

Agenda Date: January 18, 2018  
Agenda Placement: Admin  
Estimated Time: N/A  
Continued Item: No

## Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer

CONTACT: Jim Fredrickson, Air Quality Specialist, 961-8892

SUBJECT: Increase Carl Moyer Program Cost-Effectiveness Limit

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### RECOMMENDATIONS:

Rescind Resolution No. 15-23 and adopt a new resolution (Attachment 1) that contains the following actions for grant agreements through the Carl Moyer Program:

- A. Establish the cost-effectiveness limit for conventional technology projects at no greater than \$30,000 per weighted ton of emissions reduced;
- B. Establish the cost-effectiveness limit for advanced technology projects at no greater than \$100,000 per weighted ton of emissions reduced; and
- C. Establish the cost-effectiveness limit for school bus projects at no greater than \$276,230 per weighted ton of emissions reduced.

### BACKGROUND:

On August 20, 2015, the Board approved Resolution 15-23, which established the District's Carl Moyer Program cost-effectiveness limit at no greater than \$18,030 per weighted ton of emission reduced. Recent legislation broadened the scope of the statewide program, and the California Air Resources Board (CARB) also increased the State's cost-effectiveness limits to accommodate these changes. We are seeking Board approval to make the District's Carl Moyer Program cost-effectiveness limits consistent with the current CARB-approved cost-effectiveness limits. In particular, a higher cost-effectiveness limit for school bus projects must be adopted before the District can enter into grant agreements using the Moyer Year 19 State Reserve funds that were allocated to the District in August 2017.

## **DISCUSSION:**

The District's current Carl Moyer Program provides grants to qualified applicants in the county to cost-effectively achieve emission reductions by funding the repower or replacement of older polluting diesel engines and equipment in the off-road, on-road, marine and agricultural sectors with new low emission technology.

CARB continually tracks Carl Moyer projects that are implemented statewide and determines when an increase to the cost-effectiveness limit for Carl Moyer projects is warranted. On January 1, 2016, CARB approved a number of modifications to their existing 2011 Carl Moyer Guidelines, including a new cost-effectiveness limit for school bus projects that use Carl Moyer Program funds set at \$276,230 per-weighted-ton of emission reductions. On April 27, 2017, CARB approved new 2017 Carl Moyer Program Guidelines, and these guidelines include revised statewide cost-effectiveness limits for the program.

### ***Tiered Cost-Effectiveness Limits***

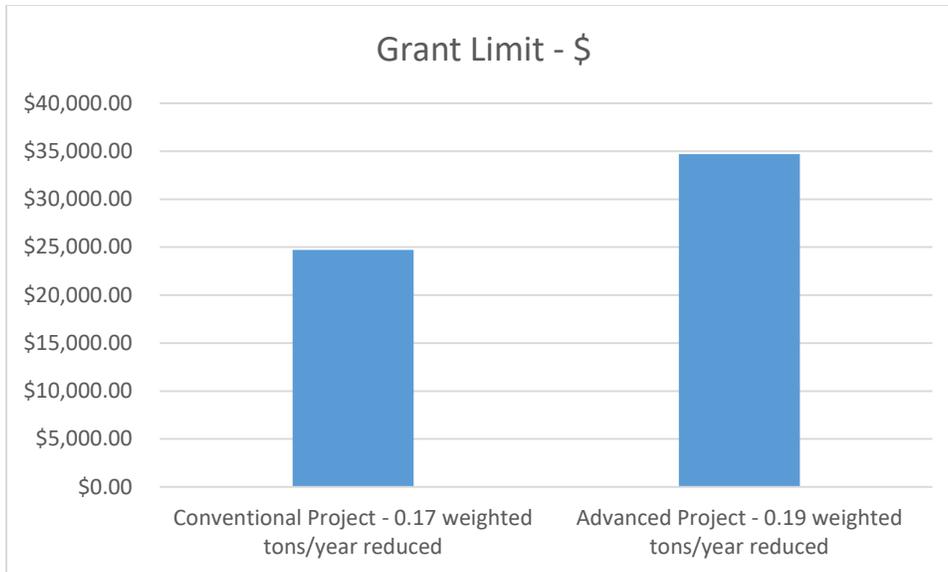
The State's revised cost-effectiveness limits are based on data from projects implemented statewide, along with the increased costs of technology to comply with recent regulations and new engine emission standards. Now, instead of a single cost-effectiveness limit, two tiers are available:

1. **Conventional Projects:** A base limit to support conventional technology projects, set at \$30,000 per-weighted-ton of emission reductions. This level allows full funding for a wide range of traditional projects such as diesel engine replacements. The level is consistent with the cost of compliance with regulations and will enable grants of sufficient size to encourage engines to be replaced or repowered sooner, to the highest available engine tier standard.
2. **Advanced Projects:** An optional advanced technology limit for projects that are zero-emission, or alternatively meet the cleanest optional standard level certified by CARB. The \$30,000 per-weighted-ton base limit applies for reductions down to the level that is achievable with conventional technology, and then a \$100,000 per-weighted-ton limit applies for the incremental emission reductions achieved with advanced technology.

The following example shows how these tiered cost-effectiveness limits work for a project to replace a model year 2009 on-road refuse truck that is used 15,000 miles per year:

If the refuse truck were replaced with a model year 2017 refuse truck powered by a compressed natural gas (CNG) engine that meets the current standard (0.20 grams NOx/brake horsepower-hour), then the project would reduce 0.17 weighted-tons per year of emissions and could qualify for up to \$24,700 in funding.

If the refuse truck were instead replaced with a model year 2017 refuse truck powered by a CNG engine with near-zero emissions (0.02 grams NOx/brake horsepower-hour), the project would reduce a total of 0.19 weighted-tons-per-year (an additional 0.02 weighted-tons per year) and would qualify for up to \$34,700 in funding (\$10,000 more than a conventional repower project).



***School Bus Cost-Effectiveness Limit***

CARB has established a cost-effectiveness limit for school bus projects that is considerably higher than for conventional and advanced technology projects. School buses are generally less cost-effective than other mobile projects because they travel less miles per day and thus have smaller emission reductions. However, the diesel exhaust from school buses is a toxic air contaminant and a direct threat to vulnerable young students with developing lungs when regularly exposed to this exhaust. With the new higher cost-effectiveness limit set at \$276,230 per-weighted-ton of emission reductions, CARB has allowed air districts greater flexibility to fund school bus projects using Carl Moyer Program funds. With Board approval of this new cost-effectiveness limit for school buses, the District will be able to implement grant agreements with the Lompoc Unified School District to replace six of their old high-emitting school buses with new low-emitting school buses.

**ATTACHMENT:**

1. Board Resolution Establishing Cost-Effectiveness Limits for Authorized Innovative Technology Group Carl Moyer Programs

**RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE SANTA BARBARA COUNTY  
AIR POLLUTION CONTROL DISTRICT**

IN THE MATTER OF ESTABLISHING  
COST-EFFECTIVENESS LIMITS FOR  
AUTHORIZED INNOVATIVE  
TECHNOLOGY GROUP CARL MOYER  
PROGRAMS

APCD RESOLUTION NO. \_\_\_\_\_

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**RECITALS**

**WHEREAS**, Resolution No. 09-14 of the Board of Directors delegated authority to the Control Officer to enter into and approve certain grant agreements for emissions reduction projects within specified parameters; and

**WHEREAS**, condition 2.c. in Resolution No. 09-14 states, “All grants must meet or exceed the established cost-effectiveness limits established by the Board”; and

**WHEREAS**, Resolution No. 15-23 of the Board of Directors established the cost-effectiveness limit for grant agreements through the Carl Moyer Program at no greater than \$18,030 per weighted ton of emissions reduced; and

**WHEREAS**, on April 27, 2017 the California Air Resources Board further established tiered cost-effectiveness limits based on technology; and

**WHEREAS**, the California Air Resources Board established the cost-effectiveness limit for conventional technology projects in the Carl Moyer Guidelines for the Carl Moyer Program at no greater than \$30,000 per weighted ton of emissions reduced ; and

**WHEREAS**, the California Air Resources Board established the cost-effectiveness limit for advanced technology projects with zero or near-zero emitting engines in the Carl Moyer Guidelines for the Carl Moyer Program at no greater than \$100,000 per weighted ton of emissions reduced ; and

APCD RESOLUTION IN THE MATTER OF ESTABLISHING COST-EFFECTIVENESS LIMITS FOR INNOVATIVE TECHNOLOGY GROUP AUTHORIZED CARL MOYER PROGRAMS

**WHEREAS**, the California Air Resources Board established the cost-effectiveness limit for school bus projects in the Carl Moyer Guidelines for the Carl Moyer Program at no greater than \$276,230 per weighted ton of emissions reduced ; and

**WHEREAS**, the administration of the District’s Carl Moyer Program meets the provisions in the California Air Resources Board Carl Moyer Guidelines.

**NOW, THEREFORE, IT IS HEREBY RESOLVED**, as follows:

1. Resolution No. 15-23 of the Board of Directors is rescinded and hereby superseded by the adoption of this Resolution.
2. The Board hereby establishes the cost-effectiveness limit for conventional technology project grant agreements through the Carl Moyer Program at no greater than \$30,000 per weighted ton of emissions reduced.
3. The Board hereby establishes the cost-effectiveness limit for advanced technology projects with zero or near-zero emitting engine grant agreements through the Carl Moyer Program at no greater than \$100,000 per weighted ton of emissions reduced.
4. The Board hereby establishes the cost-effectiveness limit for school bus project grant agreements through the Carl Moyer Program at no greater than \$276,230 per weighted ton of emissions reduced.

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APCD RESOLUTION IN THE MATTER OF ESTABLISHING COST-EFFECTIVENESS FOR AUTHORIZED INNOVATIVE TECHNOLOGY GROUP CARL MOYER PROGRAMS

**PASSED, APPROVED AND ADOPTED** by the Air Pollution Control District Board of the Santa Barbara County, State of California, this 18<sup>th</sup> day of January, 2018, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

SANTA BARBARA COUNTY  
AIR POLLUTION CONTROL DISTRICT

**ATTEST:**

AERON ARLIN GENET  
Clerk of the Board

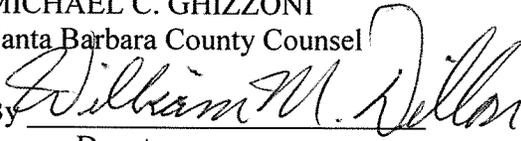
By \_\_\_\_\_  
Deputy

By \_\_\_\_\_  
Chair

Date \_\_\_\_\_

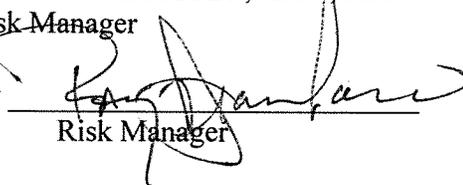
**APPROVED AS TO FORM:**

MICHAEL C. GHIZZONI  
Santa Barbara County Counsel

By   
Deputy

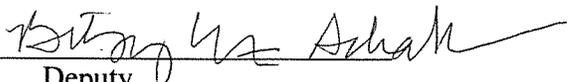
**APPROVED AS TO FORM:**

RAY AROMATORIO, ARM, AIC  
Risk Manager

By   
Risk Manager

**APPROVED AS TO FORM:**

THEODORE A. FALLATI, CPA, CPFO  
Auditor-Controller

By   
Deputy