Air Resources Board

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ATTACHMENT B

MEMORANDUM

TO: Michael P. Kenny
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THROUGH: Kathleen Walsh
General Counsel

FROM: Leslie Krinsk
Senior Staff Counsel

DATE: January 26, 2000

SUBJECT: AUTHORITY OF AIR RESOURCES BOARD TO REGULATE URBAN BUS FLEETS

I. Background

The Air Resources Board (ARB) is developing a proposal to control emissions from heavy-duty diesel-cycle transit buses, especially emissions of oxides of nitrogen (NOx) and particulate matter (PM), in order to make progress towards the attainment of national and state ambient air quality standards. Reductions of PM emissions will also reduce emissions of toxic air contaminants that comprise diesel exhaust. The proposals envision stricter urban bus engine emission standards for NOx and PM phased in over several years, coinciding with the development and widespread availability of cleaner fuels for diesel-cycle engines.

A number of cleaner fuel alternatives are currently available and in use by transit agencies and transit bus leasing companies. In order to encourage more widespread use of these cleaner buses now, the ARB is proposing to provide incentives to bus fleet owners and operators while recognizing their need to plan in both the short- and long- term for transit service that is cost-efficient, safe, convenient, and feasible to maintain and operate, in addition to contributing to cleaner air. Thus, in addition to requiring engine and bus manufacturers to produce cleaner engines and vehicles, the ARB would like to propose that transit agencies and leasing companies that currently and in the near-term use cleaner fuel buses will be given more time to purchase only buses meeting the most stringent emission standards in the longer-term.

While some of the provisions relating to bus fleets will be optional and transit agencies and leasing companies may choose to purchase diesel-fueled buses that comply with the generally applicable heavy-duty urban bus standards, a retrofit requirement, some reporting

requirements, and a mandatory clean fuel demonstration project are being considered to enable the ARB to encourage and track the status of the urban bus fleet in progressing towards cleaner vehicles. Legal authority is a prerequisite for voluntary as well as mandatory programs. Before the ARB formally proposes a regulation that will apply not only to bus engine and vehicle manufacturers but also to fleet operators, a statement of our legal authority to do so is advisable.

II. Introduction

The authority of the ARB to adopt emission standards for heavy-duty urban bus engines and vehicles is not at issue. This authority clearly stems not only from the ARB's general responsibility to research and control air pollution from vehicular sources (see sections 39002, 39003, 39500, 39701, 40000, 43000, 43000.5 and 43700 of the Health and Safety Code), but also from specific provisions requiring the ARB to adopt and implement emission standards and test procedures for new motor vehicles (see sections 43009, 43013, 43018, 43101, 43102, 43104, and 43108 of the Health and Safety Code and 27157 and 27157.5 of the Vehicle Code). Indeed, section 43806 of the Health and Safety Code specifically requires the ARB to "adopt emission standards and procedures applicable to new engines used in publicly owned and privately owned public transit buses" in consideration of "the engine and fuel as a system" and reflecting "the use of the best emission control technologies expected to be available at the time the standards and procedures become effective." (Health and Safety Code section 43806.)

Moreover, the ARB is to "consider the projected costs and availability of cleaner burning alternative fuels and low-emission vehicles compared with other air pollution control measures" in adopting urban transit bus standards (Id.) Vehicle Code section 233 and Health and Safety Code section 39017 define "bus" as "any vehicle . . . designed, used or maintained for carrying more than 15 persons including the driver," not including vanpool vehicles, school buses, and other special-purpose vehicles not intended to be covered by the ARB regulation at issue here. All of these provisions relate to the control of exhaust or evaporative emissions and impose requirements on manufacturers of the engines or vehicles.

Transit bus fleet owners and operators purchase and deploy the buses, rather than manufacture them. Thus, the provisions cited above that pertain to ARB adoption of emission standards and test procedures do not apply to fleet operators. While the ARB could clearly accomplish the purchase and use of only buses meeting specified emission standards by requiring their exclusive manufacture and sale, the ARB would prefer to stimulate the purchase and use of currently available clean fuel buses (e.g., those diesel-cycle buses fueled by natural gas or methanol) in the near term without impeding the flexibility of transit agencies and leasing companies to determine optimal fleet composition. Many factors must be considered by fleet operators in arriving at this decision, including cost, resources, and the expectation of new

technologies. To the extent the ARB is authorized to regulate fleet operators, flexibility can be preserved and air quality improved at the same time.

III. Issues and Analysis

A. Authority to Regulate Urban Bus Fleets

In contrast to a number of air pollution control districts which are specifically authorized or directed to regulate the operators of public and commercial fleets by requiring the purchase of clean fuel vehicles (see Health and Safety Code sections 40404 and 40447.5(a), pertaining to the South Coast Air Quality Management District; sections 41011 and 41062, pertaining to the Sacramento Metropolitan Air Quality Management District, and section 41231, pertaining to the Mojave Desert AQMD), the ARB is not explicitly required to regulate fleet operators. Nevertheless, we find ample authority to enable the ARB to do so.

First, legislative concern about vehicular sources of pollution and legislative direction to the ARB to control diesel emissions is not limited to directives to impose controls on only exhaust and evaporative emissions via engine emission standards. Except as provided in specific provisions pertaining to the air districts, ARB authority over "vehicular sources" is plenary, and the ARB is required "to systematically attack the serious problem caused by motor vehicles, which is the major source of air pollution in many areas of the state." (Health and Safety Code section 39003.) Vehicular sources are defined as "those sources of air contaminants emitted from motor vehicles," including buses. (Health and Safety Code sections 39060, 39059, and 39017.) A systematic attack implies and requires an arsenal greater than emission standards imposed on manufacturers.

That the ARB's effort to control vehicular emissions is not confined to the adoption of emission standards and test procedures is borne out by additional statutes. Section 43000.5 exhorts the ARB to "take immediate action to implement both short- and long-range programs of across-the-board reductions in vehicle emissions and smoke, including smoke from heavy-duty diesel vehicles" and to "act as expeditiously as is possible to reduce nitrogen oxide emissions from diesel vehicles" in order to contribute to the attainment of ambient standards (emphasis added). Section 43013 refers not only to "motor vehicle emission standards," but also requires the ARB to "adopt standards and regulations" for various sources, including heavy-duty vehicles and fuels (see subdivisions (b), (c), (d), and (e) of section 43013), and requires the ARB to consider cost-effectiveness and technological feasibility "prior to adopting or amending any standard or regulation" relating to motor vehicle fuel specification. The ARB regulates vehicle and engine manufacturers by adopting emission standards and test procedures. Use by the Legislature of the conjunctive "and regulations" implies a wider scope of regulatory activity as necessary to meet the overarching control objectives enunciated above.

Second, an uncodified provision of the Health and Safety Code, section 1(b)(5) of the California Clean Air Act (Stats. 1988, Ch. 1568), states that "it is necessary for the state . . . to develop and implement its own program to attain air quality standards" through such measures as "the required use of cleaner burning fuels, the implementation of stricter new vehicle emission standards and warranty requirements, and the design and implementation of transportation control and vehicle fleet management measures . . . ." (Emphasis added.) Vehicle fleet management measures are not included among the transportation control measures that air districts must implement (see Health and Safety Code section 40717, pertaining to transportation control measures generally, and especially subdivision (g), which defines transportation control measure as "any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions").

Since "vehicle fleet management measures" have not been expressly included within the responsibilities of the air districts, and given the ARB's broad jurisdiction over motor vehicles, it appears that the Legislature intended the ARB to consider fleet measures. The statutory scheme clearly indicates that the air districts must be explicitly authorized to control emissions from motor vehicles, including the adoption of fleet rules in specified air districts only, to overcome the presumption that the ARB occupies the field of vehicular control. In all other areas where the Legislature required tackling the "serious problem of motor vehicles," it must be that the agency to undertake the job is the ARB.

Recognition of the ARB's plenary occupation of the motor vehicle control field is evidenced in Health and Safety Code section 40447.5, which authorizes the South Coast Air Quality Management District to adopt a fleet rule with the lead-in clause "[n]otwithstanding any other provisions of law . . . ." , and by Health and Safety Code section 42403.5, which allows air districts to collect civil penalties for violations of the nuisance provisions "resulting from the engine of any diesel-powered bus while idling" notwithstanding nonapplicability of air district civil and criminal penalties provisions to vehicular sources.

Third, the most compelling authority for ARB regulation of fleet operators is found in section 43018 of the Health and Safety Code, which requires the ARB to take "whatever actions are necessary, cost-effective, and technologically feasible" to achieve reductions in NOx, particulate matter, carbon monoxide, reactive gases, and toxic air contaminants from vehicular sources. Section 43018(c) requires the ARB to adopt "standards and regulations which will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including, but not limited to, . . . [r]equiring the purchase of low emission vehicles by state fleet operators." (Emphasis added). We note that use of the term "state fleet operators" in paragraph 3 of section 43018(c) is ambiguous. A liberal reading of the statute would have all fleet operators in the State of California subject to the low-emission vehicle

purchase requirement. A more conservative reading would limit the requirement to fleet operators that are state agencies. The legislative history is unclear on the proper interpretation. If we accept the liberal interpretation, we need go no further than to state that the ARB has explicit authority to require fleet operators in California to purchase alternative-fuel buses.

Even under a more conservative approach, whereby the provision would require the ARB to adopt a regulation to require state agencies operating fleets to purchase low-emission buses, we believe the ARB would be authorized to include non-state fleet operators in the regulation as well. Since the Health and Safety Code specifically authorizes the ARB to require state agencies to purchase clean fuel vehicles, which may include buses, this is clearly a "regulation" or "control measure" that can operate independently of an emission standard. And to the extent the statute specifically mentions "state fleet operators" in a provision that illustrates but does not exhaustively set forth acceptable motor vehicle control measures, it follows that the ARB can require the purchase of low-emission vehicles by transit agencies and leasing companies as well.

We also note that the reduction in PM that will result from the early injection of cleaner-fueled buses into the urban fleet will decrease emissions of toxic air contaminants. The ARB has designated the particulate component of diesel exhaust a toxic air contaminant (TAC). The ARB is authorized to adopt air toxics control measures for sources that emit identified TACs, including mobile sources. (See sections 39665 and 39667 of the Health and Safety Code.) While section 38667 refers to "emission standards" for vehicular sources and "regulations" specifying fuel content, it also states that the regulations "may include, but are not limited to, the modification, removal, or substitution of fuel, fuel components, or additives," arguably supporting clean fuel fleet rules.

B. Mandatory Requirements for Bus Fleets

As we stated above, transit agencies and transit bus leasing companies will generally be given the option of selecting the diesel path or the alternative-fuel path, so that the latter choice is voluntary. Several provisions of the ARB proposal may be mandatory. The authority cited in III. A. above, is relevant to the mandatory provisions as well, but further legal justification is warranted.

One component of the ARB proposal that bears discussion in this regard concerns the requirement that the owner or operator of large urban bus fleets implement a zero emission bus demonstration project. This provision would require the purchase, use, and maintenance of a minimum number of zero emission buses even by transit agencies that have chosen to pursue the diesel-fuel path. The legal authority for this requirement is the same as the authority cited above to authorize ARB regulation of urban bus fleet operators. In addition, the ARB has been directed to undertake a comprehensive and effective research program in order to combat air pollution.

(Health and Safety Code section 39700 et seq.) The ARB is required to "coordinate and collect research data" on "motor vehicle emissions control, including alternative propulsion systems, cleaner burning fuels, and improved motor vehicle pollution control devices." (Health and Safety Code section 39701(a)(1)), as well as on "[t]he consequences of various alternative solutions to specific air pollution problems." (Health and Safety Code section 39701(b).) The fleet demonstration project will help promote these objectives.

Second, with regard to mandatory reporting by transit agencies and bus leasing companies, the ARB is authorized to adopt rules "to require the owner or operator of any air pollution emission source to take such action as the state board . . . may determine to be reasonable for the determination of the amount of such emission from such source." (See Health and Safety Code section 41511.) Transit buses are a source of air pollution. The reporting requirements are reasonable for determining emissions as well as necessary for monitoring the status of the control efforts authorized by the statutes cited above.

Third, the ARB may determine that air quality considerations in "extreme" nonattainment areas, i.e. the South Coast Air Quality Management District (SCAQMD), may compel imposition of the alternative fuel path and a prohibition on future purchases of diesel buses. Despite substantial improvements, the SCAQMD has the poorest air quality in the state. The Legislature has attributed a substantial part of the pollution problem to "the operation of millions of motor vehicles in the basin." (Health and Safety Code section 40402(b)) and has stated that "in order to successfully develop and implement a meaningful strategy" to attain ambient standards, the SCAQMD and other local governments "must be delegated additional authority from the state in the control of vehicular sources . . . ." (Health and Safety Code section 40402(g)). For example, The SCAQMD is one of the three air districts authorized to require public and commercial fleet operators to purchase and operate alternative-fuel vehicles "when adding vehicles to or replacing vehicles in an existing fleet." Nothing in the ARB proposal would nullify this authority or preempt the SCAQMD in adopting a bus fleet rule.

Moreover, this grant of "additional authority" to the SCAQMD neither explicitly or implicitly detract from the authority of the ARB to "systematically attack" vehicular pollution. In doing such acts as are necessary and proper for carrying out its responsibility to control mobile sources, and given the statutory recognition that the South Coast is a special case (see, for example, Health and Safety Code sections 40919, 40920, and 40920.5), the ARB may legally treat sources in the South Coast differently from those in other, less polluted regions. The extent and severity of the air pollution problem provides a rational basis for drawing a distinction and imposing more stringent regulatory requirements on transit fleets in the SCAQMD.

Finally, the ARB proposal may include a requirement that in-use transit buses be equipped with a retrofit device to reduce emissions of PM, both as an attainment strategy and to

reduce the toxic component of diesel emissions. Health and Safety Code section 43600 provides that the ARB may not mandate the installation of certified devices on used motor vehicles "except by statute." This 1975 statute was enacted in consideration of the cost and performance aspects of installing retrofit technology on passenger vehicles. In contrast, Health and Safety Code section 43701(b) authorizes the retrofit proposal at issue here.

Section 43701 provides, in pertinent part, that the ARB shall "adopt regulations which require that heavy-duty diesel motor vehicles . . . utilize emission control equipment and alternative fuels." Further, the statute directs the ARB to "consider, but not be limited to, the use of cleaner burning diesel fuel, or other methods that will reduce gaseous and smoke emissions to the greatest extent feasible, taking into consideration the cost of compliance," (emphasis added). These modifications are to occur "during a regularly scheduled major maintenance or overhaul of the vehicle's engine," clearly implying that retrofit requirements were contemplated and authorized by the Legislature.

Having determined above that the ARB has the authority to regulate transit bus fleet operators, we here conclude that this authority supports more stringent regulation in a region where air pollution concerns are extraordinarily compelling and where the contribution from he regulated source is substantial.

V. Conclusion

In addition to the statutory authority set forth above, the ARB is authorized to perform all necessary and proper acts and adopt rules and regulations necessary to carry out its powers and duties. (Health and Safety Code sections 39600 and 39601(a).) Further, the ARB is to coordinate the efforts of all levels of government as they affect air quality and adopt an intensive, coordinated effort to protect and enhance air quality, including providing “incentives for . . . regional strategies.” (Health and Safety Code sections 39500 and 39001.) To the extent that the reduction of emissions from vehicular sources is a high legislative priority entrusted in myriad statutory provisions to the ARB, a fleet rule that provides incentives for reducing NOx and PM emissions through a mix of mandatory and voluntary measures by urban bus fleet operators appears solidly within ARB authority.