and other challenges presented during this project, and the means by which each of those challenges were overcome. In particular, monitoring technologies will be presented which describe how the project team was kept closely apprised of work activities and air quality metrics during the planning and implementation phases of the project. The comprehensive approach taken to evaluate the air quality data as compared with appropriate regulatory standards and guidelines will be presented as a potential template for future projects of this type.