

BOARD MEETING DATE: April 3, 2020

AGENDA NO. 9

**PROPOSAL:** Reallocate Funds, Execute Contract and Add/Delete Positions to Quantify and Characterize Fugitive VOC Emissions Near and Around Refineries

**SYNOPSIS:** South Coast AQMD is conducting comprehensive air pollution measurements near refineries and surrounding communities as part of the AB 617 and Rule 1180 programs. The Community Emissions Reduction Plan for the Wilmington/Carson/West Long Beach community has a measure to reduce NO<sub>x</sub>, SO<sub>x</sub>, VOCs and other associated toxics emissions from refineries by 50 percent between 2020 and 2030. To assess this target, there is a need to quantify and characterize fugitive VOC emissions near and around refineries in 2020 as well as to assess progress in the future once a baseline has been established. As part of Rule 1180, staff will be operating and maintaining a network of community air monitoring stations throughout the Basin. These actions are to reallocate up to \$500,000 to Science & Technology Advancement's FYs 2019-20 and 2020-21 Budgets, execute a contract, and approve the addition and deletion of Rule 1180 positions to perform this work.

**COMMITTEE:** No Committee Review

**RECOMMENDED ACTIONS:**

1. Reallocate AB 617 funds (General Fund) up to \$500,000 within the Services & Supplies Major Object in Science & Technology Advancement's FY 2019-20 Budget and/or FY 2020-21 Budgets to fund an AB 617 contract.
2. Authorize the Executive Officer to execute a contract with FluxSense, Inc., in an amount up to \$500,000 to perform mobile air monitoring measurements to establish year 2020 "baseline" emissions for the AB 617 program (General Fund).

3. Approve the addition of two new positions and deletion of three positions in the General Fund for Rule 1180 (as listed in the table in Resource Impacts).

Wayne Natri  
Executive Officer

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### **Background**

Petroleum refineries are among the largest stationary sources of air pollution in the South Coast Air Basin (Basin). These sources process crude oil into various products, such as gasoline, diesel fuel, aviation fuel and other fuel oils. These and other refinery-related activities can result in emissions of criteria pollutants, toxic air contaminants, and greenhouse gases. In recent years, community concerns over emissions from refineries have increased, both from routine facility operations and potential releases due to emergency or other unforeseen conditions.

The AB 617 Community Emissions Reduction Plan (CERP) for the Wilmington/Carson/West Long Beach community, which was approved by the Board on September 6, 2019, has a measure to reduce NO<sub>x</sub>, SO<sub>x</sub>, VOCs and toxics emissions from refineries by 50 percent between 2020 and 2030. To assess this measure, there is a need to estimate and characterize fugitive VOC emissions near and around refineries as well as to assess progress in the future once a baseline has been established. Although not yet appropriate for other purposes, optical remote sensing (ORS) measurements on a mobile platform is the most appropriate technology to provide this baseline emissions estimate. Traditional monitoring approaches are not suitable for this purpose because traditional monitoring techniques measure concentrations of gases (i.e. what the levels of pollutants are in a given air sample), not emissions (how much pollution is emitted over a specified time) which Fluxsense's mobile platform can monitor.

Rule 1180 Refinery Fenceline and Community Air Monitoring, which was adopted by the Board in December 2017, requires real-time fenceline air monitoring systems and establishes a fee schedule for all major refineries in the Basin to fund refinery-related community air quality monitoring. These activities will provide information to the public about levels of VOCs and air toxic pollutants at or near the property boundaries of petroleum refineries and in nearby communities.

### **Proposal**

This action is to reallocate AB 617 funds in an amount up to \$500,000 within the Services & Supplies Major Object in Science & Technology Advancement's FY 2019-20 and/or FY 2020-21 Budgets. This action is to also authorize the Executive Officer to execute a contract with FluxSense, Inc., to conduct mobile ORS emissions monitoring

of VOCs, NO<sub>x</sub> and SO<sub>x</sub> from all major refineries in the Wilmington/Carson/West Long Beach community (i.e., Marathon Carson, Marathon Wilmington, Phillips 66 Carson, Phillips 66 Wilmington and Valero Wilmington). The results of the ORS monitoring will provide the initial baseline refinery emissions estimates that will be used to calculate the percentage change over time as a measure for tracking AB 617 refinery emissions reduction goals. The contract amount will not exceed \$500,000.

This action is to also approve the addition of two Air Quality Specialist positions and the deletion of one Senior Air Quality Instrument Specialist and two Air Quality Instrument Specialist II positions for Rule 1180 air monitoring implementation. This staffing will better serve operational needs for the Rule 1180 Community Air Monitoring Program, which requires staff to perform more specialized and complex activities, including: installation, operation, calibration, maintenance and repair of advanced air monitoring and ORS equipment, mobile monitoring surveys, and data analysis, mapping, interpretation and reporting.

#### **Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole-source award may be justified. The request for a sole source contract with FluxSense is made under Sections VIII.B.2.c(1): The unique experience and capabilities of the proposed contractor or contractor team; VIII.B.2.c(2): The project involves the use of proprietary technology; and VIII.B.2.d(6): Projects requiring compatibility with existing specialized equipment. FluxSense is the only contractor who provides mobile ORS measurement services allowing quantification of refinery emissions of VOCs, NO<sub>x</sub> and SO<sub>x</sub>, which is most appropriate to fulfill the technical requirements of this AB 617 measure and satisfy CERP requirements. Additionally, the proposed instruments and proprietary software are compatible with instrumentation and software that is currently being used by staff in South Coast AQMD Mobile ORS Laboratory, therefore allowing for data compatibility and comparability.

#### **Benefits to South Coast AQMD**

Implementation of AB 617 and Rule 1180 benefits environmental justice communities and others working and residing in the Basin.

#### **Resource Impacts**

Funding from CARB's Community Air Protection Program under AB 617 (General Fund) will provide sufficient resources for FluxSense to perform mobile air monitoring measurements to establish year 2020 "baseline" emissions for the AB 617 program.

Payments received from petroleum refineries under Rule 1180 and Rule 301 fees will provide sufficient resources to plan and establish the required community air monitoring program, and for ongoing community air monitoring operation and maintenance.

Below is a table summarizing the proposed Rule 1180 staffing additions/deletions:

| <b>Position Title</b>                    | <b>Qty</b> | <b>Estimated Amount*</b> |
|--|------------|--------------------------|
| Air Quality Specialist                   | 2          | \$335,196                |
| Senior Air Quality Instrument Specialist | -1         | -150,515                 |
| Air Quality Instrument Specialist II     | -2         | -279,236                 |
| <b>Total</b>                             | <b>-1</b>  | <b>-\$94,555</b>         |

\*Annual Salaries & Employee Benefits at Step 5 include base salary, retirement cost, insurance, FICA & SDI.