

## CALIFORNIA AIR RESOURCES BOARD

### NOTICE OF PUBLIC MEETING TO CONSIDER REVISIONS TO THE CARL MOYER MEMORIAL AIR QUALITY STANDARDS ATTAINMENT PROGRAM GUIDELINES

The Air Resources Board (ARB or Board) will conduct a public meeting at the time and place noted below to consider proposed revisions to the Carl Moyer Memorial Air Quality Standards Attainment Program (Moyer Program or Program) Guidelines (Guidelines). The Moyer Program 2017 Guidelines update is available for public comment.

DATE: April 27, 2017

TIME: 9:00 a.m.

LOCATION: California Environmental Protection Agency  
Air Resources Board  
Byron Sher Auditorium, 2<sup>nd</sup> Floor  
1001 I Street  
Sacramento, California 95814

WEBCAST: <http://www.cal-span.org/>

This item may be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., Thursday, April 27, 2017, and may continue at 8:30 a.m., on Friday, April 28, 2017. Please consult the agenda for the meeting, which will be available at least 10 days before April 27, 2017, to determine the day on which this item will be considered.

#### **Background**

Since 1998 the Moyer Program has reduced criteria pollutant emissions, including oxides of nitrogen (NO<sub>x</sub>) and reactive organic gases (ROG) that contribute to ozone formation, as well as particulate matter (PM). The Program provides grants that fund up to the incremental cost of cleaner-than-required engines, equipment or vehicles, and emission reduction technology. The projects must yield emission reductions above and beyond or before it is required by regulation and are constrained by a cost effectiveness limit of no more than \$18,260 per ton of weighted emissions reductions. Emission reductions produced by Moyer Program-funded projects must be creditable in the State Implementation Plan (SIP).

The Moyer Program is a statewide program that is implemented locally by California's air pollution control and air quality management districts (air districts). Each year the Program helps remove older, high-polluting engines that would have operated for years to come. Over the past 18 years ARB has worked alongside local air districts to implement over \$900 million in Moyer Program projects, cleaning up over 50,000 engines and reducing ozone precursors by 178,000 tons and particulates by 6,500 tons.

Senate Bill (SB) 513 (Beall, 2015) provides new opportunities for the Program to contribute significant emission reductions alongside implemented regulations, while advancing zero and near-zero technologies, and co-funding projects with other incentive programs. This new flexibility will allow the Moyer Program to support California's commitment to transition to zero and near-zero emission technologies, which are essential in the State's effort to attain federal air quality standards and other strategic goals. SB 513 directs the Board to update the Moyer Program Guidelines to reflect these changes no later than July 1, 2017.

Under authority delegated to the Executive Officer, a number of updates have already been implemented, most notably a separate cost-effectiveness limit of \$276,230 per weighted ton for school bus projects, to enable consistency with the funding levels used in California's Lower-Emission School Bus program. This proposal addresses the remainder of the SB 513 directives.

### **Proposed Action**

Staff is proposing changes to the Guidelines consistent with the provisions of SB 513. SB 513 allows cost-effectiveness limits to reflect regulatory and technology costs, increases opportunities to fund infrastructure projects, and enables co-funding with other grant programs without a cost-effectiveness penalty. The key Program changes to implement these provisions are described below.

Cost-effectiveness. SB 513 specifies that the Board, in collaboration with the air districts, consider the cost of emission control technologies and the cost-effectiveness of adopted regulations in establishing cost-effectiveness values for the Program. After review of those factors and public input, staff proposes a two-tiered cost-effectiveness approach that will allow the Moyer Program to meet dual needs by supporting conventional projects and cost-effectively providing emerging technologies with necessary funding.

First, staff proposes to increase the general cost-effectiveness limit from the current \$18,260 up to \$30,000 per weighted ton of emission reductions.<sup>1</sup> This reflects the cost-effectiveness of more recent regulations and will enable more meaningful grant amounts for cleaner engines at the required standard.

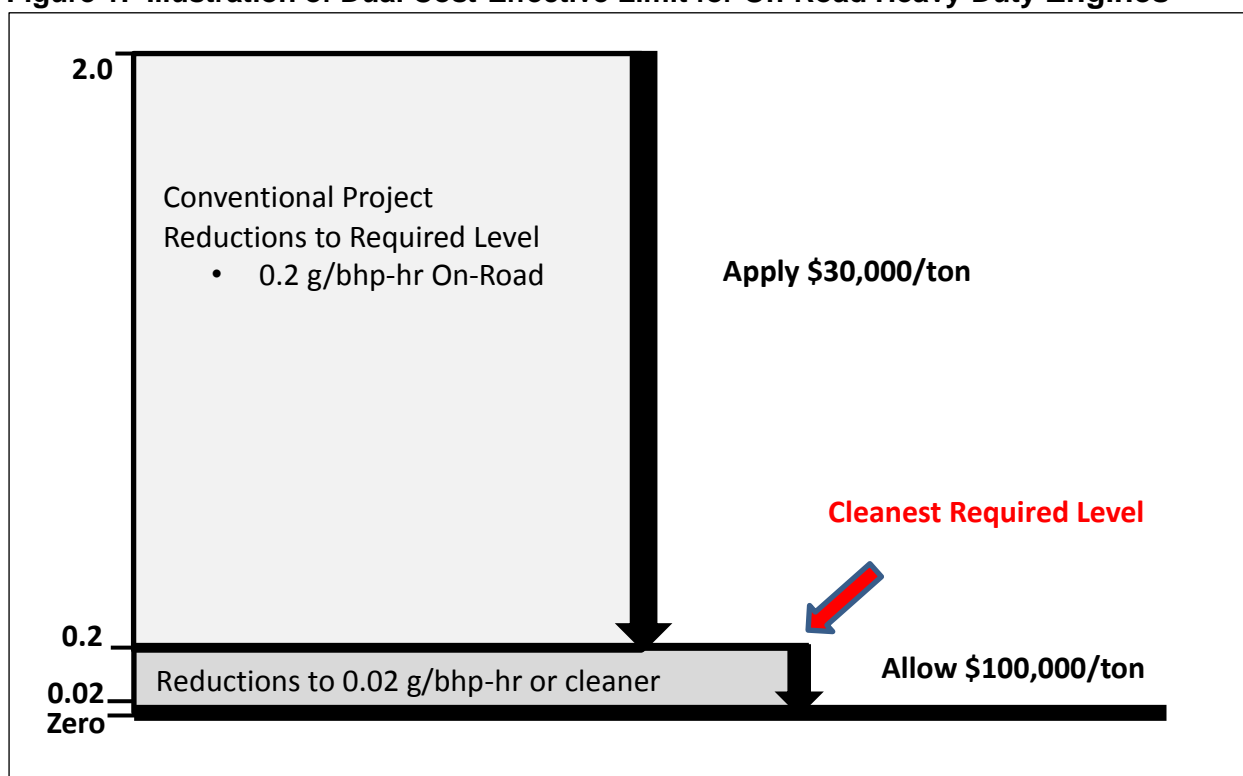
Second, staff proposes an optional cost-effectiveness value based on the cost of the cleanest technologies. For advanced technology projects that are zero-emission, or alternatively meet the cleanest certified optional standard applicable by source category, staff proposes that districts be given the option to apply a cost-effectiveness limit of up to \$100,000 per weighted ton, limited to the increment of emissions reductions beyond those achieved at the required standard. This higher limit would provide additional incentive to turn engines and fleets over to the cleanest certified technologies that are now emerging in the marketplace.

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<sup>1</sup> Particulate matter (PM) reductions are weighted by a factor of 20, relative to NOx and ROG, due to diesel PM toxicity.

Figure 1 illustrates how the proposal would apply to the example of on-road heavy-duty engines, for which the required standard is 0.2 grams per brake horsepower-hour (g/bhp-hr) NOx, and the cleanest certified optional standard is 0.02 g/bhp-hr. Air districts would apply the base cost-effectiveness limit of \$30,000 per weighted ton to all “early” reductions down to the required standard. Air districts could then choose to apply the higher limit of \$100,000 per weighted ton to the increment of “extra” reductions beyond the required standard, as long as the new engine is certified to the cleanest optional standard -- or is zero-emitting. The higher cost-effectiveness limit would thus also be available for incremental reductions down to zero. This applies to all source categories; some do not have engines certified to optional cleaner standards at this time, but when those become available the same limits would apply.

**Figure 1: Illustration of Dual Cost-Effective Limit for On-Road Heavy-Duty Engines**



As Figure 1 shows, a relatively small portion of the total reductions would be allowed the higher cost-effectiveness limit. There are further safeguards in the staff proposal to prevent overpayment: grant funds remain restricted to incremental costs, and funding caps would be applied by source category to back up the cost-effectiveness limits. Furthermore, it should be noted that air districts would retain the discretion to be more stringent than these limits.

Infrastructure. SB 513 provides the opportunity for the Program to support infrastructure projects. The staff proposal would allow air districts to fund infrastructure projects where the greatest penetration of commercially available advanced technology vehicles and equipment exists. These categories include commercial and publicly-

accessible battery charging and alternative fueling stations for on-road and off-road vehicles and equipment, as well as continued support for marine shore power electrification and stationary agricultural projects. To ensure transparency for publicly accessible projects, staff proposes requiring a competitive bid process when the project includes public access. Air districts would retain the flexibility to select projects that meet their local needs and priorities. Per SB 513, infrastructure projects are not required to meet a cost-effectiveness limit.

Co-Funding Projects. SB 513 provides new opportunities for Program funds to co-fund projects with other incentive programs without a cost-effectiveness penalty. Co-funding would allow projects to be approved with support from multiple programs. There would be no limit on the number of co-funding sources that can be used to fund a project, as long as the total project costs are not exceeded and a 15 percent applicant cost share requirement is met for private sector projects. Provisions in the General Criteria and Program Administration Chapters would safeguard against double counting of emission reductions, and the Moyer Program would account for all emission reductions for SIP purposes. Projects would still be required to meet the individual requirements of each funding source.

In addition to the above changes as per SB 513, staff proposes other improvements to the existing Guidelines to further modernize the Program.

Program Administration. Staff has worked with air districts to streamline and reorganize the administrative requirements that ensure program accountability. A major reporting update made in SB 513 was changing the two year expenditure deadline for grant funds to a four year liquidation deadline. To reflect this, the staff proposes additional time for air districts to complete more complex projects, while retaining contract execution as an interim milestone for progress tracking. To improve fiscal transparency and lower the cost of Program audits, the proposal incorporates recommendations from the California Department of Finance.

Emissions Estimates. Staff also proposes to update emissions factors and include emissions that occur due to deterioration of vehicle and equipment emission controls over time. Including the deterioration factors used in ARB emissions inventories where feasible, for both old and new equipment, will better reflect real-world engine emissions over project lives and align Moyer Program calculation methods with those used in ARB planning inventories and SIP air quality modeling.

On-Road. The proposal would merge several different chapters into one comprehensive chapter for heavy-duty trucks and buses. The On-Road Voucher Incentive Program (VIP) program would remain separate in Part II of the Guidelines. The proposal would also establish funding caps for new technologies such as optional low NOx engines and zero emission vehicles. Staff also proposes to increase VIP funding caps for conventional project types to \$60,000 to align with the funding caps for non-VIP replacement projects. While the proposal retains provisions to ensure smaller fleets have an opportunity to apply for funding, it would expand eligibility for fleets larger than

ten, provided they use cleaner engine technology meeting optional low NOx standards of 0.1 g/bhp-hr NOx or cleaner.

Off-Road. The proposal would combine several previous chapters into one streamlined off-road equipment chapter, while Off-Road VIP remains separate. Staff proposes to extend the eligibility for large fleets (more than 5,000 total horsepower) by allowing districts to provide such fleets a single additional funding opportunity after January 1, 2017. This will provide large fleets a path to add Tier 4 final equipment while retaining broader opportunity for medium fleets within this time frame. Staff also proposes to allow equipment with Tier 3 engines and portable equipment to be eligible for equipment replacement.

Locomotive. Staff proposes to require all new equipment be Tier 4 or cleaner. Staff also proposes to allow the reuse and/or the recycling of the baseline chassis while still requiring the baseline engine to be destroyed. As there is little to no interest in idle limiting devices and retrofit projects staff proposes they would no longer be eligible for funding.

Marine. Staff proposes that only the cleanest technologies be eligible for the highest maximum funding percentage, and allowing compliant Tier 2 engines to be repowered. Vessels that are compliant with ARB's Commercial Harbor Craft Regulation (title 17, California Code of Regulations, section 93118.5) replacement schedule would become eligible for the same funding amounts as unregulated vessels. The proposal would also add provisions to fund the retrofit of vessels to install verified hybrid systems.

Other Changes.

- For all categories, new purchase projects that expand fleets would no longer be eligible.
- Staff proposes only minor changes to the Light Duty Vehicle and Lawn and Garden chapters, and to the Agricultural Assistance Program (Part III).
- Staff proposes updates to the Appendices to reflect the above.

ARB staff will report to the Board on the proposed Guidelines at the meeting. A written staff report and the proposed Guidelines will be available for a 45-day public comment period beginning March 10, 2017. Copies of the report may be obtained from ARB's Public Information Office, 1001 I Street, First Floor, Environmental Services Center, Sacramento, California, 95814, (916) 322-2990, Monday, March 10, 2017. The report may also be obtained from ARB's website at <https://www.arb.ca.gov/msprog/moyer/2017guideline.htm>.

Interested members of the public may present comments orally or in writing at the meeting and may provide comments by postal mail or by electronic submittal before the meeting. To be considered by the Board, written comments not physically submitted at the meeting, must be received **no later than 5:00 p.m., Monday, April 24, 2017**, and addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board  
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

ARB requests that written statements on this item be filed at least 10 days prior to the meeting so that ARB staff and Board members have additional time to consider each comment. Further inquiries regarding this matter should be directed to Ms. Neva Lowery, Air Pollution Specialist, at (916) 324-1209 or Mr. Doug Thompson, Manager of the Incentives Oversight Section, at (916) 322-6922.

### **SPECIAL ACCOMMODATION REQUEST**

Consistent with California Government Code Section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the meeting;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 10 business days before the scheduled Board meeting. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia;
- Documentos disponibles en un formato alternativo u otro idioma;
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

CALIFORNIA AIR RESOURCES BOARD

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Richard W. Corey  
Executive Officer

Date:

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.arb.ca.gov](http://www.arb.ca.gov).*