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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 27, 2018

Achille Alonzi, Division Administrator
Federal Highway Administration, Texas Division
300 E. 8th Street, Rm 826
Austin, Texas 78701

Subject: Transportation conformity review and concurrence

Dear Mr. Alonzi:

Thank you for the opportunity to review the *Transportation Air Quality Conformity Report for the Houston-Brazoria-Galveston Region for Amendments to the 2040 Regional Transportation Plan and 2017-2020 Transportation Improvement Program* and supporting documents submitted by the Houston-Galveston Area Council (H-GAC). The purpose of this conformity analysis was to determine if amendments to the H-GAC's 2040 Regional Transportation Plan and the 2017-2020 Transportation Improvement Program are consistent with area emissions requirements for ozone. An eight-county area in the Houston-Galveston-Brazoria (HGB) region is designated nonattainment for ozone: Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.

In order for conformity to be demonstrated for the HGB ozone nonattainment area, projected emissions of nitrogen oxides (NO_x) and volatile organic compounds (VOC) from the transportation plan and transportation improvement program must be no greater than the applicable motor vehicle emissions budgets (MVEB) for NO_x and VOC, as required under Title 40 Code of Federal Regulations Part 93, Subpart A. Regional transportation emissions were projected for analysis years 2017, 2021, 2025, 2035, and 2040 and then compared to the NO_x and VOC MVEB established in the *Houston-Galveston-Brazoria Reasonable Further Progress State Implementation Plan Revision to meet the 2008 Eight-Hour Ozone National Ambient Air Quality Standard*. The MVEB in the applicable state implementation plan (SIP) revision were found adequate for transportation conformity purposes by the United States Environmental Protection Agency (EPA) effective June 21, 2017. The NO_x MVEB is 121.81 tons per day (tpd), which includes a safety margin of 23.66 tpd. The VOC MVEB is 68.04 tpd, which includes a safety margin of 11.67 tpd.

Texas Commission on Environmental Quality (TCEQ) staff reviewed the transportation conformity determination documents submitted by the H-GAC. The H-GAC used Spatial Emissions Estimator (SEE) as a modeling framework around the MOVES model for regional conformity emissions inventory development. SEE was not used for SIP-related emissions inventory development. Updates to SEE, as documented in a May 31, 2017 report, allow for methodological consistency between SEE-based emissions inventories and inventories developed for the SIP, but the TCEQ has not yet seen the results of rigorous testing that compares emissions estimates generated using SEE with those generated using the utilities relied upon for SIP development. The TCEQ recommends that H-GAC complete such testing to ensure that results between the two approaches are reliably consistent.

Without rigorous testing to demonstrate reliable consistency between the SEE approach and the SIP approach, the TCEQ used the delta between analysis-year estimated emissions and the MVEBs to determine whether to ask H-GAC to use the SIP approach for this conformity analysis. Estimated emissions for all conformity analysis years were at least 16% lower than the NO_x and

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VOC MVEB, therefore, the TCEQ is satisfied that the difference in approaches does not jeopardize this demonstration.

All issues with this conformity analysis were addressed and resolved in a series of meetings, consultative calls, and e-mails with the H-GAC, the Federal Highway Administration, the EPA, the Texas Department of Transportation, and the TCEQ. The TCEQ is satisfied that all requirements have been met and transportation conformity has been demonstrated. If you have any questions about our review, please contact Ms. Jamie Zech of my staff at 512-239-3935 or jamie.zech@tceq.texas.gov.

Sincerely,



David Brymer, Director
Air Quality Division
Texas Commission on Environmental Quality

DB/jz

Cc: Jose Campos, Federal Highway Administration
Guy Donaldson, U.S. Environmental Protection Agency
Carlos Swonke, Texas Department of Transportation
Peter Smith, P.E., Texas Department of Transportation
Alan Clark, Houston-Galveston Area Council