AQRP Monthly Technical Report

PROJECT TITLE	Quantifying Ozone Production from Light Alkenes Using Novel Measurements of Hydroxynitrate Reaction Products in Houston	**PROJECT #**	14-026
PROJECT PARTICIPANTS	Dr. Tom Ryerson (NOAA) Dr. Greg Yarwood (ENVIRON) Dr. David Parrish	**DATE SUBMITTED**	12/8/2014
REPORTING PERIOD	**From:** November 1, 2014 **To:** November 30, 2014	**REPORT #**	6

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

- The SEAC^{4}RS data archive was posted online by Caltech on November 25, 2014. These data will probably have another revision in the next few months, but the revisions are likely to only influence data in the remote regions. Since the AQRP project will focus on data in the immediate vicinity of the Houston Ship Channel, Task 1 can proceed.
- Dr. Parrish has developed a preliminary kinetics scheme for the HRVOC chemistry. This scheme will under-pin both the data analysis (Tasks 1and 2) and the modeling (Task 3). As Tasks 1 and 2 move forward, the details and specific parameters of this scheme will be refined.

Preliminary Analysis

Data Collected

Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

Goals and Anticipated Issues for the Succeeding Reporting Period

- Now that the QA/QC'd SEAC^{4}RS data archive is available, Tasks 1 and 2 will be moved forward as rapidly as possible.
- All involved researchers will review the preliminary HRVOC kinetics scheme developed by Dr. Parrish, and suggest needed improvements.
- The SEAC^{4}RS data archive will be interrogated to derive the meteorological and chemical information needed to initiate the modeling, which comprises Task 3.

Detailed Analysis of the Progress of the Task Order to Date

Submitted to AQRP by: Greg Yarwood

Principal Investigator: Tom Ryerson