

AQRP Monthly Technical Report

PROJECT TITLE	Dallas Field Study (DFS); Ozone Precursors, Local Sources and Remote Transport Including Biomass Burning	PROJECT #	22-010
PROJECT PARTICIPANTS	Dr. Ed Fortner PI	DATE SUBMITTED	01/10/2023
REPORTING PERIOD	From: 12/01/2022 To: 12/31/2022	REPORT #	5

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 for reporting period

Task 2: Base Site Selection:

Progress continues regarding preparing the Fort Worth Northwest Site owned by TCEQ at the Meachum field airport for base staging by the Aerodyne Mobile Laboratory (AML) during the campaign intensive. The two primary issues which need resolution by the end of January are executing a legal agreement with Meachum Field for site access and improving/updating electrical infrastructure at the site to accommodate both the AML and the Baylor trailer sampling platform (AQRP project 22-006). Vince Torres and RoseAnna Goewey (TX AQRP) are working diligently with the airport manager Dakota Shaw at Fort Worth Meachum Field regarding the site access agreement and a draft of this agreement is expected to be generated during the week of Jan 9 -13 which will then be reviewed. Regarding the electrical work which needs to be conducted Dr. Sascha Usenko at Baylor University has been coordinating with a local electrical company to conduct necessary electrical upgrades at the Fort Worth Northwest Site. The latest information received from the electrical company is that they will set up an install date in the near future.

Task 3: Campaign Planning:

The field staffing plan is being completed, all positions are filled, and date commitments are being made. The measurement intensive dates are being planned for Apr 3 – 23. Some personnel will be on-site for the entire campaign while others will be split into first and second half crews. The AML and key instrument availability has been scheduled for the time period of mid-March - April with May considered to be an alternate measurement month if needed. A two-week integration plan of the AML at Aerodyne is scheduled to occur during the last two weeks of March. The necessary ordering of calibration equipment has occurred to ensure its availability for the measurement campaign.

Preliminary Analysis

N/A

Data Collected

N/A

Identify Any Problems or Issues Encountered and Proposed Solutions or Adjustments

A concern is whether the site agreement and the electrical upgrade will both be completed prior to the intensive which will occur in April. As stated above work on both matters is occurring and it is still the primary plan to have the Northwest (Meachum Airport) field site used as the base for the AML during the intensive. If this site cannot be made ready, then backup solutions being considered are a different TCEQ measurement site in the Dallas – Fort Worth (DFW) area or Recreational Vehicle (RV) parks in the DFW area. The preference for co-measuring with both TCEQ and project 22-006 has motivated the site selection to be a TCEQ measuring location, however, the AML has used RV parks in past measurement intensives, and it would be possible to do so for this campaign.

Goals and Anticipated Issues for the Succeeding Reporting Period

Executing a site agreement and completing the electrical upgrade work on the Northwest site are priorities for the month of January. These issues will be a point of focus for both the 22-006 and the 22-010 projects.

Detailed Analysis of the Progress of the Task Order to Date

Tasks 2 and 3 are proceeding on schedule at this point.

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 AQR Project Manager and your TCEQ Liaison?

Yes No

Do you have any bibliographic publications (ie: publications that cite the project) 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

Have any personnel changes occurred that were not listed in the original proposal? If so, please include a detailed description of the personnel change(s) below.

Yes No

Are any delays expected in the progress of the research? If so, please include a detailed description of the potential delay below.

Yes No

Describe any possible concerns/issues (technical or non-technical) that AQRP should be made aware of.

No new concerns or issues.

Are you anticipating using all the available funds allocated to this project by the end date? If not, why and approximately what is the amount to be returned?

Yes No

Submitted to AQRP by

Dr. Ed Fortner, PI