

AQRP Monthly Technical Report

PROJECT TITLE	Next steps for improving Texas biogenic VOC and NO emission estimates	PROJECT #	18-005
PROJECT PARTICIPANTS	UCI Ramboll	DATE SUBMITTED	2/28/2019
REPORTING PERIOD	From: 2/1/2019 To: 2/28/2019	REPORT #	5

A Financial Status Report (FSR) and Invoice will be submitted separately from each of the Project Participants reflecting charges for this Reporting Period. We 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

Task 1. Measure Texas BVOC emission factors and their variability

We are continuing efforts to prepare for the May/June field study in Texas. This includes the testing and application of the BVOC enclosure measurement approaches and ancillary measurements to characterize leaf environment. Field measurements have been conducted on the UCI campus on *Quercus virginiana*, a dominant Texas isoprene emitter.

Task 2. MEGAN model improvements

The specific coding tasks required for implementing the new soil NO emission algorithm have been identified and assigned to the project team. Updates are being made to the MEGAN-EFP python code and BVOC emission inputs.

Task 3. MEGAN3.1 sensitivity analysis of Texas biogenic emissions

Not yet initiated. The work on this task is scheduled to start in May 2019.

Preliminary Analysis

None.

Data Collected

Measurements of *Quercus virginiana* isoprene emission and ancillary data.

Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

None.

Goals and Anticipated Issues for the Succeeding Reporting Period

UCI will continue emission measurements in Irvine to obtain data and further test the approach. UCI and Ramboll will begin implementation of the new MEGAN soil NO emission approach and continue updating the MEGAN-EFP BVOC emission data.

Detailed Analysis of the Progress of the Task Order to Date

The project is proceeding as planned.

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

Submitted to AQRP by

Alex Guenther, UCI