

AQRP Monthly Technical Report

PROJECT TITLE	Improving Estimates of Wind-Blown Dust from Natural and Agricultural Sources	PROJECT #	20-011
PROJECT PARTICIPANTS	Chris Emery, Tejas Shah, Uarporn Nopmongcol, Greg Yarwood (Ramboll)	DATE SUBMITTED	3/4/2021
REPORTING PERIOD	From: February 1, 2021 To: February 28, 2021	REPORT #	8

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 1: Review Current CAMx WBDUST Estimates

This task was completed in September 2020.

Task 2: Review Alternative Methods and Datasets

Task 2.1 was completed in November 2020.

Ramboll completed work on Task 2.2 to identify and review publicly available US and Texas agricultural activity datasets from which to improve seasonal and spatial characterization of emissive agricultural lands. A Task 2.2 technical memorandum was submitted to AQRP and TCEQ on February 26 describing our review, selection of datasets, and approaches to process and use the data in WBDUST.

Task 3: Update the WBDUST Model and Evaluate Impacts in CAMx MP

Continued to apply CAMx with the 2016 EPA Modeling Platform to assess alternative windblown dust estimates from previous and updated (from Task 2.1) versions of the WBDUST model. We expect to report results to the AQRP and TCEQ in our March progress report.

Task 4: Project Reporting and Presentation

Developed January MTR and FSR and submitted to AQRP on February 2 and 17, respectively.

Preliminary Analysis

Please see our Task 2.2 technical memorandum for current information.

Data Collected

No data collected during the reporting period.

Identify Any Problems or Issues Encountered and Proposed Solutions or Adjustments

None during the reporting period.

Goals and Anticipated Issues for the Succeeding Reporting Period

Continue model testing of WBDUST updates using the CAMx model. Model results using original and alternative windblown dust estimates will be evaluated against ambient measurements. No anticipated issues for the succeeding reporting period.

Detailed Analysis of the Progress of the Task Order to Date

This project initiated on July 28 with the execution of the AQRP Task Order. All remaining tasks remain on schedule and budget according to our work plan.

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 (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.

None.

**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
Chris Emery, Ramboll