South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

April 17, 2024

Dr. B.H. Baek:

Thank you for your interest in submitting a proposal for South Coast AQMD request for proposals (RFP) P2024-09, "Brake and Tire Wear Exposure Concentrations in the South Coast Air Basin and Coachella Valley". South Coast AQMD staff have evaluated your requested use of South Coast AQMD modeling capabilities for your proposed work. If your proposal is selected for funding, then South Coast AQMD staff anticipate making the capabilities listed in this letter available for your proposed work.

South Coast AQMD shares the goals of the project and will make a good faith effort to provide the modeling support listed in this letter. If due to extenuating or unexpected circumstances, South Coast AQMD cannot provide any or all of the modeling capabilities listed below, then South Coast AQMD may renegotiate the terms of the contract with the selected contractor. Applicants shall provide contingency measures and estimated costs in the submitted proposal that may be used if South Coast AQMD is unable to provide the support outlined below.

This letter should be included with the applicant's proposal. The proposal must describe what South Coast AQMD support is required for each proposed task, and the support should be consistent with this letter. While this letter is addressed to Dr. Baek, any applicant may use the support provided in this letter in their proposal. However, they may only use the support provided in one monitoring support letter and one modeling support letter.

Points for cost in scoring proposals will be based on only the cost that is proposed by the applicant in the submitted cost proposal and will not include any costs incurred by South Coast AQMD for support. However, the applicant must list the estimated cost that they would have to incur if South Coast AQMD is unable to provide the support outlined below. Applicants must provide the total proposed cost without contingency measures and provide the total proposed cost with the contingency measures separately in the cost proposal. The total proposed cost without factoring in the cost of any contingency measures is limited to a maximum of $850,000.

Modeling Capabilities

MATES VI modeling will be based on a modeling platform that will be an upgrade from the platform used in MATES V. The emissions and air quality modeling portions will be based on the Community Air Quality Modeling (CMAQ) platform that is consistent with South Coast AQMD's State Implementation Plan modeling. As in previous MATES campaigns, modeling will include source apportionment for major source categories by turning on specific sources of emissions while removing the rest. In the MATES VI campaign, South Coast AQMD staff plans to include source apportionment for on-road tire and brake wear emissions to estimate their contribution to air toxics in the basin.

Development of the modeling platform will start in 2025 with the goal of having preliminary on-road emissions during the year. However, modeled emissions will not be finalized until the modeling framework can be validated with meteorology and measurements collected during the monitoring period, which is expected in 2026. The preliminary modeling will be conducted using the emissions inventory incorporated in the MATES V modeling, with updates to on-road emissions using the EMFAC 2021, the latest U.S. EPA approved model.

South Coast AQMD Modeling Support

1. Air Quality Modeling Data

South Coast AQMD staff will provide preliminary gridded hourly emissions, CMAQ model-ready meteorological data and direct model output data that includes hourly gridded concentrations of PM2.5 model species. The preliminary modeling will be based on emissions and meteorology from the MATES V campaign, with updates to on-road emissions using the EMFAC2021 model. South Coast AQMD will provide modeling inputs and outputs newly developed for MATES VI as they become available, tentatively by the end of 2026 or early 2027.

Sincerely,

Sarah Rees

Sarah Rees, Ph.D.
Deputy Executive Officer
Planning, Rule Development, and Implementation