Placer County Air Pollution Control District AB 617 Grant Agreement Annual Report

Annual Report #1

Grantee: Placer County Air Pollution Control District

Report Date: March 13, 2019

Grant #: G17-CAPP-23

This annual report is prepared for funds received by the Placer County Air Pollution Control District (District) to implement the Community Air Protection Program (CAPP) pursuant to Assembly Bill 617 (AB 617) between March 1, 2018 and February 28, 2019. It includes 1) a summary of all activities associated with tasks conducted by the District under the CAPP, 2) costs associated with specific tasks, 3) grant funds remaining and expended, and 4) expenditure summary showing all CAPP funds which reimbursement is being requested for.

1. <u>Summary of Tasks with associated work completed in the first annual reporting period</u>
In the first annual reporting period, District staff developed these specific tasks to implement the CAPP and satisfy the grant agreement requirements. Each task is described in the following sections with the summary of work completed in the first annual reporting period.

Task 1 – Execute the grant agreement. The Grant Agreement was submitted to the District's Board of Directors for review and approval on April 12, 2018. The grant award provides funding to support the District's activities associated with the State's CAPP implementation. The Board of Directors approved the Grant Agreement and authorized the Air Pollution Control Officer to accept grant funds in the amount of \$62,092 from the California Air Resources Board (CARB). According to the grant agreement, the funds can be used to support the selection of locations, the deployment of community air monitoring systems, and the deployment of fence-line monitoring. It also allows for the development of an expedited schedule for best available control technology, best available retrofit control technology, and the development of Community Emissions Reduction Programs which includes, developing rules, staff support, collecting data and reporting. The signed Grant Agreement and Board Resolution were sent to CARB on April 20, 2018.

In November 2018, CARB amended the CAPP implementation grant to provide an additional \$35,000 to the District. The amendment to the CAPP Grant Agreement to accept this additional amount of funds was submitted to the District's Board of Directors for review and approval on February 14, 2019. The total amount of the CAPP grant award for the District is now \$97,092. In the same Board meeting, the District's Board of Directors also approved staff's proposal to use CAPP funds for the purchase of a portable E-BAM (a portable monitor for measuring PM

concentrations) and a cargo trailer for transporting the E-BAM and other air quality equipment. The purchase of a portable E-BAM air monitor and the cargo trailer will help build a monitoring platform that is part of the District's CAPP task outlined in this report (Task 5). The equipment will assist the District by providing mobility to its PM monitoring network in order to better assess community level emission impacts when they arise.

Task 2 – Hold a public meeting and conduct outreach for the program implementation. In its implementation of AB 617, CARB developed the "Draft Process and Criteria for 2018 Community Selection" outlining a process for identifying and recommending communities for inclusion in CAPP. Considering these criteria, the District recognized that certain neighborhoods within Roseville should be evaluated in order to be considered for future recommendation under the CAPP, due to their close proximity to both the Union Pacific Railroad (UPRR) Company's J.R. Davis Roseville Rail Yard (Rail Yard) and Interstate Highway 80 (I-80). Therefore On April 25, 2018, the District held an evening public meeting at Roseville City Hall to explain the CAPP, solicit ideas on potential emission reduction projects, and hear community concerns. The District posted to its website information on the meeting, as well as coordinated with the City of Roseville to also share the meeting information with neighborhood residents via their community outreach tools.

<u>Yard.</u> As mentioned in Task 2 above, one location that has come to the attention of the District is UPRR's Rail Yard due to its diesel emissions originating from locomotive activities. About the same time the CAPP was established, the District received several complaints from neighboring communities surrounding the Rail Yard. The complainants reported that diesel locomotives parked near the maintenance shop frequently emitted black smoke when the Rail Yard's staff conducted engine diagnostics. The challenge however, was that most of the complainants reported that the diesel engine smoke impacts were occurring at night. Due to the timing of the complaints received by the District, it was difficult to investigate and identify the sources of black smoke. Therefore, recognizing the communities' concerns, District staff worked with the CARB Enforcement Division and the City of Roseville in order to install a video surveillance system near the Rail Yard's maintenance shop to better confirm the complaints of excessive locomotive emissions.

The City of Roseville provided a city-owned property located near the Rail Yard's maintenance shop and CARB's Enforcement Division installed a surveillance system with a camera directly facing the maintenance yard. The video obtained from the surveillance system was designed to assist District staff in the investigation of potential diesel emissions being emitted by the locomotives. Unfortunately however, the surveillance system cannot provide real-time video or playback functionality. In order to be viewed, the hard drive, containing the video, needs to be

sent back to CARB. Due to this, the surveillance video isn't capable of assisting the District in providing a timely response to complainants. Now with the availability of CAPP funds, the District is consulting with vendors in order to identify a method for installing an advanced surveillance system which can remotely provide real-time video viewing and playback via a secured internet connection. This potential purchase could be accomplished in Fiscal Year (FY) 19-20.

<u>Task 4 – Engage CARB and UPRR regarding the possibility of updating the Roseville Rail Yard's Health Risk Assessment (HRA).</u> In addition to responding to recent local citizens' complaints, regarding potential diesel emissions from the Rail Yard, the District is also discussing with CARB and UPRR the possibility of updating the Rail Yard's HRA, which was completed by CARB in 2004. The 2004 HRA used the Rail Yard's activity data and operating practices during the 12-month period between December 1999 and November 2000 to estimate the diesel PM (particulate matter) emissions from locomotives. A dispersion modeling analysis was also conducted to assess long-term population exposure concentrations and related health risk to the surrounding areas.

The District believes that the results of the 2004 HRA are still informative but they may no longer be accurate. This is due to HRA modeling changes approved by the Office of Environmental Health Hazard Assessment since 2004, as well as changes to the type of locomotives and associated activities in use at the Rail Yard. The District is working with CARB and UPRR to discuss possible updates to the locomotive inventory, activity and emissions data so that an updated HRA may potentially be developed and used to provide a more relevant evaluation of risk around UPRR's Rail Yard. During the reporting period identified in this report, District staff conducted several meetings with CARB staff in person or by conference calls. As a result, several approaches for updating the Rail Yard's HRA were identified. UPRR is now evaluating these approaches with necessary data collected from the Rail Yard's operations and is supposed to get back to the District about their desired approach. The District will continue to pursue work on the HRA update with CARB and UPRR, during the next annual reporting period. The updated HRA will ultimately assist the District in better understanding the total health burden affecting local communities around the Rail Yard.

<u>Task 5 – Develop a community monitoring plan for the Roseville Rail Yard surrounding area.</u> In addition to exploring the possibility of an updated HRA, the District is working to develop a community monitoring plan to collect air quality data from the communities surrounding the Rail Yard. Between 2005 and 2008, the District conducted an air monitoring study to recognize air pollution impacts emanating from the Rail Yard. The study consisted of two upwind/downwind pairs of monitoring sites aligned as optimally as possible to wind direction across the Rail yard. The results of the study were used to recognize the performance of

proposed mitigation measures implemented by UPRR to reduce diesel emissions from the Rail Yard's activities.

Since the 2005 – 2008 timeframe, the locomotive inventory and the Rail Yard's activities have changed. These changes will therefore result in different exposure levels to diesel PM concentrations within the local communities when compared to monitoring data collected between 2005 and 2008. The District is therefore planning to purchase 10 to 12 low-cost PM monitors for deployment around the Yard in order to create a community monitoring network which can provide instant PM concentration measurements from the Rail Yard's activities. The data from these low-cost PM monitors can be used as an indicator how local PM concentrations could be affected by locomotive activities. This information can assist in the investigation of complaints and help to evaluate where additional robust monitoring instrumentation should be applied in the future. In addition to the low-cost monitoring network, the District is proposing to construct a mobile air monitoring platform, including a portable PM monitor and a trailer that can be quickly deployed to a site in a surrounding neighborhood to collect preliminary screening information and to respond to community concerns quickly.

<u>Task 6 – Engage the process of BARCT review and mandatory emission reporting regulation pursuant the AB 617 requirement.</u> AB 617 requires each air district that is in a nonattainment area for one or more air pollutants to review and if necessary, adopt an expedited schedule for implementation of best available retrofit control technology (BARCT) on specified facilities subject to CARB's Cap-and-Trade Program. Local air districts are required to adopt this schedule before January 1, 2019. Since the District is located in the Sacramento Federal Ozone Nonattainment Area and has one industry subject to the Cap-and-Trade program, District staff worked with CARB and the California Air Pollution Control Officer Association (CAPCOA) working group to evaluate the BARCT requirement under AB 617. Due to the group's work, CARB developed a list of entities that are subject to the BARCT provision of AB 617. There is no facility/entity in Placer County subject to the AB 617 BARCT requirement.

In addition to the BARCT requirement, AB 617 also requires CARB to establish a uniform statewide system for annual reporting of criteria pollutant and toxic air contaminants for stationary sources. District staff joined the CAPCOA working group with CARB staff to discuss possible emission data reporting approaches, including two District meetings with CARB staff to specifically discuss the District's approaches for the proposed emission data reporting regulation. Staff evaluated the proposed regulatory requirements and provided feedback to CARB staff. The proposed regulation was adopted by the CARB Board on December 14, 2018 and is now in the review of its draft 15-day regulatory revision. In the next reporting period, District staff is going to prepare the facility emission data for the 2019 reporting year that meets the regulatory requirement.

<u>CAPCOA</u>. To implement the CAPP, CARB and CAPCOA are working to create several working groups and advisory committees. The working groups will discuss ways to coordinate the development of guidance for community selection, BARCT review and implementation schedule, emission data collection and reporting, monitoring equipment recommendation, and funding allocations. District staff continues to participate in these groups and committees in order to assist characterizing the community specific air pollution challenges and to identify key components for community monitoring plans and emission reduction plans. Even though there is currently no community in Placer County being recommended and selected by CARB for the first year (2018) of the CAPP, District staff will continue to participate in these groups to acquire experience and knowledge from air district colleagues in order to respond to concerns from Placer's communities.

<u>Task 8 – Administer Program Implementation.</u> The grant agreement includes the administrative requirements for the program implementation. To satisfy these requirements, District staff needs to prepare the grant disbursement requests, track the program funding payments and earned interest, develop a program work plan and identify the program related tasks, coordinate the District's resources for the program implementation, prepare and submit the reports to CARB for program implementation. These are on-going efforts and continue annually through the end of the grant term or until all funds have been liquidated.

2. Summary of expenditure associated with each specific task

For the first annual reporting period, the District's expenditures were associated with the staff hours spent on task development and implementation. The following table summarizes the staff hours spent on each task and its associated costs.

Specific Task	Staff Hours	Costs
#1 Grant Agreement Approval	40	\$4,510
#2 Public Meeting and Outreach	23	\$2,437
#3 Surveillance Camera System at Rail Yard	23	\$2,922
#4 Rail Yard HRA Update	66	\$7,699
#5 Rail Yard Monitoring Plan	32	\$3,759
#6 BARCT Review and Emission Reporting Regulation	28	\$3,353
#7 Working Group Participation	64	\$8,671
#8 Program Administration	42	\$4,104
Total	318	\$37,455

3. Grant funds remaining

The District submitted a grant disbursement request of \$62,092 on May 1, 2018 and a grant disbursement request of \$35,000 on February 19, 2019. According to this annual report, associated program expenditures have so far totaled \$37,455. The current remaining balance for the program is therefore \$59,637. The following table summarizes this amount as of March 1, 2019.

FY 18-19 CAPP-23 Grant Funding Tracking		
grant award request (5/1/2018)	\$62,092	
grant award request (2/19/2019)	\$35,000	
program expenditure (3/1/2018~3/1/2019)	-\$37,455	
Remaining balance	\$59,637	

The District will continue to work on the above tasks to implement the program. During the next annual reporting period, possible program expenditures may include the cost of staff hours and proposed advanced surveillance camera system, monitoring platform, and low-cost monitors.