

AQRP Monthly Technical Report

PROJECT TITLE	The Influence of Alkyl Nitrates from Anthropogenic and Biogenic Precursors on Regional Air Quality in Eastern Texas	PROJECT #	16-019
PROJECT PARTICIPANTS	University of Texas at Austin (Drs. McDonald-Buller and Hildebrandt Ruiz) Ramboll Environ (Dr. Yarwood)	DATE SUBMITTED	11/8/2016
REPORTING PERIOD	From: 10/6/2016 To: 10/31/2016	REPORT #	1

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

Task 1: Refinements to the CB6r4 Mechanism in CAMx

The University of Texas at Austin (Elena McDonald-Buller, Lea Hildebrandt Ruiz and graduate students, and Yosuke Kimura) and Ramboll Environ (Greg Yarwood and Ou Nopmongcol) teams held an initial conference call on October 26, 2016. The discussion included an update about on-going chamber experiments that are being conducted by Dr. Hildebrandt Ruiz's research group under the sponsorship of the Texas Air Research Center (TARC) to examine gas-particle partitioning and particle-phase hydrolysis rates of alkyl nitrates from straight-chained and branched alkane precursors. These experiments are expected to be important to the refinements that will be made to the CB6r4 mechanism for our AQRP project. A literature review has also been initiated, focusing right now on alkyl nitrates formed from nitrate radical oxidized monoterpenes.

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 on-going literature review and planning for CB6r4 refinements. 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 will be coordinated.

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

Principal Investigator

