

BOARD MEETING DATE: July 12, 2019

AGENDA NO. 4

PROPOSAL: Execute Contract to Evaluate Meteorological Factors and Trends Contributing to Recent Poor Air Quality in South Coast Air Basin

SYNOPSIS: On November 2, 2018, the Board approved the release of an RFP to solicit bids to perform a comprehensive meteorological study to evaluate various factors and trends conducive to recent poor air quality in the South Coast Air Basin. This action is to execute a contract with the University of California, Riverside to conduct a meteorological study in an amount not to exceed \$188,798 from the Clean Fuels Program Fund (31).

COMMITTEE: Mobile Source, June 21, 2019; Recommended for Approval

RECOMMENDED ACTION:

Authorize the Executive Officer to execute a contract with University of California, Riverside to conduct a study to evaluate meteorological factors and trends contributing to recent poor air quality in the South Coast Air Basin in an amount not to exceed \$188,798 from the Clean Fuels Program Fund (31).

Wayne Nastri
Executive Officer

PF:SR:ZP:SM

Background

Despite achieving significant improvements in air quality over the last several decades, the South Coast Air Basin (Basin) experiences some of the worst air quality in the nation. The progress in reducing ozone and PM2.5 concentrations have slowed down or reversed in recent years. Persistent drought during 2013 through 2016 hindered the South Coast AQMD's efforts to reach attainment of the PM2.5 annual standard, and unusually high ozone concentrations were observed in 2016 through 2018 while emissions continued to decrease. Therefore, there is a need to better understand the significance of meteorological effects on regional air quality. On November 2, 2018, the Board approved the release of RFP #P2019-08 to solicit bids to conduct a comprehensive meteorological study to evaluate various factors and trends contributing to recent poor air quality in the South Coast Air Basin.

Outreach

In accordance with South Coast AQMD's Procurement Policy and Procedure, a public notice advertising the RFP and inviting bids was published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may have been notified utilizing South Coast AQMD's own electronic listing of certified minority vendors. Notice of the RFP was emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the internet at South Coast AQMD's website (<http://www.aqmd.gov>). In addition, staff reached out to potential qualified bidders whose work has been cited in related literature or referred to staff by other subject experts.

Bid Evaluation

Six proposals were received by the 5:00 p.m. deadline on February 28, 2019 in response to the RFP. The Attachment reflects the evaluation of the submitted proposals in response to RFP #P2019-08. Using the prescribed evaluation criteria to consider technical and cost qualifications, only three of the six proposals were scored as technically qualified. These proposals were from the University of California, Riverside (UCR), University of Alabama Huntsville and University of Houston. UCR received the highest score.

The important factors noted by the review panel that contributed to the UCR proposal's score are: excellent understanding of the problem to be studied, high level of detail and specificity as to how each task will be implemented, in-depth knowledge of atmospheric physics and chemistry, extensive experience in air quality analysis, extensive work plan combining various tools such as computer modeling, statistical analysis, machine learning, climate modeling and satellite data, and prior experience working on air quality issues in Southern California.

Panel Composition

The evaluation panel consisted of two air quality specialists from South Coast AQMD, one Research and Modeling Manager from the Bay Area Air Quality Management District, and one Air Resources Engineer from CARB. Of the four panel members, one is Asian Pacific American and three are Caucasian; all male.

Proposal

This action is to authorize the Executive Officer to execute a contract with UCR to evaluate meteorological factors and trends contributing to recent poor air quality in the Basin in an amount not to exceed \$188,798. UCR will develop a set of meteorological factors which contribute to high ozone and PM2.5 episodes, analyze the recent

meteorological and air quality trends and project a general direction of ozone and PM2.5 trends in the near future. Other related studies may be considered in the future to supplement UCR's study on meteorological effects.

Benefits to South Coast AQMD

Emissions studies on biofuels, alternative fuels and other environmental impacts, including the contribution of meteorological factors that may contribute to higher ozone and PM2.5, are included in the *Technology Advancement Office Clean Fuels Program 2019 Plan Update* under "Fuel/Emissions Studies". The results from the study will assist staff in better understanding the complex dynamics of air pollution and weather impacts and to develop more effective control strategies to improve air quality under changing climate conditions.

Resource Impacts

The contract with UCR will not exceed \$188,798 from the Clean Fuels Program Fund (31). Sufficient funds are available from the Clean Fuels Program Fund (31), established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. This project was included in the Technology Advancement Office 2019 Plan Update, pp 91-92. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.

Attachment

Evaluation of Proposals for RFP #P2019-08

ATTACHMENT

Evaluation of Proposals for RFP #P2019-08

Evaluate Meteorological Factors and Trends Contributing to Recent Poor Air Quality in the South Coast Air Basin

Institute	Proposed Cost	Technical Points	Cost Points	Total Score
University of California, Riverside	\$188,798	61	30	91
University of Houston, Department of Earth and Atmospheric Sciences	\$226,389	56	24	80
University of Alabama Huntsville, Earth System Science	\$249,986	58	20.3	78.3
University of California, Los Angeles-- Joint Institute for Regional Earth System Science and Engineering	\$239,273	54*	-	-
San Jose University	\$249,629	49*	-	-
Tetra Tech	\$236,372	47*	-	-

*This proposal was disqualified for scoring less than 56 points on technical expertise.