

## AQRP Monthly Technical Report

<b>PROJECT TITLE</b>	The Influence of Alkyl Nitrates from Anthropogenic and Biogenic Precursors on Regional Air Quality in Eastern Texas	<b>PROJECT #</b>	16-019
<b>PROJECT PARTICIPANTS</b>	University of Texas at Austin (Drs. McDonald-Buller and Hildebrandt Ruiz) Ramboll Environ (Dr. Yarwood)	<b>DATE SUBMITTED</b>	12/8/2016
<b>REPORTING PERIOD</b>	<b>From:</b> 11/1/2016 <b>To:</b> 11/30/2016	<b>REPORT #</b>	2

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

---

### Detailed Accomplishments by Task

#### *Task 1: Refinements to the CB6r4 Mechanism in CAMx*

An initial literature review focusing on organic nitrate and secondary organic aerosol formation from the nitrate radical-initiated oxidation of monoterpenes has been completed. The transfer of the CAMx model inputs for the Houston DISCOVER-AQ period (September 2013) between the University of Texas at Austin and Ramboll Environ was completed, and the base case is being run at the Texas Advanced Computing Center (TACC).

#### *Task 2. Evaluating CB6r4 Updates in CAMx Modeling for DISCOVER-AQ*

Not yet initiated.

#### *Task 3. Project Reporting and Presentation*

On-going per requirements.

### **Preliminary Analysis**

Not yet initiated

### **Data Collected**

Not yet initiated

### **Identify Problems or Issues Encountered and Proposed Solutions or Adjustments**

None.

### **Goals and Anticipated Issues for the Succeeding Reporting Period**

Objectives for the succeeding reporting period include initial planning for CB6r4 refinements based on the on-going literature review. The team will plan another conference call to also

discuss the progress of Dr. Hildebrandt-Ruiz's experiments. Dr. McDonald-Buller's group will compare the results of the base case CAMx simulation run at TACC to the results of Ramboll Environ to ensure reasonable agreement.

**Detailed Analysis of the Progress of the Task Order to Date**

See above.

**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

Elena McDonald-Buller