

# **AIR QUALITY RESEARCH PROGRAM**

**Texas Commission on Environmental Quality  
Contract Number 582-15-50047  
Awarded to The University of Texas at Austin**

**Quarterly Report  
March 1, 2016 through May 31, 2016**

**Submitted to**

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## **Texas Air Quality Research Program**

### **Quarterly Report**

**March 1, 2016 – May 31, 2016**

#### **OVERVIEW**

The goals of the State of Texas Air Quality Research Program (AQRP) are:

- (i) to support scientific research related to Texas air quality, in the areas of emissions inventory development, atmospheric chemistry, meteorology and air quality modeling,
- (ii) to integrate AQRP research with the work of other organizations, and
- (iii) to communicate the results of AQRP research to air quality decision-makers and stakeholders.

#### **PROGRAM ACTIVITIES FOR THE QUARTER**

Between March 1, 2016 and May 31, 2016, the AQRP closed the Request for Proposals (RFP) and met with the Independent Technical Advisory Committee (ITAC) to perform the technical review and technical ranking of the proposals received. The ranking was then transmitted to the Texas Commission on Environmental Quality (TCEQ), to perform a review and ranking of each proposal's relevancy to the air quality needs of the state of Texas.

The RFP for the FY 16-17 funding cycle, which was issued on Tuesday, February 23, 2016, closed on April 20, 2016 at 5:00 pm central time. An extension was granted to investigators from institutions which were closed due to severe weather that occurred on April 15 through April 18, 2016. The extension was equal in length to the period of time that the investigator's institution was closed and required substantiation from the institution announcing the closure.

In total the AQRP received 54 proposals requesting a total of \$9,549,443.00 in funding. The AQRP has approximately \$1,630,000.00 available for funding projects in FY 16-17.

The technical review and ranking of the proposals began on Friday, April 22, with each proposal assigned to 3 primary reviewers on the ITAC. Efforts were made to ensure that no conflicts of interest existed between the proposer(s) and the reviewer(s) assigned to the proposal. Prior to beginning the review process, each ITAC member agreed to abide by both a Conflict of Interest Policy and a Confidentiality Policy. The primary reviewers scored the proposals they were assigned and returned the scores to the AQRP. The AQRP then compiled those scores to determine a preliminary average score for each proposal.

The ITAC met in Austin, Texas, on May 12 and 13, 2016. At the meeting, the preliminary average scores were evaluated to determine whether the proposals that failed to rank in the top half of the scoring should undergo additional review. The primary reviewers briefly discussed each proposal. At this stage, if any ITAC member called for additional consideration, the proposal advanced to the next stage. Otherwise, these proposals that failed to rank in the top half of submissions, based on technical merit, were not advanced to the next stage. In the second stage of review, proposals were described by the three primary reviewers, and the entire ITAC discussed the strengths and weaknesses of each proposal. Based on the discussion, every ITAC member provided a technical score for each proposal for which they did not have a conflict. After the initial round of discussion, a group of proposals were rated in an upper group, a group were rated in a lower group (of those that advanced to this round) and a group were rated in the middle. The ITAC went through a second round of discussion concerning proposals that appeared, based on technical ranking alone, to be near the limits of the AQRPs ability to fund proposals. Informed by that discussion, ITAC members had the opportunity to change their scoring for proposals ranked in the middle and lower groups. At this stage, the scoring for the technical rankings was final. This process is similar to the processes that AQRPs has utilized in past solicitations.

The ranked proposals were then submitted to the TCEQ as follows:

Highly Recommended/Recommended – 7 proposals receiving the highest peer review scores, totaling \$1,299,951 in funding requested, and 11 proposals that went through a second round of review by the ITAC, totaling \$2,216,738 in funding requested were collectively rated as highly recommended/recommended. A rank ordering of the proposals, based on technical merit was developed.

Recommended if funding is available – 11 proposals had lower technical merit scores, but still could be considered for funding, if resources were available; these proposals totaled \$1,753,238 in funding requested.

Not recommended – 25 proposals with significant technical concerns, were not recommended for funding.

TCEQ is currently performing a relevancy review of these proposals. When the process is complete, they will provide ranked list to the AQRPs. With this information, the AQRPs will convene a meeting of the Advisory Council to perform the final round of review and select the proposals that will receive funding.

## BACKGROUND

Section 387.010 of HB 1796 (81<sup>st</sup> Legislative Session), directs the Texas Commission on Environmental Quality (TCEQ, Commission) to establish the Texas Air Quality Research Program (AQRP).

Sec. 387.010. AIR QUALITY RESEARCH. (a) The commission shall contract with a nonprofit organization or institution of higher education to establish and administer a program to support research related to air quality.

(b) The board of directors of a nonprofit organization establishing and administering the research program related to air quality under this section may not have more than 11 members, must include two persons with relevant scientific expertise to be nominated by the commission, and may not include more than four county judges selected from counties in the Houston-Galveston-Brazoria and Dallas-Fort Worth nonattainment areas. The two persons with relevant scientific expertise to be nominated by the commission may be employees or officers of the commission, provided that they do not participate in funding decisions affecting the granting of funds by the commission to a nonprofit organization on whose board they serve.

(c) The commission shall provide oversight as appropriate for grants provided under the program established under this section.

(d) A nonprofit organization or institution of higher education shall submit to the commission for approval a budget for the disposition of funds granted under the program established under this section.

(e) A nonprofit organization or institution of higher education shall be reimbursed for costs incurred in establishing and administering the research program related to air quality under this section. Reimbursable administrative costs of a nonprofit organization or institution of higher education may not exceed 10 percent of the program budget.

(f) A nonprofit organization that receives grants from the commission under this section is subject to Chapters 551 and 552, Government Code.

The University of Texas at Austin was selected by the TCEQ to administer the program. A contract for the administration of the AQRP was established between the TCEQ and the University of Texas at Austin on July 29, 2015 for the 2016-2017 biennium. Consistent with the provisions in HB 1796, up to 10% of the available funding is to be used for program administration; the remainder (90%) of the available funding is to be used for research projects, individual project management activities, and meeting expenses associated with an Independent Technical Advisory Committee (ITAC).

## RESEARCH PROJECT CYCLE

The Research Program is implemented through a 9 step cycle. The steps in the cycle are described from project concept generation to final project evaluation for a single project cycle.

- 1.) The project cycle is initiated by developing (in year 1) or updating (in subsequent years) the strategic research priorities. The AQRP Director, in consultation with the ITAC, the Council and the TCEQ, develop research priorities; the research priorities are released along with a Request for Proposals.
- 2.) Project proposals relevant to the research priorities are solicited. The Request for Proposals can be found at <http://aqrp.ceer.utexas.edu/>.
- 3.) The Independent Technical Advisory Committee (ITAC) performs a scientific and technical evaluation of the proposals.
- 4.) The project proposals and ITAC recommendations are forwarded to the TCEQ. The TCEQ evaluates the project recommendations from the ITAC and comments on the relevancy of the projects to the State's air quality research needs.
- 5.) The recommendations from the ITAC and the TCEQ are presented to the Council and the Council selects the proposals to be funded. The Council also provides comments on the strategic research priorities.
- 6.) All Investigators are notified of the status of their proposals, either funded, not funded, or not funded at this time, but being held for possible reconsideration if funding becomes available.
- 7.) Funded projects are assigned an AQRP Project Manager at UT-Austin and a Project Liaison at TCEQ. The AQRP Project Manager is responsible for ensuring that project objectives are achieved in a timely manner and that effective communication is maintained among investigators involved in multi-institution projects. The AQRP Project Manager has responsibility for documenting progress toward project measures of success for each project. The AQRP Project Manager works with the researchers, and the TCEQ, to create an approved work plan for the project.

The AQRP Project Manager also works with the researchers, TCEQ and the Program's Quality Assurance officer to develop an approved Quality Assurance Project Plan (QAPP) for each project. The AQRP Project Manager reviews monthly, annual and final reports from the researchers and works with the researchers to address deficiencies.

- 8.) The AQRP Director and the AQRP Project Manager for each project describe progress on the project in the ITAC and Council meetings dedicated to on-going project review.
- 9.) The project findings are communicated through multiple mechanisms. Final reports are posted to the Program web site; research briefings are developed for the public and air quality decision makers; and a bi-annual research conference/data workshop is held.

Steps 3 and 4 took place during the quarter being reported. Steps 5 through 7 are expected to take place during the next quarter.

## **FINANCIAL STATUS REPORT**

Initial funding for fiscal year 2016 and 2017 was established at \$1,000,000 each, for a total award of \$2,000,000 for the FY 2016/2017 biennium. The funds were distributed across several different reporting categories as required under the contract with TCEQ. The reporting categories are:

Program Administration – limited to 10% of the overall funding (per Fiscal Year)

This category includes all staffing, materials and supplies, and equipment needed to administer the overall AQRP. It also includes the costs for the Council meetings.

### ITAC

These funds are to cover the costs, largely travel expenses, for the ITAC meetings.

Project Management – limited to 8.5% of the funds allocated for Research Projects

Each research project will be assigned a Project Manager to ensure that project objectives are achieved in a timely manner and that effective communication is maintained among investigators in multi-institution projects. These funds are to support the staffing and performance of project management.

Research Projects / Contractual

These are the funds available to support the research projects that are selected for funding.

Expenses were charged to the FY 16 AQRP Program Administration account during the months of April and May, 2016.

## **Program Administration**

Program Administration includes salaries and fringe benefits for those overseeing the program as a whole, as well as, materials and supplies, travel, equipment, and other expenses. This category allows indirect costs in the amount of 10% of salaries and wages.

During the reporting period several staff members were involved, at various levels of effort, in the administration of the AQRP. Dr. David Allen, Principal Investigator and AQRP Director, is responsible for the overall administration of the AQRP. James Thomas, AQRP Manager, is responsible for assisting Dr. Allen in the program administration. Maria Stanzione, AQRP Program Manager, with Rachael Bushn, Melanie Allbritton, and Susan McCoy each provided assistance with program organization and financial management. Denzil Smith is responsible for the AQRP Web Page development and for data management.

Fringe benefits for the administration of the AQRP were initially budgeted to be 24% of salaries and wages across the term of the project. It should be noted that this was an estimate, and actual fringe benefit expenses are reported for each month. The fringe benefit amount and percentage fluctuate each month depending on the individuals being paid from the account, their salary, their FTE percentage, the selected benefit package, and other variables. For example, the amount of fringe benefits is greater for a person with family medical insurance versus a person with individual medical insurance. Actual fringe benefit expenses to date are included in the spreadsheets below.

**Table 1: AQRP Budget**

Budget Category	FY16	FY17	Total
Personnel/Salary	\$70,040.00	\$70,040.00	\$140,080.00
Fringe Benefits <sup>1</sup>	\$16,806.00	\$16,806.00	\$33,612.00
Travel	\$150.00	\$150.00	\$300.00
Supplies	\$6,000.00	\$6,000.00	\$12,000.00
Equipment	\$0.00	\$0.00	\$0.00
Contractual/Research Projects	\$815,000.00	\$815,000.00	\$1,630,000.00
Project Management	\$65,000.00	\$65,000.00	\$130,000.00
ITAC <sup>4</sup>	\$15,000.00	\$15,000.00	\$30,000.00
Other	\$5,000.00	\$5,000.00	\$10,000.00
Total Direct Costs	\$992,996.00	\$992,996.00	\$1,985,992.00
Authorized Indirect Costs <sup>2</sup>	\$7,004.00	\$7,004.00	\$14,008.00
Total Costs	\$1,000,000.00	\$1,000,000.00	\$2,000,000.00
Fringe Rate <sup>1</sup>	24%	24%	
Indirect Rate <sup>2</sup>	10% of Personnel/Salary	10% of Personnel/Salary	

**Table 2: AQRP Administration Budget**

**Administration Budget (includes Council Expenses)  
FY 2016/2017**

Budget Category	FY16 Budget	FY17 Budget	Total	Expenses	Remaining Balance
Personnel/Salary	\$70,040.00	\$70,040.00	\$140,080.00	\$15,487.54	\$124,592.46
Fringe Benefits	\$16,806.00	\$16,806.00	\$33,612.00	\$3,523.28	\$30,088.72
Travel	\$150.00	\$150.00	\$300.00	\$0.00	\$300.00
Supplies	\$6,000.00	\$6,000.00	\$12,000.00	\$1.98	\$11,998.02
Equipment					
Total Direct Costs	\$92,996.00	\$92,996.00	\$185,992.00	\$19,012.80	\$166,979.20
Authorized Indirect Costs	\$7,004.00	\$7,004.00	\$14,008.00	\$1,548.75	\$12,459.25
10% of Salaries and Wages					
<b>Total Costs</b>	<b>\$100,000.00</b>	<b>\$100,000.00</b>	<b>\$200,000.00</b>	<b>\$20,561.55</b>	<b>\$179,438.45</b>