

AQRP Monthly Technical Report

PROJECT TITLE	MOVES-Based NO _x Analyses for Urban Case Studies in Texas	PROJECT #	16-010
PROJECT PARTICIPANTS	Sonoma Technology, Inc. (STI)	DATE SUBMITTED	January 6, 2017
REPORTING PERIOD	From: December 1, 2016 To: December 31, 2016	REPORT #	3

A Financial Status Report (FSR) and Invoice will be submitted separately from each of the Project Participants reflecting charges for this Reporting Period. I understand that the FSR and Invoice are due to the AQRP by the 15th of the month following the reporting period shown above.

Detailed Accomplishments by Task

During this reporting period, the STI team continued work on Task 1 Emissions Reconciliation Analyses. The team collected pollutant concentration data from the U.S. Environmental Protection Agency (EPA) Air Quality System (AQS) for three monitoring sites in Houston, Fort Worth, and El Paso, and started processing these data. The team also prepared a summary of key data files needed for MOVES modeling and contacted TCEQ (Texas Commission on Environmental Quality), NCTCOG (North Central Texas Council of Government), HGAC (Houston-Galveston Area Council), and El Paso MPO to collect local MOVES data.

Preliminary Analysis

The STI team assessed the MOVES modeling data needs based on the local agency data submission requirement to develop the 2014 National Emissions Inventory (NEI). Using a summary of data tables associated with the County Data Manager (CDM) and Project Data Manager (PDM), the team identified several key MOVES data files (see **Table 1**) and contacted the local planning agencies to request data for MOVES modeling analyses.

Table 1. Summary of example data and data tables needed for MOVES modeling runs.

Input Category	Input Data Tables (from MOVES County Data Manager)
Age Distribution	sourceTypeAgeDistribution
Fuel	FuelSupply
	FuelFormulation
	FuelUsageFraction
	AVFT
Meteorology	zoneMonthHour
I/M Programs	IMCoverage

Data Collected

As illustrated in the November 2016 monthly technical report, the STI team used the EPA's online AQS application to collect 2014-2015 air quality data for three study sites. In this reporting period, the team acquired MOVES County Database (CDB) files for the three study areas used for the development of 2014 National Emission Inventory (NEI) from EPA. The team also collected the following local MOVES data files:

- MOVES County Databases (CDBs) and supporting data files, obtained from TCEQ, for the three study areas prepared for 2014 Air Emissions Reporting Requirements (AERR).
- MOVES CDB of analysis year 2017 for the Fort Worth area obtained from NCTCOG.
- MOVES CDB input tables of analysis year 2015 for the Houston area (Harris County only), obtained from HGAC.

Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

No problems or issues were encountered during the reporting period. As of the writing of this report, we have obtained MOVES modeling input data from TCEQ, NCTCOG, and HGAC. We are still waiting for response from El Paso MPO regarding the availability of local MOVES data. If there is no timely response from El Paso MPO and/or their local MOVES data are not available, we will use the MOVES modeling input data for the El Paso area provided in the TCEQ dataset in the planned reconciliation analysis.

Goals and Anticipated Issues for the Succeeding Reporting Period

The STI team continued work on the planned emissions reconciliation analysis with processing near-road monitoring data and collecting MOVES modeling data; the team plans to continue work with ambient air quality data and meteorological data processing, MOVES modeling runs with local inputs, and ambient-based pollutant ratios calculation. We do not expect significant issues in the next reporting period.

Detailed Analysis of the Progress of the Task Order to Date

The completion of each project task and the project deliverables are expected to follow the schedule from the work plan and quality assurance project plan.

Do you have any publications related to this project currently under development? If so, please provide a working title, and the journals you plan to submit to.

Yes No

Do you have any publications related to this project currently under review by a journal? If so, what is the working title and the journal name? Have you sent a copy of the article to your AQRP Project Manager and your TCEQ Liaison?

Yes No

Do you have any bibliographic publications related to this project that have been published? If so, please list the reference information. List all items for the lifetime of the project.

Yes No

Do you have any presentations related to this project currently under development? If so, please provide working title, and the conference you plan to present it (this does not include presentations for the AQRP Workshop).

Yes No

Do you have any presentations related to this project that have been published? If so, please list reference information. List all items for the lifetime of the project.

Yes No

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