

## AQRP Monthly Technical Report

|                             |   |                       |          |
|-----------------------------|---|-----------------------|----------|
| <b>PROJECT TITLE</b>        | Quantifying Ozone Production from Light Alkenes Using Novel Measurements of Hydroxynitrate Reaction Products in Houston | <b>PROJECT #</b>      | 14-026   |
| <b>PROJECT PARTICIPANTS</b> | Dr. Tom Ryerson (NOAA)<br>Dr. Greg Yarwood (ENVIRON)<br>Dr. David Parrish   | <b>DATE SUBMITTED</b> | 1/8/2015 |
| <b>REPORTING PERIOD</b>     | <b>From:</b> December 1, 2014<br><b>To:</b> December 31, 2014   | <b>REPORT #</b>       | 7        |

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

- The hydroxynitrate data have been downloaded from the SEAC<sup>4</sup>RS data archive, and Tasks 1 and 2 (review alkene hydroxynitrate measurements, and analyze in context of other measurements) have been initiated.
- The kinetics scheme, which will under-pin both the data analysis (Tasks 1 and 2) and the modeling (Task 3), for the HRVOC chemistry has been revised in response to comments from collaborators. This scheme likely will evolve further.

### Preliminary Analysis

### Data Collected

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

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

- Finalize the kinetics scheme.
- Complete Task 1.
- The SEAC<sup>4</sup>RS data archive will be interrogated to derive the meteorological and chemical information needed to initiate the modeling, which comprises Task 3.
- Move forward with Task 2.

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

---

Submitted to AQRP by: Greg Yarwood

Principal Investigator: Tom Ryerson