# **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	2/4/2019
REPORTING PERIOD	From: 1/1/2019 To: 1/31/2019	REPORT #	4

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 15<sup>th</sup> of the month following the reporting period shown above.

#### **Detailed Accomplishments by Task**

Task 1. Measure Texas BVOC emission factors and their variability

We have initiated efforts to prepare for the May/June field study in Texas. This includes the development and testing of the two BVOC enclosure measurement approaches and completing our strategy for selecting target plants. Initial tests demonstrated that a portable GC-MS provides better results than the portable GC-PID system we had originally proposed for isoprene measurements. We have set up two portable GC-MS systems and optimized our sampling and analytical approach. We have conducted extensive laboratory tests and are now beginning field tests. We have also completed a custom temperature/light controlled glass cuvette field enclosure system and are conducting tests.

Task 2. MEGAN model improvements

Not yet initiated. The work on this task will start in February 2019.

Task 3. MEGAN3.1 sensitivity analysis of Texas biogenic emissions As in Task 1 above.

### **Preliminary Analysis**

None.

**Data Collected** 

None.

**Identify Problems or Issues Encountered and Proposed Solutions or Adjustments** None.

## Goals and Anticipated Issues for the Succeeding Reporting Period

UCI will complete the emission measurement approach development and testing and begin measurements in Irvine to obtain data and further test the approach. UCI and Ramboll will work on the development and implementation of the soil NO emission approach in MEGAN.

## **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.
YesX_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?
YesX 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.
YesX_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). YesX_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.
YesX No
Submitted to AQRP by
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