

**NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT**

**Headquarters**

**200 Litton Drive, Ste. 320**

**Grass Valley, CA 95945**

**(530) 274-9360/ FAX: (530) 274-7546**

**Gretchen G. Bennett, APCO**

**Northern Field Office**

**257 E. Sierra Street, Suite E**

**Portola, CA 96122**

**(530)832-0102 FAX:(530) 832-0101**

**NORTHERN SIERRA**  
**AIR QUALITY MANAGEMENT DISTRICT**  
**BOARD OF DIRECTORS**  
**REGULAR BOARD MEETING**

**MONDAY**

**September 23, 2019**

**1:00 p.m.**

NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT  
BOARD OF DIRECTORS REGULAR MEETING

September 23, 2019

1:00 p.m.

This meeting will be held by Video/Telephone Conference at the  
following locations:

(Site A) VIDEOCONFERENCE/TELEPHONE CONFERENCE

Northern Sierra Air Quality Management District (Headquarters)

200 Litton Drive, Conference Room 316

Grass Valley, California

(Site B) VIDEOCONFERENCE/TELEPHONE CONFERENCE

Northern Sierra Air Quality Management District (Northern Office)

257 E. Sierra Street, Unit E

Portola, California

All items on the agenda may be acted upon by the Board of Directors. No action will be taken nor discussion held at the meeting on business not appearing on the posted agenda.

---

- I. **Standing Orders:**
  - Call to Order.
  - Roll call and determination of quorum.
  
- II. **Public Comment:** For items **NOT** appearing on the agenda and within the jurisdiction of the Board. The public may comment on Agenda items as they are discussed.
  
- III. **Consent Calendar** These Items Are Expected to Be Routine and Noncontroversial. They Will Be Acted on By the Board at One Time Without Discussion. Any Board Member, Staff Member, or Interested Party May Request That an Item Be Removed From the Consent Calendar for Discussion.
  - A. Approval of regular meeting minutes – August 26, 2019 *Page 5*
  
- IV. **Administrative Report**
  - A. Discussion and Adoption of the AB2766 DMV Surcharge Proposals for 2019/2020 *Page 9*
  
- V. **Director's Report**
  - A. Status on Portola PM2.5 Nonattainment Area *Page 164*
  - B. Green Waste Disposal *Page 165*

**VI. Concerns of Board** - The Board may at this time bring up matters it wishes to discuss at the next Board Meeting, as long as no discussions are conducted and no actions are taken, in compliance with the Brown Act.

**VII. Schedule next Meeting** – October 28, 2019

**VIII. Adjournment**

**PERSONS DESIRING TO ADDRESS THE BOARD**

Meetings of the Board of Directors shall be conducted by the Chairperson in a manner consistent with the policies of the District. The latest edition of Robert's Rules of Order, Revised shall also be used as a general guideline for meeting protocol. District policies shall prevail whenever they are in conflict with Robert's Rules of Order, Revised. All Board meetings shall commence at the time stated on the agenda and shall be guided by same.

**PUBLIC COMMENT:**

Provisions for permitting any individual or group to address the Board concerning any item on the agenda of a special meeting, or to address the Board at a regular meeting on any subject that lies within the jurisdiction of the Board of Directors, shall be as follows:

Three (3) minutes may be allotted to each speaker and a maximum of fifteen (15) minutes to each subject matter;

No boisterous conduct shall be permitted at any Board meeting. Persistence in boisterous conduct shall be grounds for summary termination, by the Chairperson, of that person's privilege of address.

No oral presentation shall include charges or complaints against any District employee, regardless of whether or not the employee is identified in the presentation by name or by another reference which tends to identify. All charges or complaints against employees shall be submitted to the Board of Directors under provisions contained in District Policy 1030.

Willful disruption of any of the meetings of the Board of Directors shall not be permitted. If the Chairperson finds that there is in fact willful disruption of any meeting of the Board, he/she may order the room cleared and subsequently conduct the Board's business without the audience present. In such an event, only matters appearing on the agenda may be considered in such a session.

After clearing the room, the Chairperson may permit those persons who, in his/her opinion, were not responsible for the willful disruption to re-enter the meeting room.

Duly accredited representatives of the news media, whom the Chairperson finds not to have participated in the disruption, shall be admitted to the remainder of the meeting.

Members of the public are given the opportunity to address the Board of Directors directly at each teleconference location.

**POSTING AGENDA:**

This agenda was posted at least 72 hours prior to the regular meeting at the following locations: Eric Rood Government Center in Nevada City, The Plumas County Courthouse in Quincy, the Litton Building in Grass Valley, the Plumas County Board of Supervisors Chambers in Quincy, Sierra County Courthouse Square in Downieville. **The agenda and board packet are available on-line prior to the Board Meeting at [www.myairdistrict.com](http://www.myairdistrict.com)**

**To:** Northern Sierra Air Quality Management District Board of Directors

**From:** Gretchen Bennitt, Air Pollution Control Officer

**Date:** September 23, 2019

**Agenda Item:** III.A

**Agenda Description:** Approval of regular meeting minutes – August 26, 2019

**Requested Action:** The minutes are attached for Board comment/approval

**ROLL CALL VOTE REQUESTED**

**Attachments:**

1. August 26, 2019 Minutes

DISTRICT HEADQUARTERS

200 Lilion Drive, Suite 320

Mailing Address:

Grass Valley, CA 95945

(530) 274-9360 / FAX: (530) 274-7546

email: [office@myairdistrict.com](mailto:office@myairdistrict.com) or [www.myairdistrict.com](http://www.myairdistrict.com)

NORTHERN FIELD OFFICE

257 E. Sierra, Unit E

Mailing Address: P.O. Box 2227

Portola, CA 96122

(530) 832-0102 / FAX: (530) 832-0101

email: [Julie@myairdistrict.com](mailto:Julie@myairdistrict.com) or [www.myairdistrict.com](http://www.myairdistrict.com)

**MINUTES**

**NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT  
BOARD OF DIRECTORS REGULAR MEETING**

**August 26, 2019**

**1:00 p.m.**

**IN PERSON MEETING**

**Northern Sierra Air Quality Management District (Northern Office)**

**257 E. Sierra Street, Unit E**

**Portola, California**

**Members Present:**

**Supervisor Scofield, Chair  
Supervisor Anderson, Vice Chair  
Supervisor Roen  
Supervisor Huebner  
Supervisor Simpson  
Supervisor Thrall**

**Members Absent:**

**None**

**I. Standing Orders:**

**Call to Order. Roll Call and Determination of Quorum.**

Chair Scofield called the meeting to order at 1:01 P.M. A quorum was confirmed. Gretchen Bennitt, APCO; Julie Ruiz, APCSII, Melissa Klundby, APCSI, David Nicholas, APCSI were also in attendance.

**II. Public Comment: For Items NOT Appearing on the Agenda and Within the Jurisdiction of the Board. The Public May Comment on Agenda Items As They Are Discussed. Both Teleconference Sites are Allowed an Opportunity for Public Comment.**

Chair Scofield called for public comment, there were no public present.

**III. Consent Calendar** These Items Are Expected to Be Routine and Noncontroversial. They Will Be Acted on By the Board at One Time Without Discussion. Any Board Member, Staff Member, or Interested Party May Request That an Item Be Removed From the Consent Calendar for Discussion.

**A. Approval of regular meeting minutes – June 24, 2019**

6

There was a motion by Supervisor Anderson to approve the consent calendar. Supervisor Roen seconded the motion. The motion was approved.

#### **IV. Administrative Report**

##### **A. FY 2018-2019 End of Year Report and Proposed Final Budget Amendments to FY 2018-2019**

There was a motion by Supervisor Thrall to approve the District's FY 18-19 End of Year Report and the final budget amendments. Supervisor Roen seconded the motion. The motion was approved unanimously.

##### **B. Approval of the Term Renewal of Variance Hearing Board Member Greg Margason**

There was a motion by Supervisor Anderson to approve the renewal of term for Greg Margason from August 26, 2019 to August 26, 2022. Supervisor Roen seconded the motion. The motion was approved unanimously.

#### **V. Director's Report**

##### **A. Status on Portola PM2.5 Nonattainment Area**

Ms. Ruiz shared the latest woodstove replacements with the Board.

Ms. Bennitt discussed that the modification to the Portola Woodstove Ordinance was adopted by the City Council.

##### **B. California Air Resources Board's Truck and Bus Regulation**

Mr. Nicholas presented a powerpoint presentation to the Board the impacts of the California Air Resources Board's Truck and Bus Regulation on the Air District. The Board requested that the District research the individual trucks impacted by the regulation on the individual counties. Additionally, the Board requested contact information to request someone from CARB give presentations at each respective county.

##### **C. FY 19 Targeted Airshed Grant Program Eligible Federal Nonattainment Areas – Western Nevada County and Portola**

Ms. Bennitt discussed that Northern Sierra Air District has the distinction of TWO federal nonattainment areas that are eligible for an EPA Targeted Airshed Grant – both the Portola Federal PM2.5 Nonattainment Area (for the 4<sup>th</sup> year in a row!) and western Nevada County's Federal Ozone Nonattainment Area (first year). They are eligible since they are considered to be in the top five worst areas in the nation for their respective Air Quality Standards.

Ms. Bennitt reported that she has contacted the California Air Resources Board (CARB) and the local Nevada County Transportation Commission to submit a proposal for funding projects that will reduce vehicle emissions in western Nevada County.

The Board requested that Ms. Bennitt request that CARB assist in pursuing a grant for the Portola Nonattainment Area that will provide an alternative to the burning of green waste. Ms. Bennitt discussed that the District did pursue a grant in 2016 which would fund the purchase of a large scale yard waste grinder, but the grant did not succeed. The Board requested that she pursue a similar grant, since conditions have changed since 2016, specifically a new ordinance was adopted by the City of Portola to prohibit the open burning of green waste.

**VI. Concerns of the Board**

There were no concerns from the Board.

**VII. Schedule next Meeting** – Next meeting was scheduled for September 23, 2019 via video/telephone conference.

**VIII. Adjournment**

The meeting was adjourned at 2:15 P.M.



**To:** Northern Sierra Air Quality Management District Board of Directors  
**From:** Gretchen Bennitt, Air Pollution Control Officer  
**Date:** September 23, 2019

**Agenda Item: IV.A**

**Agenda Description:** Discussion and Adoption of the AB2766 DMV Surcharge Proposals for 2019/2020

**Issues:**

The District received the project proposals presented in the attachments. Project proponents were requested to attend today's meeting to respond to any questions from the Board.

Per the Request for Proposal adopted by the Board during the April 22, 2019 meeting, the following sunset criteria applies:

**SUNSETTING**

The sunseting criteria is designed to generate new, innovative proposals and discourage participant from considering AB2766 funds as a perpetual funding source for operating expenses. Projects that have received funding for **three years or more** fall under the sunseting category. These projects are only eligible for funds that remain after the District Governing Board approves non-sunseting projects. Projects that were subjected to the sunseting requirements the previous funding year may participant the following year as a regular project and will be evaluated as if it were a new project. Basically, the clock is reset and these projects have another three years before falling under the sunseting category.

**Requested Action:**

1. Listen to presentation from grantees, consider approval of proposals

**ROLL CALL VOTE REQUESTED**

**Attachments:**

1. Ranking and Discussion of FY 2019-2020 AB2766 Projects
2. Spreadsheet - AB2766 Available Funds 2019-2020 Cycle
3. Individual Project Proposals

## FY 2019-2020 AB 2766 Ranking and Discussion of Projects

District staff has evaluated all of the submitted projects.

- There is one applicant for the \$5,672 funds available for projects in Sierra County.
- There are nine applicants for the \$185,332 funds available for projects in Nevada County.
- There are two applicants for the \$70,683 funds available for projects in Plumas County.

All Projects listed below are ranked from high to low, based on scoring criteria outlined in the FY 2019-2020 Request for Proposals (RFP).

1. **Applicant:** Hansen Bros. Enterprise *Page 14*  
**County:** Nevada  
**Total AB 2766 Funding Request:** \$26,000.00  
**Co-Funding:** \$119,444.00  
**Cost Effectiveness:** \$10.50 per pound  
**Brief Summary:** Purchase of a new 2020 class 8 HHD truck to replace a 2003 class 8 truck.
2. **Applicant:** Sierra Commons *Page 26*  
**County:** Nevada  
**Total AB 2766 Funding Request:** \$24,000.00  
**Co-Funding:** \$16,555.00  
**Cost Effectiveness:** \$19.53 per pound  
**Brief Summary:** Funding for a telecommuting center with video conferencing and voice communication workstations for prospective telecommuting clients to utilize the center to negotiate remote working arrangements, tools and resources.
3. **Applicant:** Tahoe Truckee Unified School District *Page 40*  
**County:** Nevada  
**Total AB 2766 Funding Request:** \$165,000.00  
**Co-Funding:** \$24,090.78  
**Cost Effectiveness:** \$5.09 per pound  
**Brief Summary:** Replace a 1999 diesel school bus with a new bus that utilizes a NOx and PM emission control system.
4. **Applicant:** McGarr Excavation, Inc. *Page 58*  
**County:** Plumas  
**Total AB 2766 Funding Request:** \$70,000  
**Co-Funding:** \$65,000  
**Cost Effectiveness:** \$17.57 per pound

**Brief Summary:** Replace a 1998 Heavy Duty Class 8 truck with a new Peterbuilt 367 Truck that utilizes current clean emission standards; and removing of the existing dump box on the 1998 truck and installation on the new truck.

5. **Applicant:** Nevada County Health and Human Services Agency  
**County:** Nevada  
**Total AB 2766 Funding Request:** \$21,196.00 *Page 68*  
**Co-Funding:** \$8,804.00  
**Cost Effectiveness:** \$36.79 per pound  
**Brief Summary:** Upgrade the current County video conferencing equipment.
  
6. **Applicant:** Tahoe Truckee Unified School District  
**County:** Nevada *Page 80*  
**Total AB 2766 Funding Request:** \$120,000.00  
**Co-Funding:** \$25,770.90  
**Cost Effectiveness:** \$10.22 per pound  
**Brief Summary:** Replace a 1993 diesel special needs school bus with a new 2019 bus that utilizes a NOx and PM emission control technology.
  
7. **Applicant:** Incorporated Senior Citizens of Sierra County  
**County:** Sierra *Page 98*  
**Total AB 2766 Funding Request:** \$5,672.00  
**Co-Funding:** \$54,000.00  
**Cost Effectiveness:** \$30.93 per pound  
**Brief Summary:** Support for continued operations of the senior van pool services program which provides group transit services for disabled and/or senior residents of Sierra County. The Incorporated Senior Citizens of Sierra County have been awarded this grant for the last three years, so the sunseting criteria have been met.
  
8. **Applicant:** Sierra Commons  
**County:** Nevada *Page 110*  
**Total AB 2766 Funding Request:** \$26,000.00  
**Co-Funding:** \$9,240.00  
**Cost Effectiveness:** \$57.35  
**Brief Summary:** Funding for a full featured telecommuting response center that will feature a natural gas powered generator to give local small business the tools and resources needed to continue work and connectivity during intentional and unexpected power and internet outages.
  
9. **Applicant:** Plumas County Department of Public Works *Page 122*  
**County:** Plumas  
**Total AB 2766 Funding Request:** \$3,622.55  
**Co-Funding:** \$37,285.65

**Cost Effectiveness:** \$99.99 per pound

**Brief Summary:** Purchase and installation of two Diesel particulate filters on two 1996 Freightliner trucks.

**10. Applicant:** Sierra Senior Services

**County:** Nevada

*Page 132*

**Total AB 2766 Funding Request:** \$37,000.00

**Co-Funding:** \$15,000.00

**Cost Effectiveness:** \$99.63 per pound

**Brief Summary:** Purchase a zero emission Vehicle to replace a gas powered 2004 Honda Pilot, used for the delivery of Meals on Wheels to homebound seniors.

**11. Applicant:** Fire Safe Council of Nevada County

**County:** Nevada

*Page 144*

**Total AB 2766 Funding Request:** \$45,000.00

**Co-Funding:** \$10,000.00

**Cost Effectiveness:** \$86.39 per pound

**Brief Summary:** Purchase of a new Tesla zero emissions vehicle to replace a 2006 Toyota Highlander, hybrid vehicle.

**12. Applicant:** Bear Yuba Land Trust

**County:** Nevada

*Page 152*

**Total AB 2766 Funding Request:** \$15,000.00

**Co-Funding:** \$15,000.00

**Cost Effectiveness:** \$41.84 per pound

**Brief Summary:** Building of a short trail to connect Bragg Avenue and Carol and Davis Drive for non-motorized use.

# RFPs Submitted for Grant Cycle Year 2020

13

County	Applicant	Project Description	Ranking (100 pts Max.)	Requested Grant Amount	Co-Funding by Applicant	Cost Effectiveness Score	Emissions Reduced (lbs)
Nevada	Hansen Bros. Enterprises	Purchase of cleaner diesel truck	94	\$ 26,000.00	\$ 119,444.00	5 year project life: \$ 10.50 per pound	545
Nevada	Sierra Commons	Purchase and installation of telecommuting equipment	90	\$ 24,000.00	\$ 16,555.00	10 year project life: \$ 19.53 per pound	148
Nevada	Tahoe Truckee Unified School District	Replace older school bus with a new low NOx bus	85	\$ 165,000.00	\$ 24,090.78	15 year project life: \$ 5.09 per pound	2591
Nevada	Nevada County Health & Human Services	Upgrade of existing Video Conferencing System	84	\$ 21,196.00	\$ 8,804.00	5 year project life: \$ 36.79 per pound	127
Nevada	Tahoe Truckee Unified School District	Replace older school bus for special needs kids with a new low NOx bus	81	\$ 120,000.00	\$ 25,770.90	15 year project life: \$ 10.22 per pound	939
Nevada	Sierra Commons	Purchase and installation of a natural gas powered generator for a business critical response center	74	\$ 26,000.00	\$ 9,240.00	10 year project life: \$ 57.35 per pound	54
Nevada	Sierra Senior Services, Truckee	Purchase of an Electric Vehicle	61	\$ 37,000.00	\$ 15,000.00	10 year project life: \$ 99.63 per pound	46
Nevada	Fire Safe Council of Nevada County	Purchase of a Tesla EV	57	\$ 45,000.00	\$ 10,000.00	10 year project life: \$ 86.39 per pound	63
Nevada	Bear Yuba Land Trust	Construction of a public trail	55	\$ 15,000.00	\$ 15,000.00	5 year project life: \$ 41.84 per pound	25

Total of Requested Grant Amounts: \$ 479,196.00      Amount available for Disbursement: \$185,332

Sierra	Inc. Senior Citizens of Sierra County	Subsidized van pool services for senior citizens	76	\$ 5,721.00	\$ 54,000.00	1 year project life: \$ 30.93 per pound	177
--------	---------------------------------------	--	----	-------------	--------------	---	-----

Total of Requested Grant Amounts: \$ 5,721.00      Amount available for Disbursement: \$ 5,672.00

Plumas	McGarr Excavation, Inc.	Purchase of cleaner diesel truck	85	\$ 70,000.00	\$ 65,000.00	10 year project life: \$ 17.57 per pound	877
Plumas	Plumas County Dept of Public Works	Purchase of two diesel particulate filters	67	\$ 3,622.55	\$ 37,285.65	10 year project life: \$ 99.99 per pound	4

Total of Requested Grant Amounts: \$ 73,622.55      Amount available for Disbursement: \$70,683

## EXHIBIT SUMMARY SHEET

Proposing Entity (Include other participating entities): **Hansen Bros. Enterprises**

Contact Person: **Lerry Peterson**

Address: **P.O. Box 1599 (11727 La Barr Meadows Rd.) Grass Valley, CA 95945**

Phone #: **(530) 273-3381** FAX #: **(530) 273-4396** EMAIL: **lpeterson@gohbe.com**

Total Project Budget:	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	<u>\$26,000.00</u>	<u>\$ 119,444.00</u>	<u>\$ 145,444.00</u>
Operating Costs	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>
<b>TOTAL</b>	<u><b>\$ 26,000.00</b></u>	<u><b>\$ 119,444.00</b></u>	<u><b>\$ 145,444.00</b></u>

Type of Project: (check one)

Quantifiable Project

Reduced Emission Vehicles Project

Implementation Area for Project: Check if District-wide

Describe the Implementation Area for the Project (e.g. city, county, region):

Estimated Emission Reductions:

A. Emission Reductions (lbs/yr) 522

Reactive Organic Gases 20 Nitrogen Oxides 486 PM10 16

B. Vehicle Miles Traveled (VMT) Reduced \_\_\_\_\_

Single Occupancy Vehicle Trips Reduced \_\_\_\_\_

C. Number of people reached per day through public education \_\_\_\_\_

Cost-effectiveness: \$ 49.61 per pound (AB 2766 Funds Only)

**Brief Project Description: To improve air quality by purchasing a new 2020 class 8 HHD truck to replace a 2003 class 8 truck.**

# REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: Hansen Bros. Enterprises

Please complete and attach this checklist with your application.

Exhibit Summary Sheet - page 1-1

Request for Proposal Contents Checklist - page 2-1

Authorization Letter/Resolution - page 3

Project Description - page 4

Project Organization/Background - page 5

Emissions Benefits/Cost-Effectiveness - page 6

Work Statement - page 7

Funding Request/Breakdown of Cost - page 8

Schedule of Deliverables/Monitoring - page 9

All Pages Numbered

3 Copies of Proposal, One Original, (X emailed)

(CHECK ONE ONLY)  
Quantifiable Project

- OR -

Reduced Emission Vehicles Project

GENERAL ENGINEERING CONTRACTOR  
CSL# 207705  
Residential & Commercial Site Development  
Quality Aggregates & Ready Mixed Concrete  
HBE Equipment Rentals • Sales • Service  
Landscape & Masonry Products  
U-Call Concrete



Grass Valley: (530) 273-3381 - All Services  
(530) 273-3100 - Rental Yard  
(530) 272-5401 - Main Office Fax  
Colfax: (530) 346-2432 - Ready Mix Concrete  
(530) 346-8174 - Landscape/Masonry Yard  
(530) 346-8798 - Main Office Fax  
[www.gohbe.com](http://www.gohbe.com)

December 27, 2018

To Whom It May Concern:

At a regularly scheduled Board of Directors meeting, December 27, 2018, the board restated the resolution of the board authorizing any and all of the corporate officers of Hansen Bros. Enterprises to conduct all normal business of the corporation, including, but not limited to, banking and financial transactions, securing of operating capital, equipment purchases, equipment loans, acquisitions or disposal of businesses, property, land, line(s) of credit, real estate transactions, insurance, bonding and other business of the corporation.

Duly elected officers of the corporation are:

Jeffery I. Hansen	President and General Manager
Sue H. Peterson	Corporate Secretary and Vice President
Frank P. Bennalack	Corporate Treasurer and Vice President
Lerry D. Peterson	Vice President, Special Projects
Craig I. Arthur	Rental Manager and Vice President
Helen Hansen	Cash Manager and Vice President
Kirk C. Harris	Construction Manager and Vice President

These officers, any and all, are hereby directed to conduct the business of the corporation of Hansen Bros. Enterprises.

Sincerely,

*Sue H. Peterson*

Sue H. Peterson  
Corporate Secretary  
Hansen Bros. Enterprises  
[speterson@gohbe.com](mailto:speterson@gohbe.com)

Page-3



## **Project Description**

**Applicant:** Hansen Bros. Enterprises

**Objectives:**

- To improve air quality by Purchasing a new 2020 class 8 HHD truck to replace a 2003 class 8 truck which ran an average of 10,535 miles in 2017 and 2018;
- The 2003 truck will then be sold out of state or retired and rendered inoperable.

**Scope:**

1. Write specifications for the purchase of a new 2020 Concrete Ready Mix truck.
2. Request bids for the purchase of the new 2020 class 8 HHD truck.
3. Order the above mentioned 2020 truck that meets the specifications and has the most competitive responsible quote.
4. Take delivery of the new truck.
5. Remove the mixer unit from the 2003 truck and install that mixer unit on the new 2020 truck.
6. Sell the 2003 truck out of state before the end of 2020 and provide proof of purchase from an out of state purchaser to NSAQMD OR
7. Retire and render the 2003 truck inoperable, with no chance of repair, by breaking a hole in the engine block and cutting the frame off just behind the cab. Photos will be provided to NSAQMD.
8. The odometer readings for the new 2020 truck will be recorded annually through the company's computerized program to calculate cost effectiveness of AB2766 DMV surcharge program.

## **Work Statement**

**Applicant:** Hansen Bros. Enterprises

January 7, 2019: Review final quotes on new 2018 class 8 truck. Order the truck from the lowest responsible dealer offering the complete package as specified.

+ June 3, 2019: Take delivery on the new class 8 truck.

+ June 4, 2019: Start removing the mixer unit from the 1998 truck, rebuild the unit and install the mixer unit on the new 2018 truck.

+ June 5, 2019: Log the beginning odometer readings on work orders so the tracking of miles driven, can be recorded in our computer Equipment Management module for Emission Cost-Effectiveness Calculations.

+ June 6, 2019: Send a Monitoring Report and a Claim for Payment, along with a copy of the truck dealer's invoice to NSAQMD.

+ June 10, 2019: Install decals stating: "This low emissions truck was partially funded by NSAQMD utilizing DMV Surcharge Funds to improve local air quality".

Each January from January 2020 to January 2023 send a Monitoring report to NSAQMD.

June 10, 2024 send Final Report to NSAQMD to close out the contract.

## Project Organization/Background

**Applicant:** Hansen Bros. Enterprises

**Organization:** Hansen Bros. Enterprises started business in 1953 and is a General Engineering Contractor, CSL 207705, producer of aggregate materials, ready mix concrete, a landscape and masonry materials supplier and operates 2 equipment rental yards.

At present time Hansen Bros. has approximately 105 employees, operates 46 Heavy Duty Diesel trucks and 85 Diesel Off-Road pieces of heavy equipment. Operations are seasonal.

### **Background (Air Quality Improvements):**

**AB 2766 and AB 923 with PCAPCD, 2011:** Repower with a tier 3 engine in a 1999 John Deere 544H loader. Provider and installing subcontractor: Pape Equipment, the Sacramento John Deere dealer. PCAPCD contact: Heather Kuklo at 530-745-2339.

**Hansen Bros. Enterprises funded, 2011:** Installations of Cleaire Longmile, Diesel Particulate Filters, on 4 class 8 trucks. Provider and installer: Cummins West of Sacramento and A-Z Bus Sales Emissions Solutions Group, installed 2 units each.

**Carl Moyer funded programs with NSAQMD, 2008, 2012 and 2014:** Repowers of new tier 3 engines on 1976, 1978 and 1979 Caterpillar 633D scrapers. Provider and installing subcontractor: Holt of California, the Sacramento Caterpillar dealer.

**AB 2766 DMV Surcharge Fund Program with NSAQMD, 2012:** Cleaire Longmile Diesel Particulate Filters installed on 4 more trucks. Provider and installer: A-Z Bus Sales Emissions Solutions Group of Sacramento, California.

**AB 2766 DMV Surcharge Fund Program with NSAQMD, 2013:** Purchase of 2014 Class 8 Diesel Truck. Provider: Nor-Cal Kenworth, Sacramento, California.

**AB 2766 DMV Surcharge Fund Program with NSAQMD, 2014:** Purchase of 2015 Class 8 Diesel Truck. Provider: Nor-Cal Kenworth, Sacramento, California.

**AB 2766 DMV Surcharge Fund Program with NSAQMD, 2015:** Purchase of 2016 Class 6 Diesel Truck. Provider: Nor-Cal Kenworth, Sacramento, California.

**AB 2766 DMV Surcharge Fund Program with NSAQMD, 2017:** Replace 7 ea. recalled Cleaire Longmile Diesel Particulate filters, by Holt of California, Sacramento, CA.

Hansen Bros. Enterprises tracks all costs and progress daily with Viewpoint Construction Software, Equipment Management module. Work Orders are assigned for maintenance, repairs and subcontract work. Mileage and hours of trucks and equipment are logged and entered into the computer on a reoccurring basis, so we can track both cost efficiency and emissions reductions.

Preparation and management of this project will be handled by Lerry Peterson, Vice President, Special Projects.

The worksheet calculator used in preparing estimates of emissions reductions for the proposal and reporting is provided by NSAQMD, entitled "Emissions Reduction and Cost Effectiveness Spreadsheet Calculator", and may be found on page T2 of the Technical Appendix.

## **Emission Benefits/Cost Effectiveness**

**Applicant:** Hansen Bros. Enterprises

**Emission Benefits:**

Project life:	5 years
Annual ROG reductions:	20 lbs./year
Annual NOx reductions:	486 lbs./year
Annual PM10 reductions:	16 lbs./year
Total project ROG reductions:	100 lbs. over 5-year period
Total project NOx reductions:	2430 lbs. over 5-year period
Total project PM10 reductions:	80 lbs. over 5-year period
Annual Vehicle Miles Traveled (VMT) 2017-18	10,535 miles/year.
Total project cost:	\$145,444.00
AB 2766 cost: 18%	\$26,000.00
Total project cost-effectiveness:	\$55.73 \$/lb.
AB 2766 cost-effectiveness:	\$49.81 \$/lb.

The above information is based on the Truck mileage odometer readings attached as page T1 and Emission Reduction and Cost Effectiveness spreadsheet calculator attached page T2 and Emission-Factor tables-March-2018.

## **Work Statement**

### **Applicant Hansen Bros. Enterprises**

January 6, 2020: Review final quotes on new 2020 class 8 truck. Order the truck from the lowest responsible dealer offering the complete package as specified.

+ June 2, 2020: Take delivery on the new class 8 truck.

+ June 3, 2020: Start removing the mixer unit from the 2003 truck, rebuild the unit and install the mixer unit on the new 2020 truck.

+ June 5, 2020: Log the beginning odometer readings on work orders so the tracking of miles driven, can be recorded in our computer Equipment Management module for Emission Cost-Effectiveness Calculations.

+ June 8, 2020: Send a Monitoring Report and a Claim for Payment, along with a copy of the truck dealer's invoice to NSAQMD.

+ June 12, 2020: Install decals stating: "This low emissions truck was partially funded by NSAQMD utilizing DMV Surcharge Funds to improve local air quality".

Each January from January 2021 to January 2023 send a Monitoring report to NSAQMD.

June 10, 2023 send Final Report to NSAQMD to close out the contract.

### Funding Request/Breakdown of Cost

Applicant: Hansen Bros. Enterprises

Task	AB 2766 Cost	HBE Cost	Total Cost
Purchase new 2020 Class 8 Truck:	\$26,000.00	\$119,444.00	\$145,444.00
Grand Total Direct Cost*:	\$26,000.00	\$119,444.00	\$145,444.00

\*Planning, monitoring, management, miscellaneous, removal/reinstall mixer units, operating and administrative costs will be paid separately by Hansen Bros. Enterprises and are not included in the "Grand Total Direct Cost."

This project will be monitored using our computer Equipment Management module for tracking annual mileage on each truck and using the Emission Reduction and Cost Effectiveness, located in the Technical Appendix, page T2, and the Emission-Factor-Tables-March-2018.

## **Schedule of Deliverables/Monitoring Program**

**Applicant:** Hansen Bros. Enterprises

For the purposes of this project, we will be collecting data (mileage) for the 2020 truck, partially funded by AB2766 funds, upon delivery and at the end of the 2<sup>nd</sup> and 4<sup>th</sup> quarters. The 4<sup>th</sup> quarter reading is also the annual mileage reading. This mileage data will be plugged into the Emission Reduction and Cost Effectiveness Spreadsheet Calculator, to determine the cost-effectiveness of funding this air quality project.

### **Schedule:**

+/- June 5, 2020: Log the beginning odometer readings for the new 2020 truck on work orders so the tracking of miles driven can be recorded in our computer Equipment Management module for Emission Cost-Effectiveness Calculations and project Monitoring Reports.

+/- June 8, 2020: Provide NSAQMD with the first Monitoring Report to establish the beginning miles.

Each January from January 2021 to January 2023 provide NSAQMD with the annual Monitoring Report.

June 2023: Provide NSAQMD with the Final Report.

Truck #	Description	OD reading 2015	Total miles 2015	OD reading 2016	Total miles 2016	OD reading 2017	Total miles 2017	OD reading 2018	Total miles 2018
TR228	TRUCK, Meter 6 c.y. MW	187233	13526	201399	14168	212486	11087	222470	9554





# EXHIBIT SUMMARY SHEET

## Sierra Commons Remote Working Center

**Proposing Entity:** Sierra Commons

**Contact Person:** Robert X Trent

**Address:** 792 A Searls Ave., Nevada City, CA 95959

**Phone #:** (530) 265-8443    **FAX #:** NA    **EMAIL:** info@sierracommons.org

### Total Project Budget:

	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	\$24,000	\$9,855	\$33,855
Operating Costs	\$0	\$6,700	\$6,700
<b>TOTAL</b>	<b>\$24,000</b>	<b>\$16,555</b>	<b>\$40,555</b>

### Type of Project: (check one)

- Quantifiable Project  
 Reduced Emission Vehicles Project

### Implementation Area for Project: Check if District-wide

Describe the implementation Area for the Project (e.g. city, county, region): The greater Nevada City and Grass Valley areas

### Estimated Emission Reductions:

#### A. Emission Reductions (lbs/yr)

Reactive Organic Gases 58.03 Nitrogen Oxides 64.25 PM10 25.22

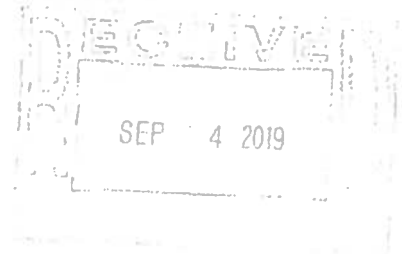
#### B. Vehicle Miles Traveled (VMT) Reduced 131,544

Single Occupancy Vehicle Trips Reduced 1,044

#### C. Number of people reached per day through public education .33

**Cost-effectiveness: \$19.53 per pound (AB 2766 Funds Only)**

**Brief Project Description:** A full-featured telecommuting center with videoconferencing and voice communication workstations. Public education provides prospective telecommuters tools to successfully negotiate remote working arrangements with out-of-area employers.



26

# REQUEST FOR PROPOSAL CONTENTS CHECKLIST

**Applicant: Sierra Commons**

Please complete and attach this checklist with your application.

- ✓ Exhibit Summary Sheet - page 1
- ✓ Request for Proposal Contents Checklist - page 2
- ✓ Authorization Letter/Resolution - page 3
- ✓ Project Description – page 4
- ✓ Project Organization/Background – page 5
- ✓ Emissions Benefits/Cost-Effectiveness - page 6
- ✓ Work Statement - page 7
- ✓ Funding Request/Breakdown of Cost - page 8
- ✓ Schedule of Deliverables/Monitoring - page 11
- ✓ All Pages Numbered
- ✓ Proposal, One Original
- ✓ (CHECK ONE ONLY) Quantifiable Project

- OR -

**Reduced Emission Vehicles Project**



## AB 27766 Authorization Letter

Sierra Commons  
792 A Searls Ave.  
Nevada City, CA  
95959  
(530) 265-8443  
info@sierracommons.org

To whom it may concern,

This authorization letter serves as consent and approval from the Sierra Commons board of directors to submit grant applications for the AB 2766 DMV Surcharge Fund Program - grant year 2020.

If you have any questions, please do not hesitate to contact Robert Trent or Sierra Commons' Board Treasurer, Joshua Robinson.

Best regards,

Joshua Robinson  
Treasurer  
Sierra Commons Board of Directors  
[JoshuaRobinson@tcbk.com](mailto:JoshuaRobinson@tcbk.com)  
(530) 478-6001

Project Manager Contact: Robert Trent

# Project Description

This project will help transition traditional Nevada County commuters into telecommuters and support them by providing four dedicated telecommuting workstations located at Sierra Commons.

For the past decade, Sierra Commons has been serving Western Nevada County's small businesses with office infrastructure, education, and mentoring. Our community relies on us for dependable Internet connectivity and a productive work environment. Our facility is optimized for solopreneurs and remote workers who complete their day-to-day work with limited verbal conversations. Unfortunately, our facility is not currently designed to support people who are heavy phone or videoconferencing users.

By converting a currently underutilized area at Sierra Commons into a dedicated telecommuting workspace, we will help reduce emission, improve our economy by helping keep local dollars circulating locally, and support a healthier lifestyle for people using the Remote Working Center.

Educating traditional commuters on the benefits of telecommuting and providing them with motivation and the resources to approach their employers with a telecommuting proposal is also a critical aspect of this project.

The key components of the Remote Working Center are:

- Facilities upgrades
- Providing telecommuting technologies
- Creating an ergonomic and modern telecommuting office environment
- Training out-of-area commuters how to develop and deliver telecommuting proposals
- And public outreach

In addition to the key components listed above, the project will require project management, planning, curriculum development, data collection, and evaluation.

## **Project Organization/Background**

**Founded in 2009, Sierra Commons is a 501(c)(3) business education center, located in Nevada City. Sierra Commons provides a platform for local businesses to start, grow and thrive. The organization has been instrumental in launching and reigniting over 150 local businesses and our partnership with the Sierra Small Business Development Center is extending this positive impact by providing free one-to-one business consulting with local entrepreneurs and small businesses.**

**Our ADA accessible campus includes a 1,700 square foot main building that features coworking spaces, meeting rooms, and office administration. The secondary building holds up to thirty people and serves as a classroom, coworking space, and meeting space. Surrounding these buildings are a large patio, shaded lawns, and 12 parking spaces. Typically, approximately 30 on-street parking spaces are also available on Searls Avenue.**

**Successful execution of this project involves collaboration between Sierra Commons' leadership team, 20 + members, and professional contractors. Sierra Commons' Board and select coworking members, including an experienced architect and Building Information Modeler (BIM) contractor will support the project. Project contractors will be selected based on competitive pricing, experience, licensing, insurance, availability and reputation.**

**Robert Trent, Sierra Commons Executive Director, and Joe Fish of the Northern Sierra Air Quality Management District (District) have worked together to validate the methodology for generating emissions reductions estimates for this proposal and how to prepare accurate reporting as part of the requirements of this project. Sierra Commons will use our existing project accounting systems and professional bookkeeping service, Accountability Pro Inc., to track expenses and funding sources, as well as completing project financial reports.**

## Emissions Benefits/Cost-Effectiveness

In 2020 there are ~252 workdays. Up to 11,400 people will commute outside of Nevada County—racking up a median 63 one-way miles commuted to the top three out-county destinations (2016 statistics). This project will help reduce miles traveled and emissions in Nevada County while improving everyone's quality of life. Our reductions calculations are based on a conservative estimate of transitioning the equivalent of four full-time commuters into remote workers. Usage scenarios will most likely involve a larger number of participants with varying weekly schedules.

Estimated one-way vehicle trip reductions: 1044 one-way trips per year

Estimated reductions in vehicle miles traveled: 131,544 Miles

### Estimated emission reductions and cost-effectiveness:

Nitrogen Oxides (NOx)	<u>64.25</u> Pounds/year
Reactive Organic gases (ROG)	<u>58.03</u> Pounds/year
Particulate Matter (PM2.5)	<u>25.22</u> Pounds/year
Cost-Effectiveness:	<u>19.53</u> Cost/pound

# Work Statement

The scope of work falls under five categories: Planning, Building, Education, Outreach, and Evaluation. Once funding is secured and planning is complete, the building phase will bring building improvements, and technology and infrastructure will be purchased and put into place. Using well-established communication channels, Sierra Commons will develop and execute an outreach plan raising awareness about the availability of our Remote Working Center and free-to-the-public telecommuter classes. Use of the center will be tracked continually and effectiveness will be monitored through surveys and interviews.

## Project Phases

### Planning

1. End-user needs analysis including interviews and surveys
2. Usage scenarios identified
3. Technology analysis with emphasis on videoconferencing
4. Office design for optimal ergonomics and functionality
5. Safety and security plan
6. Permitting (as needed)
7. Detailed build-out schedule
8. Integrated outreach plan
9. Data tracking and evaluation plan
10. End-user policies and agreements
11. Contractor and supplies sourcing/bidding
12. Contractor agreements secured

### Building

1. Building supplies/technology/furniture purchases
2. Building modifications as needed
3. Testing equipment
4. Staff training
5. Soft launch

### Education

1. Develop curriculum
2. Add resources to sierracommons.org
3. Conduct trainings (2 minimum)
4. Update curriculum as needed

### Outreach

1. Execute integrated outreach plan including:
  - a. Social/Broadcast/Print media
  - b. 211 and calendar listings
  - c. Speaking opportunities
  - d. Email newsletters
  - e. Signage including DMV logo
2. Create and publish user documentation and policies
3. Update sierracommons.org website
4. Project Launch/project funding acknowledgement

### Evaluation

1. Track usage data
2. Track emissions reduction data
3. Generate and publish reports
4. Maintain and improve systems as necessary



# Funding Request/Breakdown of Cost

AB 2766 funds will be used to make building improvements, purchase and activate telecommuting technology, purchase and create a welcoming and functional office environment, develop and deliver educational contents, and fund a public awareness campaign. Sierra Commons will cover all operational costs for this project.

BUDGET	AB 2766	Matching Funds		Administration	Cost
		Sierra Commons Co-Funding	In-Kind		
<b>PLANNING</b>					
Project Management	\$3,500	\$1,000			\$4,500
Legal			\$1,000		\$1,000
printing		\$100		\$35	\$135
Planning Subtotal	\$3,500	\$1,100	\$1,000	\$35	\$5,635
<b>BUILDING</b>					
Project Management	\$1,050				\$1,050
Contractors	\$3,050		\$2,500		\$5,550
Building supplies	\$4,000		\$1,700		\$5,700
Technology	\$3,450	\$300	\$150		\$3,900
Office	\$4,000		\$200		\$4,200
Building Subtotal	\$15,550	\$300	\$4,550	\$0	\$20,400
<b>EDUCATION</b>					
Project Management	\$600				\$600
Curriculum Development	\$600				\$600
Instruction	\$600				\$600
Contingency	\$250				\$250
Education Subtotal	\$2,050	\$0	\$0	\$0	\$2,050
<b>OUTREACH</b>					
Outreach Coordinator	\$2,250		\$1,500		\$3,750
Signage	\$250		\$200	\$35	\$485
Public event		\$200		\$200	\$400
Outreach Subtotal	\$2,500	\$200	\$1,700	\$235	\$4,635
<b>EVALUATION</b>					
Project Management	\$350				\$350
Bookkeeping		\$400		\$300	\$700
Printing	\$50			\$35	\$85
Evaluation Subtotal	\$400	\$400	\$0	\$335	\$1,135
<b>BUDGET TOTAL</b>	<b>\$24,000</b>	<b>\$2,000</b>	<b>\$7,250</b>	<b>\$605</b>	<b>\$33,855</b>

33

EQUIPMENT COSTS	AB 2766	Matching Funds		Administration	Cost
		Sierra Commons Co-Funding	In-Kind		
<b>TECHNOLOGY</b>					
MF laser Printer	\$300				\$300
Router	\$200				\$200
Charging stations	\$100				\$100
VPN (virtual private network)	\$100				\$100
Microphones			\$150		\$150
Headsets	\$200				\$200
Video monitors	\$800				\$800
Cabling	\$100				\$100
Projector	\$450				\$450
Digital whiteboard	\$200				\$200
Video cameras	\$400				\$400
Access control	\$600		\$600		\$1,200
<b>Technology Subtotal</b>	<b>\$3,450</b>		<b>\$150</b>	<b>\$0</b>	<b>\$3,600</b>
<b>OFFICE</b>					
Desks	\$1,350				\$1,350
Mobile dividers	\$1,150				\$1,150
Chairs	\$800				\$800
Sound baffels	\$400				\$400
Secured storage	\$200		\$200		\$400
Whiteboard	\$100				\$100
<b>Office Subtotal</b>	<b>\$4,000</b>		<b>\$200</b>	<b>\$0</b>	<b>\$4,200</b>
<b>BUILDING</b>					
Insulation/Ceiling	\$800		\$300		\$1,100
Heating/cooling	\$300				\$300
Lighting	\$500				\$500
Dry Wall	\$400				\$400
Reclaimed wood	\$400		\$400		\$800
Electrical	\$250		\$250		\$500
Security	\$500				\$500
Floor/carpeting	\$900		\$500		\$1,400
Paint	\$200				\$200
Plumbing	\$200				\$200
Hardware	\$250		\$250		\$500
Demo/disposal	\$300				\$300
<b>Building Subtotal</b>	<b>\$3,900</b>		<b>\$1,700</b>		<b>\$5,600</b>
<b>Equipment Total</b>	<b>\$11,350</b>		<b>\$3,400</b>	<b>\$0</b>	<b>\$14,750</b>

34

OPERATING COSTS	Matching Funds			
	AB 2766	Sierra Commons Co-Funding	In-Kind	Administration
Staffing	\$0	\$2,000	\$1,500	\$1,800
Added utilities costs	\$0	\$1,200		\$200

35

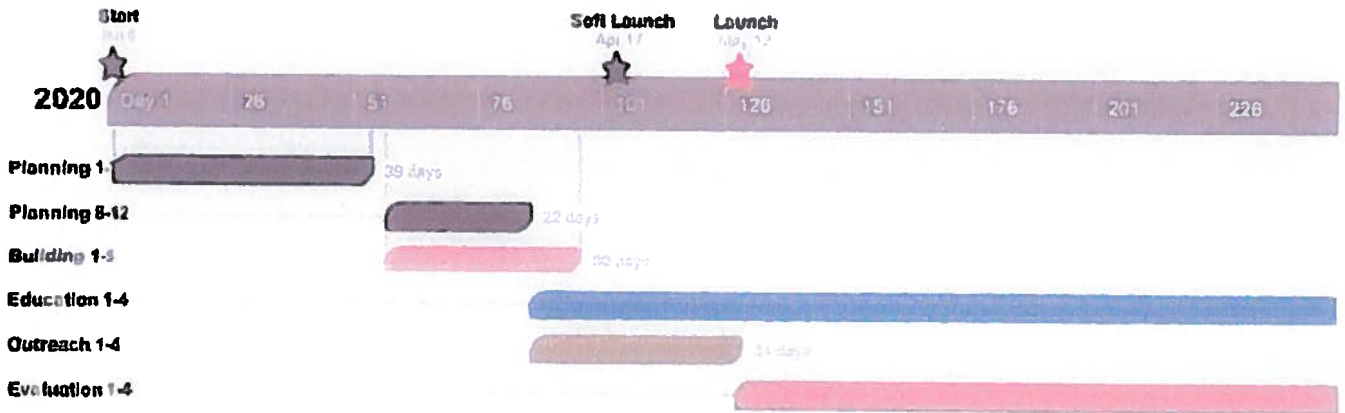
# Schedule of Deliverables/Monitoring

## Schedule of Deliverables

Please reference Work Statement on Page 7 for a listing of project tasks and subtasks.



## Sierra Commons Remote Working Center



Sierra Commons

9/03/2019

## Monitoring

All individuals using the Remote Working Center will be required to sign-in to the facility, provide contact information, and fill out a brief online survey. The survey may include, but is not limited to, the following questions:

1. How many miles did you travel to Sierra Commons?
2. Which mode of transportation did you use to get here?
3. Did you travel here by yourself?
4. Did Sierra Commons help you transition from traditional commuting to telecommuting?  
If "yes"
  - a. How many miles were you driving to work per day?
  - b. How many days per week were you driving to work?

Survey data will automatically become entered into our data analysis software to ensure accurate tracking and reporting.

A follow up survey will solicit user feedback on the Remote Working Center's ability to provide telecommuting services.

## **ATTACHMENT 1**

### **Sierra Commons Board of Directors**

The Board of Directors at Sierra Commons includes dedicated individuals from a wide variety of business backgrounds and skills.

**Chair - Evelyn Fasset**

**SBDC Business Consultant and Technology Specialist**

**Secretary - Erika Kosina**

**Media and Communication Specialist**

**Treasurer - Joshua Robinson**

**Tri Counties Bank Branch Manager - Nevada City**

**Director- Adam Dunn**

**Community Builder/Social Innovation Educator/Impact Investment Consultant**

**Executive Director - Robert X Trent**

**Business Consultant and Serial Entrepreneur**



**EXHIBIT SUMMARY SHEET**

**Proposing Entity (include other participating entities): Tahoe Truckee Unified School District**

**Contact Person: Tony Lavezzo**

**Address: 12485 Joerger Dr., Truckee, CA 96161**

**Phone #: (530) 550-0776**

**FAX #: (530) 550-0739**

**EMAIL: tlavezzo@ttusd.org**

**Total Project Budget:**

	<b>AB 2766 Funds</b>	<b>Co-Funding</b>	<b>Total Project Costs</b>
Capital Costs	<u>\$ 165,000.00</u>	<u>\$ 24,090.48</u>	<u>\$ 189,090.78</u>
Operating Costs	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>
<b>TOTAL</b>	<u><b>\$ 165,000.00</b></u>	<u><b>\$ 24,090.48</b></u>	<u><b>\$ 189,090.78</b></u>

**Type of Project: (check one)**

- Quantifiable Project
- Reduced Emission Vehicles Project

**Implementation Area for Project:** Check if District-wide

**Describe the Implementation Area for the Project (e.g. city, county, region):** Bus will be operated in the Town of Truckee, Nevada County and the surrounding area.

**Estimated Emission Reductions:**

- A. Emission Reductions (lbs. /yr.)
  - Reactive Organic Gases 634.44 Nitrogen Oxides 1907.95 PM<sub>10</sub> 49.04
- B. Vehicle Miles Traveled (VMT) Reduced 0
  - Single Occupancy Vehicle Trips Reduced 0
- C. Number of people reached per day through public education \_\_\_\_\_

**Cost-effectiveness:** \$ 5.09 per pound (AB 2766 Funds Only)

**Brief Project Description:**

Replace one older school bus with a new bus that employs a NOx and PM emission control system.





**REQUEST FOR PROPOSAL CONTENTS CHECKLIST**

Applicant: Tahoe Truckee Unified School District

Please complete and attach this checklist with your application.

Exhibit Summary Sheet - page 1

Request for Proposal Contents Checklist - page 2

Authorization Letter/Resolution - page 3

Project Description - page 4

Project Organization/Background - page 5

Emissions Benefits/Cost-Effectiveness - page 6

Work Statement - page 2

Funding Request/Breakdown of Cost - page 2

Schedule of Deliverables/Monitoring - page 10

All Pages Numbered

Three Copies Of Proposal Plus One Original

(CHECK ONE ONLY)

Quantifiable Project

- OR -

Reduced Emission Vehicles Project

41



District Office  
Robert J. Len, Ed.D.

1603 Donner Pass Rd  
Truckee, CA 96161  
4962  
P (530) 582-2880  
F (530) 582-7800  
www.tusd.org

Board of Trustees  
Ken Harwood

Kristin Leach

Orlando Hummel

Orlyan Lamm

Dianna Diller

Elementary Schools

Donner Trail

(Preschool)

Glenview Elementary

Kings Meadow

Decorative

Tahoe Lake Elementary

Tahoe Elementary

Middle Schools

Alder Creek Middle

North Tahoe School

5-8

High Schools

California State Alternative

North Tahoe High

Serra High

Tahoe Truckee High

June 20, 2019

Northern Sierra Air Quality Management District  
PO Box 2509  
Crimin Valley, CA 95945

Dear Northern Sierra Air Quality Management District,

The following individual(s) are authorized to a proposal on behalf of Tahoe Truckee Unified School District

Project Managers for the Proposal

**Vanette Rondeau**  
Director of Transportation  
12485 Joerger Rd  
Truckee, CA 96161  
(530) 550-0745 or [vrondeau@tusd.org](mailto:vrondeau@tusd.org)

**Tony Invezzola**  
Project Manager  
12485 Joerger Rd  
Truckee, CA 96161  
(530) 550-0763 or (530) 550-0745 or [tinvezzola@tusd.org](mailto:tinvezzola@tusd.org)

Authorized Signers of the Proposal

**Todd Rivers**  
Executive Director of Fiscal Services  
1603 Donner Pass Rd  
Truckee, CA 96161  
(530) 582-2541 or [trivers@tusd.org](mailto:trivers@tusd.org)

**Robert J. Len, Ed.D.**  
Superintendent / Chief Learning Officer  
1603 Donner Pass Rd  
Truckee, CA 96161  
(530) 582-2550 or [rlen@tusd.org](mailto:rlen@tusd.org)

Signature:   
Robert J. Len, Ed.D.  
Superintendent / Chief Learning Officer

Date: JUN 25 2019



42

## Project Description

The objective of the Low NOx School Bus Replacement project is to replace an older diesel vehicle with a newer vehicle that has a NOx and PM emission control device. The older diesel vehicle, like the one outlined in the project, can only be retrofitted for the control of PM emissions not NOx. NOx is harmful atmospheric pollutant known for contributing to smog and acid rain. The only way to reduce the NOx created by the vehicle in question is to replace it with a new vehicle that will employ NOx controlling technology.

This project would take a 1999 diesel school bus off of the road and replace it with a 2019 diesel school bus that would employ the latest NOx and PM control strategies. The new 84 passenger diesel school bus will exceed 2010 NOx control requirements for heavy duty diesel vehicles. With the replacement of the older school bus it would lower the NOx and PM emissions created in the region. This would ensure less exposure to children at school sites and less exposure to residents throughout the community.

## **Project Organization/Background**

### **Tahoe Truckee Unified School District (TTUSD):**

The Tahoe Truckee Unified School District Transportation Department provides transportation to 3,000 students covering over 400,000 miles a year. The fleet of over 30 school buses operates from Kingvale on Donner Summit to Hirschdale on Highway 80 towards Reno, from Tahoma on the Westshore of Lake Tahoe to Prosser on the North end of Highway 89.

The District is actively working towards reducing the impact of diesel emissions within the Tahoe Truckee School District community. Buses are replaced with the newest, cleanest, diesel technology when district funds are available, or the district applies for grants when funds are not available. In the past, TTUSD has been awarded funding for the replacement of old buses with new clean school buses. For the buses that did not qualify for replacement, TTUSD has been awarded funding for PM controlling retrofits that do not control NOx. The next step for a cleaner fleet is to replace the older buses with new buses that employ NOx controlling SCR technology.

This proposal is to replace one school bus with a new school bus that will employ the latest NOx and PM emissions control technology. TTUSD will purchase the bus through Buswest. Below is information on Buswest, the company we have selected.

### **Buswest:**

Buswest is a transportation dealer-distributor serving the education, government, public sector, commercial and private fleet markets with a broad portfolio of bus solutions. Buswest specializes in Thomas Built Buses (TBB) and offer a full range of new and used buses. From the largest to the smallest, wheelchair access/ADA compliant and more. All Buswest school buses are rigorously tested to make sure they meet or exceed all Federal and State safety standards. Buswest is part of the Velocity Vehicle Group and has multiple sales and service locations serving California, Arizona, Nevada, and Hawaii.

### **ACCOUNTING:**

Buswest will provide a single invoice for the vehicle, taxes, and any other fees or options. The invoice will be recorded through the normal Tahoe Truckee Unified School District accounting management system, as required. Grant funds will be received by TTUSD in a onetime lump sum payment and put towards the total cost of the purchase. The remaining balance will be paid by TTUSD.

## Emissions Benefits/Cost Effectiveness

Under this proposal, one school bus will be replaced with a new diesel school bus that will employ the latest NOx and PM control strategies. This system will provide a very substantial drop in NOx emissions. The calculations for these reductions are listed below. In addition to NOx reductions, the system on the new buses will lower PM emissions by over 85 percent. This is critical to the drivers, students, and communities in which the buses operate because currently no NOx emission control strategy available for the bus must be replaced.

Due to the lower speeds of school bus routes the *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects – 2005 Edition table 1: Diesel Bus Emissions Factors* do not give accurate emissions factors. The following calculations will be based on the California Executive Order for the vehicle to be replaced and the new vehicle. The information below includes both engines and the Executive Order will be attached in the technical appendices:

**1999 Thomas Westcoast-ER**  
**EO: A-13-125**  
**EPA Engine Family: XCPXH0442HRK**  
**Horsepower: 300 bhp**  
**PM: 0.10 g/bhp-hr**  
**NMHC (ROG): 1.3 g/bhp-hr**  
**NOx: 4.0 g/bhp-hr**

**2019 Thomas HDX**  
**EO: G-14-012**  
**EPA Engine Family: JCEXH0540LAX**  
**Horsepower: 300 bhp**  
**PM: 0.001 g/bhp-hr**  
**NMHC (ROG): .02 g/bhp-hr**  
**NOx: .16 g/bhp-hr**

### Engine hours:

Engine hours are captured from our Zonar GPS tracking system that is installed on all TTUSD's vehicles. Vehicles are put on set routes so that mileage and engine hours do not deviate from year to year.

Year	Start Date/Time	End Date/Time	5875.4	749.6
23	6/20/2018 7:38am	6/20/2019 12:12:58pm	5875.4	749.6

45

**Emissions Benefits/Cost Effectiveness (continued)**

**Vehicle to be Replaced Emissions Calculation**

*Annual NMHC (ROG) in Grams = (NMHC x Annual Hours) x Horsepower*

$292,110g = (1.3 \times 749) \times 300$

*Annual NMHC (ROG) in Grams ÷ Grams to Lbs. conversion factor = Annual NMHC in lbs.*

$292,110g \div 454 = 643.41 \text{ lbs.}$

*Annual NOx in Grams = (NOx x Annual Hours) x Horsepower*

$898,800g = (4 \times 749) \times 300$

*Annual NOx in Grams ÷ Grams to Lbs. conversion factor = Annual NOx in Lbs*

$898,800g \div 454 = 1,979.74 \text{ lbs.}$

*Annual PM in Grams = (PM x Annual Hours) x Horsepower*

$22,470g = (.10 \times 749) \times 300$

*Annual PM in Grams ÷ Grams to Lbs. conversion factor = Annual PM in Lbs.*

$22,470g \div 454 = 49.49 \text{ lbs.}$

<b>ROG:</b>	<b>643.41 lbs.</b>
<b>NOx:</b>	<b>1,979.74 lbs.</b>
<b>PM:</b>	<b>49.49 lbs.</b>
<b>Total Emissions:</b>	<b>2672.64 lbs.</b>

**New Vehicle Emissions Calculation**

*Annual NMHC (ROG) in Grams = (NMHC x Annual Hours) x Horsepower*

$4,494g = (.02 \times 749) \times 300$

*Annual NMHC (ROG) in Grams ÷ Grams to Lbs. conversion factor = Annual NMHC in lbs.*

$4,494g \div 454 = 8.97 \text{ lbs.}$

*Annual NOx in Grams = (NOx x Annual Hours) x Horsepower*

$35,952g = (.16 \times 749) \times 300$

*Annual NOx in Grams ÷ Grams to Lbs. conversion factor = Annual NOx in lbs.*

$35,952g \div 454 = 71.79 \text{ lbs.}$

*Annual PM in Grams = (PM x Annual Hours) x Horsepower*

$224.7g = (.001 \times 749) \times 300$

*Annual PM in Grams ÷ Grams to Lbs. conversion factor = Annual PM in lbs.*

$224.7g \div 454 = .45 \text{ lbs.}$

<b>ROG:</b>	<b>8.97 lbs.</b>
<b>NOx:</b>	<b>71.79 lbs.</b>
<b>PM:</b>	<b>.45 lbs.</b>
<b>Total Emissions:</b>	<b>81.21 lbs.</b>

46

**Emissions Benefits/Cost Effectiveness (continued)**

Total Emissions Reduction Per Year	
ROG:	634.44 lbs.
NOx:	1,907.95 lbs.
PM:	49.04 lbs.
<b>Total Emissions Reduction:</b>	<b>2,591.43 lbs.</b>

**Cost Effectiveness/ Capitol Recovery**

Project Cost	
AB 2766 Funds:	\$165,000.00
TTUSD Contribution:	\$24,090.78
<b>Total cost of Project:</b>	<b>\$189,090.78</b>

To calculate the cost effectiveness of this project the amount of funds requested will be multiplied by the capitol recovery factor of .08 and then divided by the total amount of pollutants reduced. The capitol recovery factor of .08 is used because the minimum useful life of the vehicle to be purchased is 15 years.

$$\text{Cost per Pound} = \frac{(\text{AB 2766 Funds} \times \text{Capitol recovery Factor})}{\text{Total emission reduction}}$$

$$(165,000.00 \times .08) \div 2591.43 = 5.09$$

**Totals**

<b>AB Funds Requested:</b>	<b>\$165,000.00</b>
<b>Emissions Reduced:</b>	<b>2591.43 lbs.</b>
<b>Cost Per Pound Reduced:</b>	<b>\$5.09</b>

47

### Work Statement

January 2020 Upon grant execution, TTUSD will begin the process to have the purchase of a new bus approved by TTUSD school board.

February 2020 Place order with Buswest for one new school bus.

July 2020 On or before July 2020, take delivery of one new school bus. Once delivered TTUSD will invite NSAQMD to inspect the bus and a decal stating the funding source for the bus will be applied at this time.

### Funding Request/Breakdown of Cost

Tahoe Truckee Unified School District is requesting \$165,000.00 in AB 2766 funds to purchase a new 2019 school bus. The specifications and quote are attached in the technical appendices. This project does not have any administrative costs. The following table shows a breakdown of cost and cofunding sources.

Project Cost	
AB 2766 Funds:	\$165,000.00
TTUSD Contribution:	\$24,090.78
<b>Total cost of Project:</b>	<b>\$189,090.78</b>

48



## **Schedule of Deliverables/Monitoring Program**

### **Vehicle Delivery**

On or before July 2020 TTUSD will take delivery of one new school bus. Once delivered TTUSD will invite NSAQMD to inspect the bus and a decal stating the funding source for the bus will be applied at this time. Any delay in delivery of the new school bus will be communicated to NSAQMD via email.

### **Monitoring Program**

Upon delivery of the new bus TTUSD will start to track the annual operating hours and mileage. TTUSD will report the mileage, hours and overall performance of the unit after the first, fifth and seventh year of operation. TTUSD will operate the new vehicle, at minimum, the same number of hours and miles as the vehicle it was intended to replace. Reports of operating data will be available at the request of the NSAQMD.

## Technical Appendices

<b><u>Table of Contents</u></b>	<b><u>Page</u></b>
<b>Annual hour meter report for bus to be replaced</b>	<b>ii</b>
<b>Buswest Sales Quote</b>	<b>iii</b>
<b>New Vehicle Engine Executive Order</b>	<b>iv</b>
<b>Old Vehicle Engine Executive Order</b>	<b>vi</b>

50

Annual hour meter report for bus to be replaced

6/20/2019

Zonal Systems © GPS Engine Hour Report

GPS Engine Hours Summary Report - From: 6/20/2018 To: 6/20/2019

Note: This Report Requires GPS Firmware Version 2.94 or Newer

ASSET	FIRST POWER ON	LAST POWER OFF	ZONE	ENDING HOUR METER	ELAPSED HOURS
23	06/20/2018 07:38:33	06/20/2019 12:12:58	Combined Totals	3875.4	749.6

51

Bus West Sales Quote



Bid Form

March 18, 2019

Customer Order No. SBBH 07303

Honorable Board of Trustees  
Tahoe Truckee Unified School District  
12485 Joerger Dr  
Truckee, Ca 96161

BusWest respectfully submits for your consideration our bid to supply 1 complete 84 passenger school bus as follows:

<b>Chassis Make:</b> Thomas	<b>Model:</b> CHSY	<b>Model Year:</b> 2019
<b>Wheelbase:</b> 277"	<b>Engine:</b> Cummins ISL	<b>Horsepower:</b> 300
<b>Body Make:</b> Thomas	<b>Model:</b> Saf-T-Liner HDX	<b>Capacity:</b> 84

Transmission: Allison 3000 PTS R

Delivery Date: 180-210 Days after receipt of order

Subject to Prior Sale: No

<b>Cash Purchase Price (each)</b>	<b>\$ 174,605.00</b>
<b>Doc Fee:</b>	<b>\$ 65.00</b>
<b>Sales Tax @: 8.250%</b>	<b>\$ 14,410.28</b>
<b>CA. Tire Tax: \$1.75 ea. tire</b>	<b>\$ 10.50</b>
<b>Total</b>	<b>\$ 189,090.78</b>

We have examined the detailed minimum specifications established by the school board and guarantee this bid to be in accordance thereto. Above price includes all dealer prep., pre-delivery service, necessary lettering, F.O.B. school district and documentation fee.

Brian Hedman, Sales Representative

Quote is good for thirty (30) days

Quote No.: 341093


Carson - Main Headquarters  
21107 South Chico St. Carson, CA 90745  
Sales Toll Free: (800) 458-0189 Main: (310) 984-3900 Fax: (310) 984-3996  
Parts Toll Free: (866) 707-7880 Fax: (310) 984-3994  
www.buswest.com

Sacramento  
210 North East St., Woodland, CA 95776  
Main: (916) 216-3630  
Fresno  
4337 North Goldenstone Saw101, Fresno, CA 93609  
Main: (559) 277-0118

52

Tahoe Truckee Unified School District  
 New Vehicle Engine Executive Order

Low NOx School Bus Replacement

 CALIFORNIA AIR RESOURCES BOARD	CUMMINS INC.	EXECUTIVE ORDER A-021-0088 New On-Road Heavy-Duty Engines Page 1 of 2 Pages
--	--------------	---

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G 14-012,

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	ENGINE SIZE (L)	FUEL TYPE <sup>1</sup>	STANDARDS & TEST PROCEDURES	INTENDED SERVICE CLASS <sup>2</sup>	ECC & SPECIAL FEATURES <sup>3</sup>				DIAGNOSTIC <sup>4</sup>			
						CCI	YC	CAC	ECM	EBR	OC	PTOX	SCR-U
2014	K19N140LAX	8.9	Diesel	0204	HD00								
ADDITIONAL IDLE EMISSIONS CONTROL <sup>5</sup>													
N/A													
ENGINE MODELS / CODES (rated power, in hp) See attachment for engine models and ratings													
306													
ENGINE (L) 8.9													

1. Fuel type: L=light-duty vehicle (gasoline), M=medium-duty vehicle (gasoline), D=diesel, G=gas, L=light-duty (gas), M=medium-duty (gas), H=heavy-duty (gas), L=light-duty (gas), M=medium-duty (gas), H=heavy-duty (gas).  
 2. Intended service class: HD=heavy-duty, MD=medium-duty, LD=light-duty.  
 3. ECC & special features: CCI=California Control Index, YC=Year of Certification, CAC=California Air Control, ECM=Electronic Control Module, EBR=Exhaust Backpressure Reduction, OC=On-board Diagnostics, PTOX=Particulate Trap Oxidation, SCR-U=Selective Catalytic Reduction, AMOX=Ammonia Oxidation.  
 4. Diagnostic: OS=On-board Diagnostics, S=Service, F=Fault, C=Control, M=Monitor, A=Alert, D=Data, R=Reset, I=Intermittent, P=Permanent, U=Unavailable, N=Not Applicable.  
 5. Additional idle emissions control: N/A=Not Applicable.

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the SET and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures), and 3) the corresponding certification levels, for this engine family. "Diesel" CO, SET and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For flexible- and dual-fueled engines, the CERT values in brackets ( ) are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.)

In	NHEC		NOx		NHEC-NOx		CO		PM		HCHO	
	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
g/hp-hr							19.9	19.9	0.01	0.01	-	-
g/BHP	0.14	0.14	0.20	0.20	-	-	0.2	0.00	0.001	0.001	-	-
g/BHP	0.02	0.02	0.15	0.17	-	-	19.4		0.02		-	-
g/BHP	0.31		0.38									

g/hp-hr = grams per brake horsepower-hour; g/BHP = grams per brake horsepower; FTP = Federal Test Procedure; SET = Supplemental emissions testing; STD = standard or emission limit cap; NTE = non-test engine; CO = carbon monoxide; PM = particulate matter; HCHO = formaldehyde.

BE IT FURTHER RESOLVED: The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1956.8 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" (HDE Test Procedures) adopted Dec. 12, 2002, as last amended Oct. 21, 2014 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1036.108 of the HDE Test Procedures. The manufacturer has submitted the required information and therefore has met the criteria necessary to receive a California Executive Order based on the Environmental Protection Agency's Certificate of Conformity for the above listed engine family.


In	EPA CERTIFICATE OF CONFORMITY				PRIMARY INTENDED SERVICE CLASS	
	GROSS VEHICLE WEIGHT RATING (GVWR)		TRAILER / VEHICLES		GVW	GVW
g/hp-hr	FTP	SET	FTP	SET	0.10	0.10
STD	0.10	0.10	0.10	0.10	0.10	0.10
FEL	0.10	0.10	0.10	0.10	0.10	0.10
FEL	0.10	0.10	0.10	0.10	0.10	0.10
CERT	0.10	0.10	0.10	0.10	0.10	0.10

g/hp-hr = grams per brake horsepower-hour; FTP = Federal Test Procedure; SET = Supplemental emissions testing; STD = standard or emission limit cap; FEL = family emission limit; CO = carbon monoxide; PM = particulate matter; HCHO = formaldehyde.

BE IT FURTHER RESOLVED: Certification to the FEL(s) / FCL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) / FCL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

53

New Vehicle Engine Executive Order

 <b>CALIFORNIA</b> AIR RESOURCES BOARD	CURBENS INC.	<b>EXECUTIVE ORDER A-021-0006</b> New On-Road Heavy-Duty Engines Page 2 of 2 Pages
--	--------------	--

**BE IT FURTHER RESOLVED:** Except in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) (30 g/hr NOx) and section 35.8.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" (NDE Test Procedures) adopted Dec. 12, 2002, as last amended Oct. 21, 2014, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

**BE IT FURTHER RESOLVED:** For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1956 (emission control labels), 13 CCR 1971.1 (on-board diagnostic, full or partial compliance) and 13 CCR 2036 et seq. (emission control warranty).

**BE IT FURTHER RESOLVED:** That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

**BE IT FURTHER RESOLVED:** The listed engine models are conditionally certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the heavy-duty on-board diagnostic (HD OBD) system of the listed engine models has been determined to have nineteen deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of \$500 per engine for the third through nineteenth deficiencies in the listed engine family that is produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of engines produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2016 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question in which case all engines covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$5000 per engine pursuant to HSC Section 4315.

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on the 15 day of December 2017



Annette Hebert, Chief  
Emissions Compliance Automotive Regulations and Science Division

54

Tahoe Truckee Unified School District  
 Old Vehicle Engine Executive Order

Low NOx School Bus Replacement

Page 1 of 21

State of California  
 AIR RESOURCES BOARD

EXECUTIVE ORDER H-13-285

Relating to Certification of Low Heavy-Duty Engines and Vehicles  
 CATERPILLAR, INC.

Pursuant to the authority vested in the Air Resources Board of Sections 43100, 43101, and 43102 of the Health and Safety Code and

Pursuant to the authority vested in the Board of Sections 39515 and 39516 of the Health and Safety Code and Executive Order 9-95-9, and

Pursuant to the December 15, 1998 Settlement Agreement between the Air Resources Board and Caterpillar, Inc. and any modifications to the Settlement Agreement:

IT IS ORDERED AND RESOLVED: That the following 1999 model-year Caterpillar, Inc. diesel engines are certified for use as motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

Engine Family	Displacement Liters	Cubic Inches	Exhaust Emission Control Systems and Special Features
JCP20M0220R	7.1	432	Particulate Charge Air Cooler Exhaust Gas Recirculation

The engine model and codes are listed on attachments.

IT IS ORDERED AND RESOLVED: That the following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour under the Federal Test Procedure (FTP) for Heavy-Duty Diesel Engines (Title 13, California Code of Regulations, Section 405.0):

	Total Hydrocarbons	Carbon Monoxide	Nitrogen Oxide	Particulate Matter
'FTP'	1.3	16.5	4.0	0.10

RE IT FURTHER RESOLVED: That pursuant to the Settlement Agreement and any modifications thereto, the aforementioned engine family is also subject to the following emission standards, in grams per brake horsepower-hour, under the EURO III tests in the Settlement Agreement, and a "Net-Le-Corred" nitrogen oxides emission standard of 3.6 grams per brake horsepower-hour:

	Total Hydrocarbons	Carbon Monoxide	Nitrogen Oxide	Particulate Matter
'EURO III'	1.3	16.5	6.0	0.10

55

Old Vehicle Engine Executive Order

CATERPILLAR, INC.

EXECUTIVE ORDER A-12-125  
(Page 2 of 2)

BE IT FURTHER RESOLVED: That the following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
"FTP"	0.6	1.2	3.8	0.09
"EURO III"	0.69	1.0	4.8	0.07

BE IT FURTHER RESOLVED: That for the listed engine model, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system currently provisions (Title 13, California Code of Regulations, Sections 3093 et seq.).

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

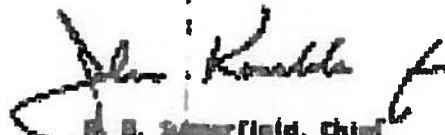
1. The Settlement Agreement is in effect.
2. The Settlement Agreement has not expired and is valid under Settlement Agreement Paragraph 366.
3. Caterpillar, Inc. is in compliance with all applicable certification requirements of the Settlement Agreement.
4. Caterpillar, Inc. generates and submits emissions data that demonstrate compliance with the terms of the Settlement Agreement. For supplementary data points pursuant to paragraph 1.1 of Appendix C of the Settlement Agreement, the emissions data must be submitted by February 22, 2008, unless AED extends this date for good cause.

Engines manufactured after July 31, 1999 are not covered under this Executive Order.

Engines certified under this Executive Order must conform to all applicable California emission regulations and to all applicable terms and conditions of the Settlement Agreement.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 22nd day of December 1999.

  
J. B. Samerfield, Chief  
Vehicle Source Operations Division

56





EXHIBIT SUMMARY SHEET

Proposing Entity (include other participating entities):

McGarr Excavation Inc.

Contact Person: Tyler O. McGarr

Address: 5941 County Road A-15 PO Box 883 ---Portola CA 96122

Phone #: 530-832-5959

FAX #: 530-832-4587

EMAIL: mcgarrt@yahoo.com

Total Project Budget:

	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	\$ 70,000	\$ 75,000	\$ 145,000
Operating Costs	\$	\$ 3,500	\$ 3,500
<b>TOTAL</b>	<b>\$ 70,000</b>	<b>\$ 75,000</b>	<b>\$ 145,000</b>

Type of Project: (check one)

Quantifiable Project

Reduced Emission Vehicles Project

Implementation Area for Project: Check if District-wide

Describe the Implementation Area for the Project (e.g. city, county, region).

Estimated Emission Reductions:

A. Emission Reductions (lbs/yr)

Reactive Organic Gases 29.07 Nitrogen Oxides 847.58 PM<sub>10</sub> 0

B. Vehicle Miles Traveled (VMT) Reduced 0

Single Occupancy Vehicle Trips Reduced 0

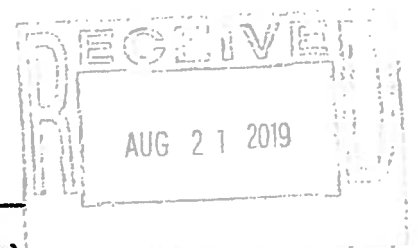
C. Number of people reached per day through public education 0

Cost-effectiveness: \$ 17.57 per pound (AB 2766 Funds Only)

Brief Project Description:

Reduce Emissions by replacing Existing Heavy-duty class 8 truck with new Peterbilt 367. new engine; X-15 485 @1855.

Remove Existing Dump box on 1998 Truck and Install on New truck. Project would reduce Emissions and contribute to our Local economy.



58

# REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: MCGARR Excavation Inc. Tyler O. McGarr

Please complete and attach this checklist with your application.

Exhibit Summary Sheet - page 1

Request for Proposal Contents Checklist - page 2

Authorization Letter/Resolution - page 3

Project Description - page 4

Project Organization/Background - page 5

Emissions Benefits/Cost-Effectiveness - page 6

Work Statement - page 7

Funding Request/Breakdown of Cost - page 8

Schedule of Deliverables/Monitoring - page 9

All Pages Numbered

Three Copies Of Proposal Plus One Original

(CHECK ONE ONLY)

Quantifiable Project

- OR -

Reduced Emission Vehicles Project

McGarr Excavation Inc.  
5941 County Road A-15  
PO Box 883  
Portola, Ca 96122  
530-832-5959  
Lic. 746805

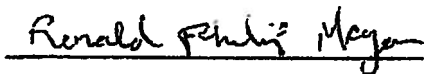
**RE: Authorization Letter**

**To Whom it may Concern:**

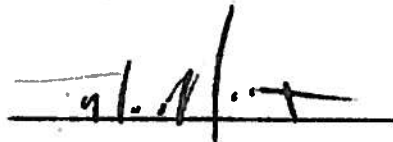
McGarr Excavation Inc. and officers within, authorize Tyler O. McGarr to act on behalf of McGarr Excavation regarding AB2766 DMV Surcharge program. As shown below with respected signatures.

**Contact information; AB2766 Project**

Tyler O. McGarr  
PO Box 883  
Portola, Ca 96122  
C: 530-249-2848



**Ronald Philip McGarr**  
**President**



**Tyler O. McGarr**  
**Vice President**

60

McGarr Excavation Inc.  
5941 County Road A-15  
PO Box 883  
Portola, Ca 96122  
Lic.746805

**Project Description: Replacement of heavy-duty class 8 diesel truck**

Project would consist of replacing our existing Heavy-Duty Class 8 Truck (See Below) with a new Heavy-duty Class 8 Truck (See Below) this would reduce Emissions first and foremost and also help our small Business contribute to our local Economy. Our existing truck was Placed on LOW USE (under 1000 Miles per year) in order to comply with restrictions causing hardship to our Business and making it hard to serv our Customer base. Existing Truck described within this Document Travels approximately 20k miles + per year and is used for onsite work as well in our Business. Our number one objective is to help reduce emissions in our local area, and comply with restrictions to heavy duty truck regulations.

**Existing Truck;**

**1998 Kenworth T-800**

**1997 Model Year Engine**

**C-12 Cat 440 HP @ 1600RPM**

**Replacement Truck;**

**2020 Peterbilt 367**

**Engine: Cummins X-15 485 @ 1855**

**Scope of Work;**

- 1. Order New Cab and Chasse Truck**
- 2. Remove Existing Dump Box from 1998 T-800**
- 3. Place box on New Peterbilt 367**

61

McGarr Excavation Inc.  
5941 County Road A-15  
PO Box 883  
Portola, Ca 96122  
Lic.746805

**Project Organization/Background:**

McGarr Excavation began conducting business in 1996, We operate in Plumas, Nevada and Sierra Counties. Our reputation for Quality work has grown our small business into what it is today; three full time field employees and two part time office employees that handle all the accounting, Certified payroll, Job Cost tracking and more. McGarr Excavation completes most equipment repairs in house and will outsource all other items to our dealer or our local mechanic. Our Company has Completed similar Projects with great Success; one of those projects was installing a new water tank on a truck chassis. another recent similar project that has been completed; In 2015 we Purchased a new Class 8 heavy duty truck that was ordered from dealer and spec'd out by Tyler McGarr. We our Doing our best to reduce emissions by purchasing the best equipment that we can possibly afford. This project Funding from AB 2766 DMV Would allow us to once again keep up with emission reduction and help our local economy by providing us the opportunity to hire a driver and also at minimum be more efficient for our existing customers.

**No Sub contractors will be used in this project.**

Old Engine			
NOx			
Miles per year	g/mile	g/year	lbs/year
20000	20.44	408800	900.44
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		408800	900.44
PM			
Miles per year	g/mile	g/year	lbs/year
20000	0	0	0.00
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		0	0.00
ROG			
Miles per year	g/mile	g/year	lbs/year
20000	0.76	15200	33.48
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		15200	33.48

New Engine			
NOx			
Miles per year	g/mile	g/year	lbs/year
20000	1.2	24000	52.86
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		24000	52.86
NOx savings:		384800	847.58
PM			
Miles per year	g/mile	g/year	lbs/year
20000	0	0	0.00
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		0	0.00
PM savings:		0	0.00
ROG			
Miles per year	g/mile	g/year	lbs/year
20000	0.1	2000	4.41
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		2000	4.41
ROG savings:		13200	29.07

Total Savings: g/year 398000 lbs/year 877  
 Grant Award Requested: \$ 70,000.00  
 Capital Recovery Factor: 0.22 for 5 years

Cost Effectiveness: \$ 17.57 per pound

Notes:  
 Emission factors obtained from Table 5 Statewide 2017 On-Road Emission Factors for Heavy-Duty Cleaner Vehicle Projects  
 See Air District website <http://myairdistrict.com/wp-content/uploads/2018/09/Emission-Factor-Tables-March-2018.pdf>

Capitol Recover Factors	
1 year	1.03
3 years	0.35
5 years	0.22
7 years	0.16
10 years	0.12
12 years	0.10
15 years	0.08
20 years	0.07

PAGE 6  
63

**McGarr Excavation Inc.**  
**5941 County Road A-15**  
**PO Box 883**  
**Portola, Ca 96122**  
**Lic.746805**

**Work Statement:**

**Item 1;**

**January 5 2020**

**Awarded Contract, Place order for Truck from Reno Peterbilt Heavy-Duty class 8 Truck.**

**Item 2;**

**April 1 2020**

**Receive New Truck from Dealer.**

**Item 3;**

**May 30 2020**

**Remove Dump Box from existing truck and place on replacement truck, perform work in McGarr Excavation Shop by Qualified individual(s) Employees and Owners to complete**

**Item 4;**

**June 4 2020**

**Place Truck in Service.**

**Add Logo to Truck of Funding AB 2766 DMV**

64



58

**Funding Request/Breakdown of Cost:**

TASK:	AB2766 DMV Funds			Total Cost of Task
	AB2766 DMV Funds	Co Funding Monetary	In Kind Funding	
Purchase Truck	70000	75000	0	145000
Install Dump Box	0	0	2500	2500
Administrative Cost	0	0	1000	1000
<b>TOTAL</b>	<b>70000</b>	<b>75000</b>	<b>3500</b>	<b>148500</b>

**Table TWO**  
**Equipment List**  
 1. New Peterbuilt 367  
 Engine; Cummins X-15 485 @ 1855

Funding of AB2766  
 70000

McGarr Excavation Inc.  
5941 County Road A-15  
PO Box 883  
Portola, Ca 96122  
Lic.746805

***Project Schedule & Time Line***

**2020** *Project Award.*  
**Jan** *Place Order for  
New Truck.*

**2020** *Truck  
Build Time*  
**Feb**

**2020** *Truck  
Build Time*  
**Mar**

**2020**  
**Apr**  
*Receive Truck.*

**2020** *Place Dump  
Box on New  
Truck.*  
**May**

**2020** *Place Truck  
into Service*  
**Jun**

RECEIVED  
SEP - 4 2019

67

**A. EXHIBIT SUMMARY SHEET**

**Proposing Entity (include other participating entities):** County of Nevada's Health and Human Services Agency (HHS) and Information and General Services Department (IGS).

**Contact Person:** Ryan Gruver

**Address:** 950 Maidu Ave, Nevada City, CA 95959

**Phone #:** (530) 265-1559 **FAX #:** (530) 265-7226 **EMAIL:** ryan.gruver@co.nevada.ca.us

**Total Project Budget:**

	<b>AB 2766 Funds</b>	<b>Co-Funding</b>	<b>Total Project Costs</b>
Capital Costs	\$ <u>21,196</u>	\$ <u>0</u>	\$ <u>20,000</u>
Operating Costs	\$ <u>0</u>	\$ <u>8,804</u>	\$ <u>10,000</u>
<b>TOTAL</b>	\$ <u>21,196</u>	\$ <u>8,804</u>	\$ <u>30,000</u>

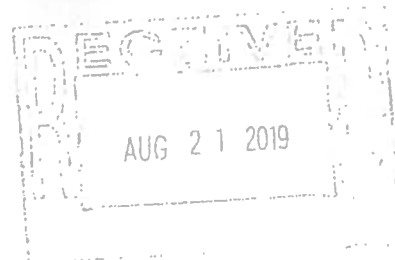
**Type of Project: (check one)**

Quantifiable Project

Reduced Emission Vehicles Project

**Implementation Area for Project:** Check if District-wide

Describe the Implementation Area for the Project (city, county, region): Nevada County



**Estimated Emission Reductions:**

**A. Emission Reductions (lbs/yr)**

Reactive Organic Gases: 54.59 Nitrogen Oxides: 49.96 PM 22.19

**B. Vehicle Miles Traveled (VMT) Reduced: 189,768**

Single Occupancy Vehicle Trips Reduced: 2,989

**C. Number of people reached per day through public education: 0**

**Cost-effectiveness: \$ 36.79 per pound (AB 2766 Funds Only)**

**Brief Project Description:**

The County of Nevada proposes to use AB 2766 grant funds to leverage current County network infrastructure and today's new video conferencing technology to enable a broad range of county workers to stay in their offices for meetings and trainings, eliminating multiple office trips each week between County facilities and reducing air pollution.

**B. REQUEST FOR PROPOSAL CONTENTS CHECKLIST**

Applicant: Nevada County Health and Human Services Agency

Please complete and attach this checklist with your application.

Exhibit Summary Sheet - page 1

Request for Proposal Contents Checklist - page 2

Authorization Letter/Resolution - page 3

Project Description - pages 4-6

Project Organization/Background - page 6

Emissions Benefits/Cost-Effectiveness - pages 7-8

Work Statement - pages 9-10

Funding Request/Breakdown of Cost - pages 10-11

Schedule of Deliverables/Monitoring - pages 12

All Pages Numbered

Three Copies Of Proposal Plus One Original

(CHECK ONE ONLY)

Quantifiable Project

- OR -

Reduced Emission Vehicles Project



**County of Nevada  
County Executive Office**

Eric Rood Administrative Center  
950 Maidu Avenue  
Nevada City, CA 95959  
Phone: (530) 265 - 7040  
Fax: (530) 265-9839  
Email: ceo@co.nevada.ca.us

August 12, 2019

Northern Sierra Air Quality Management District  
Attn: Joseph Fish  
200 Litton Drive, Suite. 320  
Grass Valley, CA 95945

**SUBJECT:** Authorization for the Nevada County Health & Human Services Agency to submit a formal grant proposal for the use of AB 2766 DMV Surcharge funds for the 2019-2020 grant project cycle on behalf of the County of Nevada.

**BACKGROUND:** Nevada County Health & Human Services Agency in a joint project with the Nevada County Information & General Services Department to submit a formal grant proposal to implement and upgrade their ability to conduct video conferencing. Video conferencing equipment is projected to have a life-span of 5 years and will reduce interagency trip traffic from County offices. Improving this ability will have a substantial impact in the reduction of vehicle miles traveled, fleet costs and associated emissions. The formal grant proposal that is being submitted equates to a \$30,000 project with a request of \$21,196 in AB 2766 funding and \$8,804 in co-funding.

**AUTHORIZATION:** I hereby authorize, on behalf of the Board of Supervisors of the County of Nevada, the submittal of Nevada County HHS's formal grant proposal to NSAQMD for the use of 2766 DMV Surcharge Funds for the 2019-2020 grant project cycle.

  
\_\_\_\_\_  
Alison Lehman  
County Executive Officer  
County of Nevada

8/21/19  
Date

Contact information for Nevada County is listed below:

David Jones  
Nevada County Executive Office

(530) 470-2720  
David.jones2@co.nevada.ca.us

#### **D. PROJECT DESCRIPTION**

The County of Nevada proposes to use AB 2766 grant funds to leverage current County network infrastructure and today's new video conferencing technology to enable a broad range of county workers to stay in their offices for meetings and trainings, eliminating multiple office trips each week between County facilities and reducing air pollution.

This proposal of grant funding covers the procurement of 3 (three) Polycom video conferencing units accompanied with 2 (two) Flat Screen Televisions, and 1 (one) Computer Monitor with supplementary wall mounting and cabling equipment. Contracts associated with the successful implementation of this project includes 3 (three) Polycom Real Connect Licenses as well as PC build/install vendor technical assistance, network cabling and the addition of 1 (one) Power Outlets. Proposal assumes labor involving setup and install of equipment through a Network Analyst at a total budget of \$8,804 will be charged to grant funds. The County of Nevada will provide \$10,000 of matching funds based on Desktop Technician Technical Assistance, Facilities Maintenance, and Project Management/Successful Implementation of the project.

Nevada County will be using the California Air Resources Board's Methods to find the *Cost- Effectiveness of Funding Air Quality Projects*, Telecommunications section to determine the amount of emissions that will be reduced by the eliminated trips to County Offices.

#### **Objectives**

The main objective for this project is to keep county workers in their home base offices during the work day, eliminating the many time wasting and air polluting trips they make every day between their regular work office locations to meetings and trainings in other county buildings.

This project will prove and measure accessibility, efficiency, effectiveness, and raise employee productivity by decreasing workers' overall travel time logged on a daily basis and will reduce air pollution based on the resulting office trip eliminations. A wide range of county workers across the organization will partake in the project including all of Health and Human Services staff, particularly those that work in the Truckee office.

This represents a portion of total county workers that will ultimately benefit from the ability to stay in the office and attend meetings and trainings virtually from their own home office building location.

Some of the functions and activities that this project will allow the workers to perform from their own building location rather than travel to other locations include:

- Weekly and monthly staff meetings
- Department wide training sessions
- County wide training and informational sessions

- Enhanced mobile communication services for video conferencing, voice calling and conferencing,
- Enhanced presentation and data sharing capability
- Screen sharing between locations

You will see below that this project stands on its own feet for the cost effectiveness requirement, however the real exponential value and pollution savings will be realized in the years after the project is completed and the enhanced video conferencing technology is expanded out to more county conference and meeting rooms. The first year will also save the County in fuel/fleet costs which will grow and continue forward annually. A very easily achievable increase of the remote video conference enabled workers would cut this cost. In addition, many of the video conferencing solutions could also be leveraged for a stay at home remote-worker program if the county desired.

### **Scope of Work**

The County currently has outdated video conferencing (VC) systems and infrastructure that current workers utilize on a daily basis. These systems requires the Information and General Services staff to troubleshoot on a frequent basis. The VC units are over 10 years old and do not have the latest technology and do not support high definition, screen sharing, telepresence, multiway conferencing, data sharing and mobile video conferencing. They are currently limited in the number of callers to the conference. This project will perform the following activities.

1. Scope and design VC solutions leveraging existing infrastructure.
2. Procure required VC hardware, software and training.
3. Implement, document, and train workers, and deploy the VC solutions.
4. Gain feedback from workers, and track travel saving activity.
5. Assist departments to expand use of the VC equipment, which could include meetings with people outside the County, or work from home.

### **AB 2766 Funds**

AB 2766 funds will be used to purchase the required equipment, services, and software as described above. The County will provide in kind and further funding through the IT and HHS staff time to perform the business analysis, design VC solutions, researching equipment to be purchased, configuring and deploying equipment, and training workers on the solutions. The County will also networking infrastructure add new networking capabilities as required to meet the VC solution needs.

### **Co-Funding**

The County will use existing networking infrastructure and enhance, expand and improve as needed. Staff time will be covered by the County for HHS and IGS staff. Some equipment in smaller conference rooms will be purchase with county funding as required.



## E. PROJECT ORGANIZATION/BACKGROUND

Staff from Health and Human Services Agency (HHS) and Information and General Services Department (IGS) will be working cooperatively on this project. Each staff member will bring his or her expertise to the project. Program Managers in each agency and/or department will be providing direct supervision for successful completion of this project.

Health and Human Services Agency (HHS) consists of multiple departments. This includes Behavioral Health, Child Support Services, Collections, Housing & Community Services, Public Health, Social Services, and Veterans' Services. The agency provides a broad range of health and social services that promote the wellness, self-sufficiency, and safety of Nevada County residents. As the largest agency within the County of Nevada, agency operational areas are located throughout the county causing a needed utilization of virtual meetings.

HHS staff have analyzed and determined the most effective use of conference room equipment. Staff has also tracked office trip activity and miles traveled. Data was then analyzed for project effectiveness. HHS staff will therefore prepare the estimates of emissions reductions for this proposal and the reporting. Expenditures of grant funds and in-kind funds will be tracked in our accounting system *Pentamotion Finance Plus*. *Pentamotion* allows the HHS Fiscal Unit to track expenditures by projects. We can track expenditures of both the grant and the in-kind funds easily using unique project code numbers. We will also use Microsoft Excel to present the financial data in the required grant finance reports.

Information and General Services (IGS) Department is a centralized department that provides support to the County's computer network infrastructure, server applications, desktop software, Intranet, and phones. IGS staff members will manage, direct and implement changes necessary to the County's computer systems to support this project.

Likewise, IGS staff have analyzed and determined necessary components in implementing video conferencing equipment. Through the duration of the project IGS staff will ensure all site preparation, power supply compatibility requirements and other specified service prerequisites are met. In addition IGS Staff will provide related settings information (IP setting etc.) and ensure workable video conferencing solutions. This scope will also include the physical mounting facilities if necessary (eg rack space, screws), LAN nodes, cabling facilities & power sockets etc. During implementation detailed information pertaining to installation, training, and troubleshooting will be relayed to HHS staff.

**F. EMISSION BENEFIT/COST EFFECTIVENESS**

**Project Assumptions**

Formulas used to calculate the estimated emission reductions from the project, and the related factor tables, are taken from the California Air Resources Board (ARB) "Methods to Find the Cost-Effectiveness of Funding Air Quality Projects". The same source is used to determine the cost-effectiveness of the project.

Estimates of mileage reduction factors come from data gathered for previous NSAQMD grant projects. Emission Factor Inputs are based on Table 3 Average Auto Emission Factors data pertaining to ROG, NOx, and PM10. Other factors are from department records of conference room calendared activities along with location designations.

The county is geographically divided into western and eastern portions by the natural divide of the Sierra Nevada Mountains. The western, more populace portion, centers on the Nevada City/Grass Valley urban area while the eastern portion is centered on the Town of Truckee. For purposes of this analysis, we have divided the county into these two portions with the Sierra Nevada point of Donner Summit as the dividing line. This allows us to apply longer travel distances (60 miles) to the eastern portion and significantly lower travel distances (6 miles) to the western portion.

To allocate the number of visits equitably, staff used actual conference room data from the previous year in order to project reductions in vehicle trips and miles traveled. This equated to 52% of visits attributed to the western portion of the county while 48% of the visits were attributed to the eastern portion of the county.

**Emissions Summary**

*Western Region Summary:*

Average miles per trip:	6
Vehicle trips reduced (one-way):	<u>1,564</u>
Vehicle trips reduced (round trip/annual):	<u>3,128</u>
Total vehicle miles traveled reductions (one-way):	<u>9,384</u>
Total vehicle miles traveled reductions (round trip/annual):	<u>18,768</u>

*Eastern Region Summary:*

Average miles per trip:	60
Vehicle trips reduced (one-way):	<u>1,425</u>
Vehicle trips reduced (round trip/annual):	<u>2,850</u>
Total vehicle miles traveled reductions (one-way):	<u>85,500</u>
Total vehicle miles traveled reductions (round trip/annual):	<u>171,000</u>

*Total Summary*

Average miles per trip:	31.7444
Vehicle trips reduced (one-way):	<u>2,989</u>
Vehicle trips reduced (round trip/annual):	<u>5,978</u>
Total vehicle miles traveled reductions (one-way):	<u>94,884</u>
Total vehicle miles traveled reductions (round trip/annual):	<u>189,768</u>
Annual Emission Reduction - ROG (lbs/year):	<u>54.59</u>
Annual Emission Reduction - NOx (lbs/year):	<u>49.96</u>

74

County of Nevada HHS, Assessor's Office, and IGS.  
AB 2766 DMV Surcharge Fund Program 2019-2020 Project Cycle

Annual Emission Reduction - PM10 (lbs/year):	22.19
Total Emissions Reductions:	126.73
Cost-effectiveness of Fund Dollars (\$/lb)	\$36.79

**Calculation**

The below chart reflects formulas, inputs, outcomes and calculations which provided the basis of the emissions summary and data provided within this grant application.

NSAQMD AB 2766 Grant

Grant yr: 2020  
Department Name: HHS  
Grant Name: Videoconferencing

Funding		Capital Recover Factors	
Grant Funding Amount	21,196.00	1 yr	1.03
In-Kind Funding amount	8,804.00	3 yrs	0.35
Total Project Funding amount	30,000.00	5 yrs	0.22
<b>Factors</b>		7 yrs	0.16
Effectiveness Period (LIFE)	5.00	10 yrs	0.12
Capital Recovery Factor	0.22	12 yrs	0.10
		15 yrs	0.08
		20 yrs	0.07
<b>Western County</b>			
Average Miles per trip (one-way)	6.00	Annual Emission Reduction - ROG (lbs/yr)	7.45
One Way Vehicle Trip Reductions per yr	1,564.00	Annual Emission Reduction - NOx (lbs/yr)	5.92
Annual Vehicle Reductions per yr	3,128.00	Annual Emission Reduction - PM (lbs/yr)	2.21
One Way Miles travelled	9,384.00	Total Emissions reduction (All) (lbs/yr)	15.58
Annual Miles travelled, round trips	18,768.00		
<b>Eastern County</b>			
Average Miles per trip (one-way)	60.00	Annual Emission Reduction - ROG (lbs/yr)	47.13
One Way Vehicle Trip Reductions per yr	1,425.00	Annual Emission Reduction - NOx (lbs/yr)	44.04
Annual Vehicle Reductions per yr	2,850.00	Annual Emission Reduction - PM (lbs/yr)	19.98
One Way Miles travelled	85,500.00	Total Emissions reduction (All) (lbs/yr)	111.15
Annual Miles travelled, round trips	171,000.00		
<b>Total County</b>			
Average Miles per trip (one-way)	31.7444	Annual Emission Reduction - ROG (lbs/yr)	54.59
One Way Vehicle Trip Reductions per yr.	2,989.00	Annual Emission Reduction - NOx (lbs/yr)	49.96
Annual Vehicle Reductions per yr	5,978.00	Annual Emission Reduction - PM (lbs/yr)	22.19
One Way Miles travelled	94,284.00	Total Emissions reduction (All) (lbs/yr)	126.73
Annual Miles travelled, round trips	189,768.00		
<b>Emission Factor Inputs for Auto Travel</b>			
ROG - Average Trip ends (g/trip end)	0.368	Data Gathered From CARB March 2018 Update Table #3	
ROG - Auto VMT factor (grams/mile)	0.119	Data Gathered From CARB March 2018 Update Table #3	
NOx - Average Trip ends (g/trip end)	0.175	Data Gathered From CARB March 2018 Update Table #3	
NOx - Auto VMT factor (grams/mile)	0.114	Data Gathered From CARB March 2018 Update Table #3	
PM - Average Trip ends (g/trip end)	0.003	Data Gathered From CARB March 2018 Update Table #3	
PM - VMT factor (grams/mile)	0.053	Data Gathered From CARB March 2018 Update Table #3	
<b>Average Auto Emissions Factors</b>			
Annual Emission Reduction - ROG (lbs/yr)	54.59	Formula: [(189,768 Annual Miles Traveled * 0.119 ROG VMT Factor) + (5,978 Annual Trips Reduced * 0.368 ROG Average Trip Ends) / 454]	
Annual Emission Reduction - NOx (lbs/yr)	49.96	Formula: [(189,768 Annual Miles Traveled * 0.114 NOx VMT Factor) + (5,978 Annual Trips Reduced * 0.175 NOx Average Trip Ends) / 454]	
Annual Emission Reduction - PM (lbs/yr)	22.19	Formula: [(189,768 Annual Miles Traveled * 0.053 PM VMT Factor) + (5,978 Annual Trips Reduced * 0.003 PM Average Trip Ends) / 454]	
<b>Total Emissions Factors</b>			
Total Emissions reduction (All) (lbs/yr)	126.73	Formula: 54.59 ROG lbs per yr + 49.96 NOx lbs per yr + 22.19 PM lbs per yr	
Cost-Effectiveness of Funding Dollars	\$36.79	Formula: (22 Capital Recovery Factor * \$32,000 Grant Funding Amount) / (54.59 ROG + 49.96 NOx + 22.19 PM)	

## **G. WORK STATEMENT**

During the pre-screening portion of this grant staff conducted a business analysis of current processes, procedures and meeting trip activities. This analysis provided the basis of data calculated in the Emissions Summary as it pertains to trips and mileage to and from meetings. Additionally this analysis provided insight to our standard operating procedures and an implementation plan was formed to reduce vehicle miles traveled and associated emissions reductions for inter-office meetings. Implementation of this plan hinges on the need of video conferencing equipment in multiple locations throughout the County.

As a secondary result of this business analysis, IGS staff created an inventory list to determine where equipment is most needed as well as listed products and services that support high definition, screen sharing, telepresence, multiway conferencing, data sharing and mobile video conferencing. Purchased equipment will include; Polycom systems, screens, mounts, cables and software. Additional details pertaining to the purchased equipment are found below as scope of video conferencing needs have now been defined.

### **PURCHASE OF VIDEO CONFERENCING RELATED EQUIPMENT AND SOFTWARE FOR PROJECT USE**

1. Purchase of Polycom systems, screens, mounts, cables and software for video conferencing.
2. Purchase software to be used for video conferencing.

*IGS Staff will request purchase orders from the County Purchasing Department to purchase video conferencing equipment and software.*

### **INSTALLATION OF VIDEO CONFERENCING RELATED EQUIPMENT AND SOFTWARE**

1. Installation of video conferencing equipment
2. Installation of software on video conferencing equipment

*IGS Staff will install the products and services that support high definition, screen sharing, telepresence, and multiway conferencing, data sharing and mobile video conferencing.*

### **REVIEW AND IMPLEMENTATION OF PROCESSES FOR VIDEO CONFERENCING**

1. Conduct quality assurance on functioning video conferencing equipment and software.
2. Promote video conferencing ability through HHS staff training.
3. HHS policy implementation for video conferencing and vehicle usage.

*HHS and IGS Staff will ensure proper troubleshooting and training has been conducted to increase the number of meetings provided by video conferencing thus reducing vehicle miles traveled and associated emissions.*

**MONITORING AND EVALUATING THE PROGRAM**

1. Review and submittal of financial requirements per NSAQMD agreement requirements.
  2. Review of conference room calendared activities.
    - a. Review of video conferencing meetings.
    - b. Review of meetings where video conferencing was not utilized
  3. Generation of GHG emissions reduced during project cycle
- HHS and IGS Staff will provide needed financial data per NSAQMD agreement requirements. Additionally throughout the implementation of this project meeting room calendars will be reviewed to ensure video conferencing equipment utilization. Utilization of video conference meeting numbers will be useful in the generation of GHG emissions reduced throughout the project life cycle.*

This work statement reflects the period from January 1, 2020 through December 31, 2020 and assumes that the Board of Supervisors approves the contract between NSAQMD and the County prior to January 1, 2020. The tasks will be completed under the guidance of the HHS Staff. The Directors and Program Managers in all divisions and departments that are involved in this project will be coordinating with the HHS Staff.

There will be public acknowledgement that this project is funded by the District utilizing DMV Surcharge Funds.

**H. FUNDING REQUEST/BREAKDOWN COST**

Funding for this video conferencing project consists of the requested \$20,000 in AB 2766 grant funds and matching in-kind funds of \$10,000 for a total project cost of \$30,000.

**AB 2766 Grant Funds**

Equipment and software purchased with AB 2766 Funds will be 100% devoted to video conferencing capabilities. Requested amount of \$21,196 includes \$19,658.00 allocated for equipment costs, \$1,538 for Contracting. Total amounts and contributions are found below in the referenced Equipment, Contracting, and Labor Chart.

**Co-Funding**

The amount of \$8,804 will be provided from Staff Costs such as: training of staff, customer training, supervision of the project, data monitoring, coordination of the Information System Services, tracking of expenditures, preparation of progress reports and administrative services.

Nevada County Health and Human Services Agency will track the expenditures of grant funds and in-kind funds using our accounting system purchased by Nevada County and installed April 18, 2005. Finance Plus software allows our Fiscal Unit to track expenditures by projects. We can track expenditures of both the grant funds and the in-kind funds very easily using unique project code numbers. We will also use Microsoft Excel to present the financial data for the required grant finance reports.

77

County of Nevada HHS, Assessor's Office, and IGS.  
AB 2766 DMV Surcharge Fund Program 2019-2020 Project Cycle

**Equipment, Contracting, and Labor Chart**

Total Equipment List			Contribution Matrix
Equipment Needed	Qty	Budgeted Cost	
Polycorn System	2	\$ 10,400.00	Equipment Costs AB 7766 Grant Funds
Polycorn HDX 5006 or equiv	1	\$ 3,640.00	
LG 55" class flat screen	1	\$ 720.00	
LG 65" class flat screen	1	\$ 1,040.00	
Flat screen mount	2	\$ 312.00	
Camera wall mount	3	\$ 780.00	
Codec wall mount	3	\$ 468.00	
HDMI and AV cables	3	\$ 1,100.00	
Standard PC	1	\$ 850.00	
22" monitor	1	\$ 140.00	
Shipping	1	\$ 200.00	
<b>Total Equipment</b>		<b>\$ 19,858.00</b>	
Total Contracts			
Contract Need	Qty	Budgeted Cost	
Polycorn RealConnect License	3	\$ 342.00	Contract Costs AB 7766 Grant Funds
PC build/install	1	\$ 296.00	Contract Costs AB 7766 Grant Funds
Network Cabling	1	\$ 400.00	Contract Costs AB 7766 Grant Funds
Additional Power Outlets	1	\$ 500.00	Contract Costs AB 7766 Grant Funds
<b>Total Contract</b>		<b>\$ 1,538.00</b>	
Total Labor			
Labor Code	Hours	Budgeted Cost	
Network Analyst	36	\$ 3,564.00	County of Nevada Matching Funds
Desktop Technician	4	\$ 710.00	
Facilities	22	\$ 2,090.00	
Project Management/ Implementation	20	\$ 2,440.00	
<b>Total Labor</b>		<b>\$ 8,804.00</b>	
Total Project Budgeted Amount			
<b>\$</b>		<b>30,000.00</b>	

78



**I. Schedule of Deliverables/ Monitoring Program**

**Schedule of Deliverables/ Monitoring Program**

Task	Jan - 20	Feb - 20	Mar - 20	Apr - 20	May - 20	Jun - 20	July - 20	Aug - 20	Sep - 20	Oct - 20	Nov - 20	Dec - 20
<b>Purchase of Video Conferencing Related Equipment and Software</b>		X		X								
Purchase of Polycom systems, screens, mounts, cables and software for video conferencing		X		X								
Purchase software to be used for video conferencing					X							
<b>Installation of Video Conferencing Related Equipment and Software</b>				X								
Installation of video conferencing equipment				X								
Installation of software on video conferencing equipment					X							
<b>Review and Implementation of Process for Video Conferencing</b>						X						
Conduct quality assurance on functioning video conferencing equipment and software.						X						
Promote video conferencing ability through HHSA staff training						X						
HHSA policy implementation for video conferencing and vehicle usage.						X						
<b>Monitoring and Evaluating the Program</b>											X	X
Review and submit of financial requirements per NSAQMD agreement requirements		X		X				X	X	X	X	X
Review of conference room calendar activities.		X						X	X	X	X	X
Review of video conferencing meetings.								X	X	X	X	X
Review of meetings where video conferencing was not utilized								X	X	X	X	X
Generation of GHG emissions reduced during project cycle		X							X	X	X	X

79