BOARD MEETING DATE: March 4, 2016 AGENDA NO. 16

PROPOSAL: Authorize Staff to Petition U.S. EPA to Adopt Lower On-Road Heavy-Duty Engine Exhaust Emission Standards for NOx.

SYNOPSIS: The largest single category of NOx emission sources in the South Coast Air Basin for 2023 and 2031 is projected to be emissions from heavy-duty trucks and further control of this category is essential to attain the 2023 and 2031 ozone air quality standards. CARB's draft mobile source strategy for the 2016 AQMP includes a proposal for CARB to adopt a lower on-road heavy-duty engine standard for NOx (lowering the standard from 0.2 g/bhp-hr to 0.02 g/bhp-hr) for engines for sale in California, but the majority of the NOx emissions from heavy-duty trucks in California come from trucks that are registered out-of-state. U.S. EPA's position is that states cannot assign control measures in the state implementation plan to the federal government under the Clean Air Act. However, under the Administrative Procedure Act, any person may petition a federal agency for a rulemaking. This action is to authorize staff to petition U.S. EPA to adopt a 0.02 g/bhp-hr NOx engine exhaust emissions standard on a nationwide basis. If successful, this action will greatly assist the region in reaching ozone air quality standards, and will help level the economic playing field between businesses purchasing trucks in California and those purchasing out of state.

COMMITTEE: Mobile Source, February 19, 2016; Recommended for Approval

RECOMMENDED ACTION:
Authorize staff to petition U.S. EPA to adopt a lower on-road heavy-duty engine exhaust emissions standard for NOx.

Barry R. Wallerstein, D.Env.
Executive Officer

BBB:pa

Background
In 2008, the primary and secondary 8-hour National Ambient Air Quality Standards ("NAAQS") for ozone were reduced from 0.080 ppm – set in 1997 – to 0.075 ppm. (7 Fed. Reg. 16436.) To date, the South Coast Air Basin remains designated as "Extreme Nonattainment" for both the 1997 and 2008 8-hour standards. Expected attainment dates for the standards set during both of these years are fast-approaching; the 1997 standards must be attained in 2023 while the 2008 standards must be met in 2031. Additionally, as of December 2015, U.S. EPA strengthened the ozone standard to 0.070 ppm. (80 Fed. Reg. 65292.) Given that NOx is a precursor to ozone, attaining the ozone standards will require substantial reductions in emissions of NOx beyond reductions from current rules, programs, and commercially available technologies. In fact, the District has projected that the region must reduce regional NOx emissions by approximately 50% by 2023 and 65% by 2031 in order to attain the 8-hour ozone NAAQS as required by federal law. It is projected that in order to achieve the NAAQS for ozone, it is necessary to revise U.S. EPA's current nationwide on-road heavy-duty engine standard for NOx from 0.2 g/bhp-hr to 0.02 g/bhp-hr as soon as possible.

Petitioning the U.S. EPA
The Administrative Procedure Act ("APA") codifies the right to petition federal agencies for rulemakings, providing that "[e]ach agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule." (5 U.S.C. § 553(e).) Courts have construed the APA rather broadly to permit the public to petition for rulemaking under the Clean Air Act. (*See Friends of the Earth v. U.S. EPA* (D.D.C. 2013) 934 F. Supp. 2d 40, 54 (suggesting that 5 U.S.C. §§ 553(e) and 555(b) apply broadly to the U.S. EPA and Clean Air Act).) Importantly, in *Massachusetts v. U.S. EPA* (2007), the Supreme Court concluded that Section 7607(b)(1) of the Clean Air Act contains the "concomitant procedural right to challenge the rejection of [a] rulemaking petition as arbitrary and capricious." (549 U.S. 497, 520.) Although the U.S. EPA acknowledges that its status as a federal agency affords all interested persons the right to petition it pursuant to the APA, it does not set forth any specific procedures or guidance for doing so. In general, however, most regulations simply ask that petitioners identify their interest, describe the substance of their proposal, and provide all available information in support of their proposal.

Staff seeks authorization to petition U.S. EPA for a revision of the current on-road heavy-duty engine standard for NOx. Section 202(a)(1) of the Clean Air Act requires the Administrator of the U.S. EPA to prescribe, by regulation, and from time to time revise, in accordance with the provisions of this section,

> standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Such standards shall be

> applicable to such vehicles and engines for their useful life . . . , whether such vehicles and engines are designed as complete systems or incorporate devices to prevent or control such pollution.

(42 U.S.C. § 7521(a)(1).) Pursuant to Section 202(b)(1)(C) of the Clean Air Act, the Administrator may promulgate such regulations, revising any NOx emission standard prescribed or previously revised, as needed to protect public health or welfare, "taking costs, energy, and safety into account." (42 U.S.C. § 7521(b)(1)(C).)

The language of Section 202 appears to afford the Administrator reasonable discretion in determining when to revise the standard. (*See e.g., WildEarth Guardians v. U.S. E.P.A.* (D.C. Cir. 2014) 751 F.3d 649, 653-655 (noting that the language of Clean Air Act Section 111 – specifically phrases such as "from time to time" and "in his judgment" – implies that the Administrator may exercise reasonable discretion in determining exactly when to add a new source to the list of regulated air pollutants and affords her the ability to prioritize sources that are the most significant threats to public health).) However, it is very clear that the public health and welfare will suffer without a more stringent NOx emission standard. Currently, on-road heavy-duty highway engines, such as those used in trucks and buses, must meet a NOx emission standard of 0.2 g/bhp-hr. Eighty-eight percent of regional NOx emissions come from mobile sources, with on-road heavy-duty diesel trucks projected to be the largest single contributor to these emissions in 2023. Based on preliminary analyses, the approximately 580 tons per day ("tpd") of current Basin NOx emissions are projected to drop to approximately 300 tpd and 250 tpd in the attainment years of 2023 and 2031, respectively, due to continued implementation of already adopted control measures. However, without additional measures, these emissions reductions are not sufficient for the Basin to meet the required ozone standards. Substantial reductions in NOx emissions from the heavy-duty fleet, including interstate trucks, are required. The majority of heavy-duty trucks that operate in California are purchased out-of-state and may be operated as part of a nationwide fleet. Staff has calculated that a nationwide standard would be much more effective than a California-only standard, with the relative benefit increasing over time.

Staff requests that the Board authorize it to petition U.S. EPA to adopt a lower on-road heavy-duty engine exhaust emissions standard for NOx as soon as possible to enable the Basin to achieve federal ambient ozone standards.

Resource Impacts
The petition will be prepared using existing staff resources.