

RULE 1195 IMPLEMENTATION GUIDANCE

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South Coast Air Quality Management District
Fleet Rule Implementation Unit
District Counsels Office
Chief Prosecutors Office

FOREWORD

The South Coast Air Quality Management District (AQMD) is the air pollution control agency for four counties including the non-desert portions of Los Angeles and San Bernardino counties, all of Orange county and most of Riverside county. This area of 12,000 square miles is home to close to 15 million people. Many of the same factors that make living in Southern California so desirable also contribute to the worst smog problem in the nation. Gentle ocean breezes carry pollutants into the inland valleys where they are trapped by the surrounding mountains. Thermal inversions act like a lid over the basin. Bright sunshine and warm temperatures cause some pollutants to react with each other, forming even more pollution. These natural conditions, along with the pollution from over 9 million motor vehicles, thousands of businesses and industries, and countless consumer products, create an ideal smog factory. Because this area's smog problem is so severe, AQMD often finds itself at the forefront of the nation's efforts to reduce air pollution.

The AQMD, by law, is required to achieve and maintain healthful air quality for its residents. To accomplish this responsibility, the AQMD carries out a comprehensive program of planning, regulation, compliance assistance, enforcement, monitoring, technology advancement, and public education. All aspects of the program are continually updated. For example, advancements in technology may lead to more emissions reductions at less cost, or research may expose new areas of concern regarding air pollution heretofore unknown.

Most recently, the AQMD's Multiple Air Toxic Exposure Study (MATES-II) found that mobile source emissions are major contributors to the potential cancer risk from air pollution. In addition, recent findings from long-term epidemiological studies of school age children conducted by University of Southern California and University of California at Los Angeles indicate that nitrogen oxides, acids, and particulate matter have much greater impacts on limiting lung growth in children than believed in the past. Mobile source emissions have become the major emission contributor to these problems. As such, the AQMD Governing Board has adopted clean fleet vehicle rules to reduce immediate population exposure to these pollutants.

One of these rules, Rule 1195 – Clean On-Road School Buses, requires private and public school bus fleet operators with 15 or more school buses to purchase or lease cleaner buses that better protect the health of the public and particularly school age children. Rule 1195 imposes new requirements on fleet operators not previously regulated by the AQMD. In the initial years of implementation, knowledge of these requirements by individuals responsible for maintaining the fleets may be an issue. A related issue will be the effort put forth by the fleet operators to inform or train their managers concerning these requirements. A Rule 1195 Implementation Guidance has been developed by the AQMD to assist school bus fleet operators with all aspects of rule compliance. This document explains rule applicability, requirements, exemptions, compliance auditing and enforcement, and alternative-fuel training opportunities.

The AQMD is committed to protecting public health by ensuring, in a manner sensitive to the economic needs of businesses, that all residents have the right to live and work in an environment of clean air. Rule 1195 Implementation Guidance has been developed towards achieving that end.

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Summary of Rule Applicability

- **The following sections detail who specifically is affected by Rule 1195. In addition, some key definitions found in the rule are provided. To assist a school district, private school, or school transportation contractor in the implementation aspects of the rule, two process diagrams are provided to illustrate the implementation process. Figure 1 shows the implementation process. Figure 2 shows the effective date of the rule depending on the size of the school bus fleet.**

- **Fleet Size Requirement**

Rule 1195 applies to private and public school bus fleet operators with 15 or more school buses.

- **Area of Jurisdiction**

Rule 1195 applies to school bus fleets operating within the South Coast Air Quality Management District (District). The District is comprised of four counties including the non-desert portions of Los Angeles and San Bernardino counties, all of Orange county and most of Riverside county.

Rule 1195 does not apply to school bus fleets garaged outside of the District that transport passengers who reside outside of the District into the District for purposes of field trips or other student-related events.

Attachment 1 provides a list of school bus fleet operators potentially affected by Rule 1195. Note that all public school districts, private schools, and private school transportation contractors are listed in Attachment 1 even though the number of school buses in the fleet may be less than 15 at this time.

- **Exemptions from Rule Applicability**

See page 4 for a list and explanation of various rule exemptions.

- **Definition of Private and Public School Bus Fleet Operators**

A private or public school bus fleet operator is a person who owns leases, or operates school buses within the District. A person is any public or private entity responsible for administering and managing school bus transportation services.

- **Definition of School Bus**

A school bus means any vehicle, as defined in California Vehicle Code Section 545, used for the express purpose of transporting students through Grade 12 from home to school.

Figure 1. Rule 1195 Implementation Process

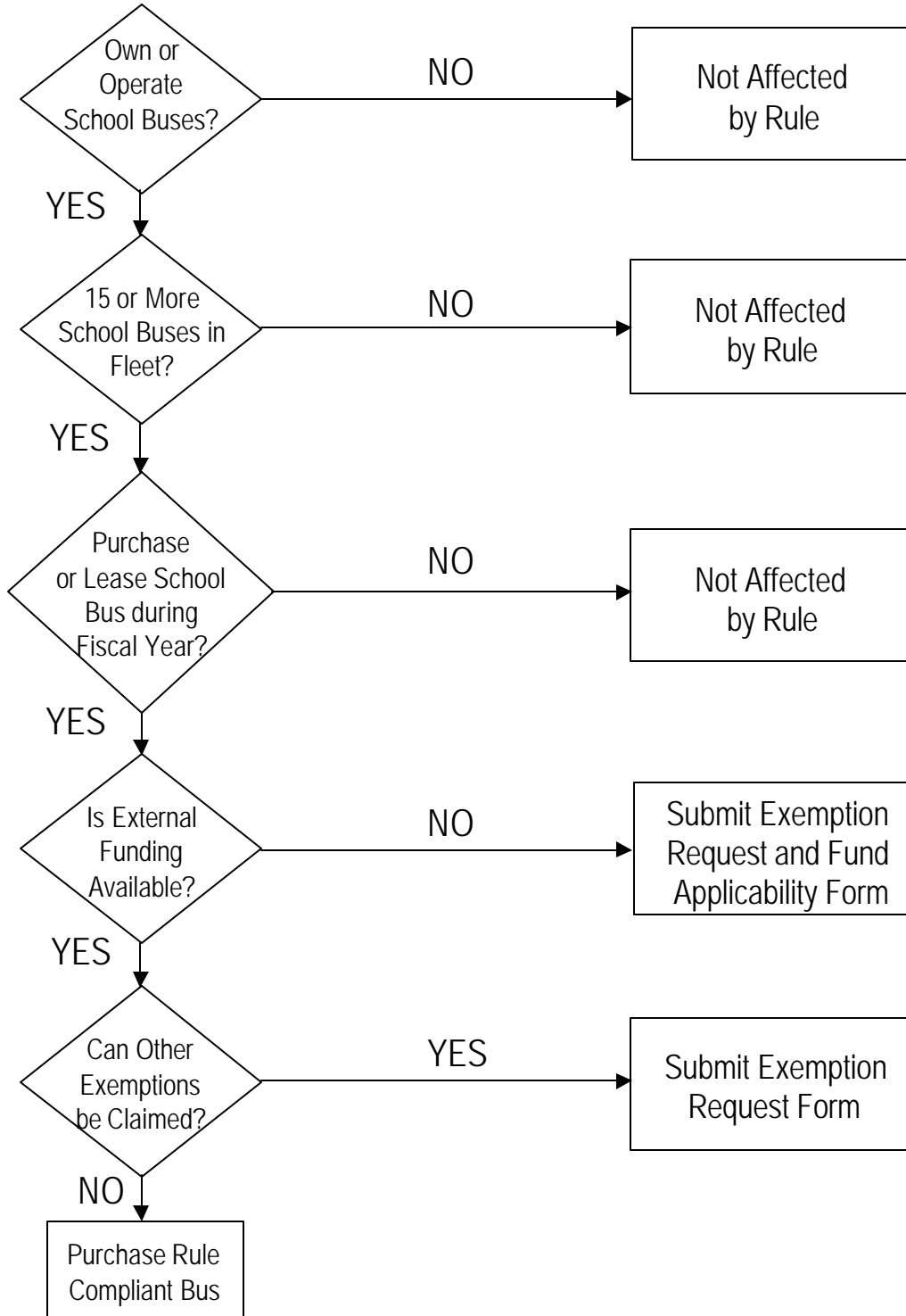
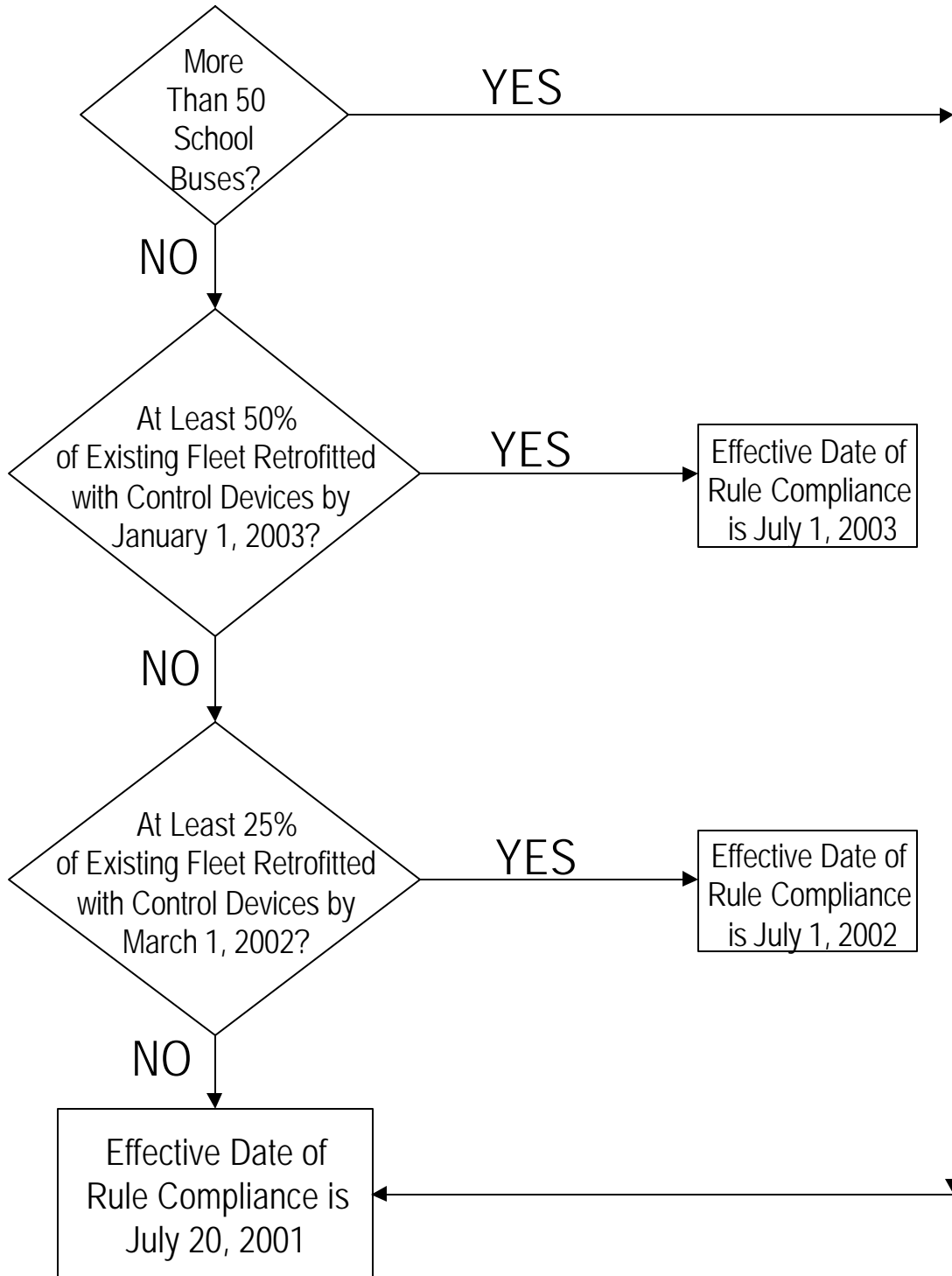


Figure 2. Rule 1195 Implementation Dates



- **Types of School Buses**

For the purposes of this rule, and generally, there are four types of school buses.

- **Type A:** This type is a conversion or body constructed upon a van-type or cutaway front-section vehicle with a left side driver's door with a gross vehicle rating of more than 10,000 pounds (medium-duty). Type A school buses transport ten to twenty-four passengers and typically run on either gasoline or diesel fuel.
- **Type B:** This type is a conversion or body constructed upon a van or front-section vehicle chassis, or stripped chassis, with a gross vehicle weight rating of more than 10,000 pounds (medium-duty). Type B school buses run on either gasoline or diesel fuel.
- **Type C:** This type is a heavy-duty vehicle with a gross vehicle weight rating of at least 14,000 pounds and a front mounted engine. These buses are capable of transporting 42 to 72 passengers or students.
- **Type D:** This type is a heavy-duty vehicle and is capable of transporting 66 or more passengers.

- **Definition of Approved Control Device(s)**

An approved control device is an exhaust control device that is verified or certified by the California Air Resources Board (CARB) to reduce particulate matter and possibly other pollutant emissions. For the purposes of this rule, a new school bus equipped with an approved control device means that the engine family has been certified by CARB. A pre-owned (used) school bus equipped with such device means that the control device has been verified or certified by CARB. To be considered fitted with an approved control device, all diesel exhaust from the vehicle must be vented through the device that has been fitted at the time of vehicle purchase or fitted by a certified device installer at the time the device is delivered to the operator. The vehicle equipped with such a control device must use diesel fuel with a sulfur content no greater than 15 ppm by weight.

As of the date of this guidance document, there are no CARB approved control devices. Purchases of diesel-powered school buses prior to CARB approval of control devices may be made without having a control device installed. However, operators are encouraged to retrofit diesel-powered school buses with control device once they have been approved by CARB and if external funding is available. (Note: It is anticipated that CARB will approve particulate matter control devices sometime in the Fall of 2001.)

- **Definition of External Funding**

External funding is any funding outside of the school bus fleet operator's fiscal budget provided to a school bus fleet operator for the purpose of purchasing rule-

compliant school buses, equipping existing diesel-powered school buses with CARB approved control devices, or building alternative-fuel infrastructure to support alternative-fueled school bus operations.

Summary of Rule Requirements

- **Rule Implementation Dates and Subsequent Requirements**
 - The effective date of Rule 1195 is **July 20, 2001**.
 - However, school bus fleets with between 15 to 50 school buses may begin implementation of Rule 1195 beginning:
 - **July 1, 2002** provided that 25 percent of the existing fleet is retrofitted with CARB-approved control devices by March 1, 2002, or
 - **July 1, 2003** provided that 50 percent of the existing fleet is retrofitted with CARB-approved control devices by January 1, 2003.
 - **For the Purchase or Lease of Newly Manufactured Buses:** Public and private school bus fleet operators must purchase new alternative-fueled heavy-duty school buses and ultra-low emission vehicle (ULEV) or cleaner non-diesel medium-duty school buses when adding or replacing school buses in their fleet if external funding is available.
 - **For the Purchase or Lease of Pre-Owned (Used):** School bus operators must repower heavy-duty school buses to operate on an alternative fuel. If the school bus is classified as medium-duty, it must be certified as a low-emission vehicle (LEV) or cleaner and does not rely on diesel fuel.
 - **Calculations:** For any calculations used to determine the number of buses to be retrofitted based on percentages, the bus fleet operator shall round down to the nearest whole number.
 - **Letter to the Executive Officer:** To obtain an extension due to retrofitting with CARB approved control devices, school bus fleet operators shall send written notification to the Executive Officer of the AQMD of the intent to retrofit on or before March 1, 2002, and January 1, 2003, respectively.

Summary of Rule Exemptions

- **Diesel-Powered School Buses May Be Purchased By Public or Private School Bus Fleet Operators If One or More of the Following Rule Exemptions Are Satisfied:**

- (1) Insufficient External Funding to Purchase School Bus**

If external funding (beyond a school bus fleet operator's fiscal budget) is not sufficient to offset the differential purchase or capital cost of an alternative-fueled school bus (including cost of warranties);

- (2) Insufficient External Funding for Alternative-Fuel Infrastructure**

If external funding (beyond a school bus fleet operator's fiscal budget) is not available to offset the cost of developing the infrastructure necessary for alternative-fueled vehicles. Prior to **April 1, 2003**, the allowable amount is \$13,000 per alternative-fueled school bus and then \$8,000 thereafter until January 1, 2004. Infrastructure includes refueling stations and upgrades to existing maintenance facilities.

- (3) No Alternative Fuel Engine/Chassis/Body**

If there is no commercially available alternative-fueled or gasoline-powered engine, chassis, or body configuration that satisfies a specific need for a specific bus route or specific bus size.

- (4) Purchase of Pre-Owned Diesel School Buses**

School bus fleet operators may purchase pre-owned diesel-powered school buses that are less than six years old if the oldest school bus in the existing fleet is scrapped or rendered permanently inoperable.

- (5) Unforeseen Circumstances**

If additional school buses are needed due to unforeseen circumstances, school bus operators may lease diesel-powered school buses in the interim (during the time required to purchase rule compliant buses). The interim period should not exceed the remaining portion of the school year, provided a demonstration is made that the school bus fleet operator cannot deploy the rule compliant school bus within one month from the date of order.

- (6) Buses Acquired from Business Mergers**

For private school bus fleet operators only, buses acquired due to business mergers are not considered to be buses purchased or leased for purposes of this rule and therefore, are not obligated to fulfill rule requirements.

- (7) Previous Contract Purchase Agreements**

Contract agreements to purchase or lease school buses signed on or before July 19, 2001, are under no obligations to fulfill rule requirements. However, this exemption does not apply to options to purchase school buses at a future

date. The operator is encouraged to equip the diesel-powered school bus with an approved control device if external funding is available.

(8) Location of Refueling Stations

Prior to **January 1, 2003**, if no external funding is available for alternative-fuel refueling stations (see above exemption titled External Funding for Alternative-Fuel Infrastructure), and there are no accessible refueling stations located within five miles of storage or maintenance yard for school buses.

(9) Field Trips Outside of the South Coast Air Quality Management District

A portion of existing school bus fleets used for field trips outside of the District are exempt from rule requirements when the remainder of the school bus fleet is rule compliant. Ten percent of the school bus fleet with 100 or more school buses can be exempt for this purpose. School bus fleets with between 51 and 100 school buses may exempt up to ten school buses. School bus fleets with 50 or fewer school buses may exempt up to five school buses.

● **Exemption Request and Fund Availability Form**

- To request an exemption from Rule 1195, an “Exemption Request and Fund Availability Form” (Attachment 3) must be submitted to the SCAQMD for approval. The form should be submitted within one month prior to the actual purchase order request for new or used school buses to allow time for SCAQMD processing. SCAQMD will provide a written response to the requestor within ten working days from the date the form is received at the SCAQMD. To assist the fleet operator in the use of the form, a flow diagram of the exemption form is provided in Figure 3. The flow diagram shows the questions that a fleet operator would ask to determine if an exemption applies.

● **Important Note**

- **Please note** that any diesel-powered school bus that is purchased under exemptions (1), (2), (3), (4), (8) or (9) must be equipped with an approved control device. In addition, under exemptions (1), (2), and (8), a school bus operator shall purchase an “intermediate diesel school bus” if funding is available. The intermediate diesel school bus is defined by CARB as part of the Statewide Lower-Emission School Bus Program. If funding is not available, the school bus operator shall consider the viability of a gasoline-powered school bus and must submit supporting documentation as to the reasons for the need to purchase a diesel-powered school bus if the diesel-powered school bus is the final choice.
- **Lastly**, under exemptions (1) and (2), and to the extent that external funding is available, school bus operators shall equip, at a minimum, 15 percent of existing diesel school buses with approved control devices on a yearly basis until the entire fleet of existing diesel-powered school buses that are capable of operating with approved control devices have approved control devices.

FIGURE 3. Exemption Request Form Process

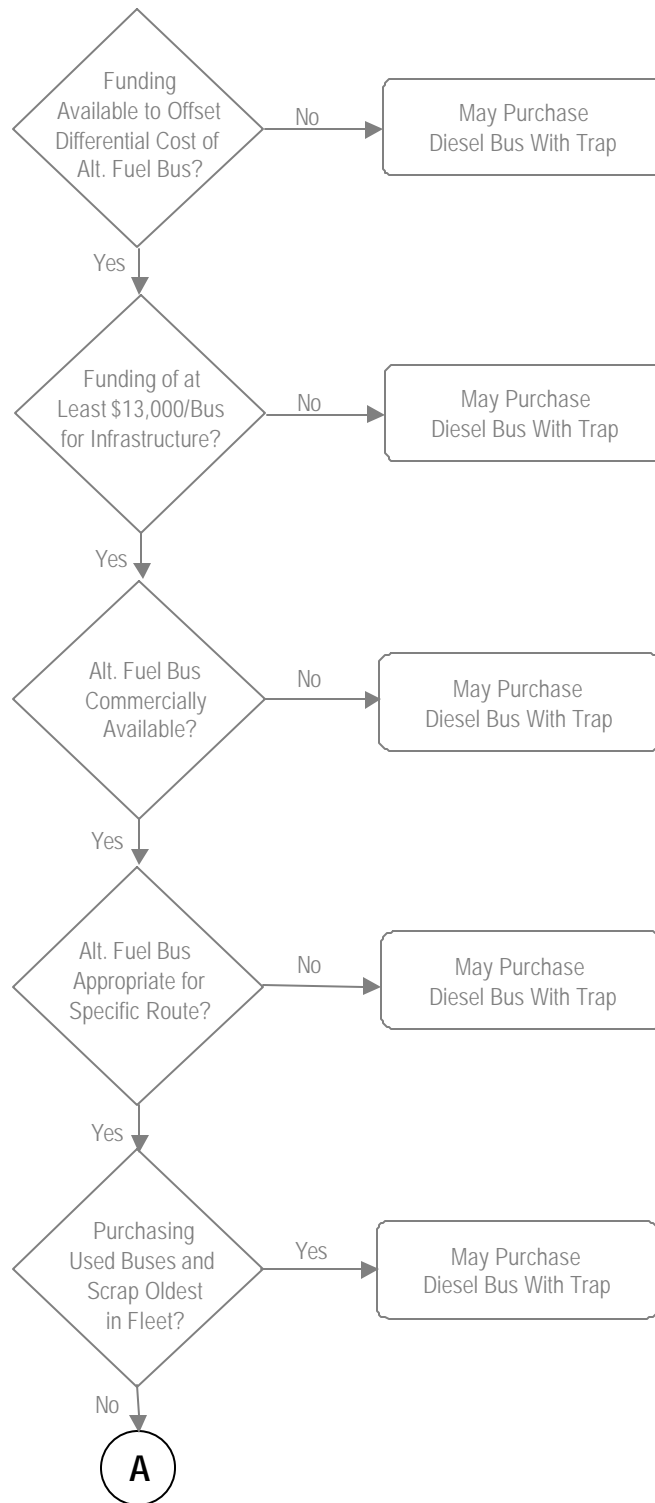
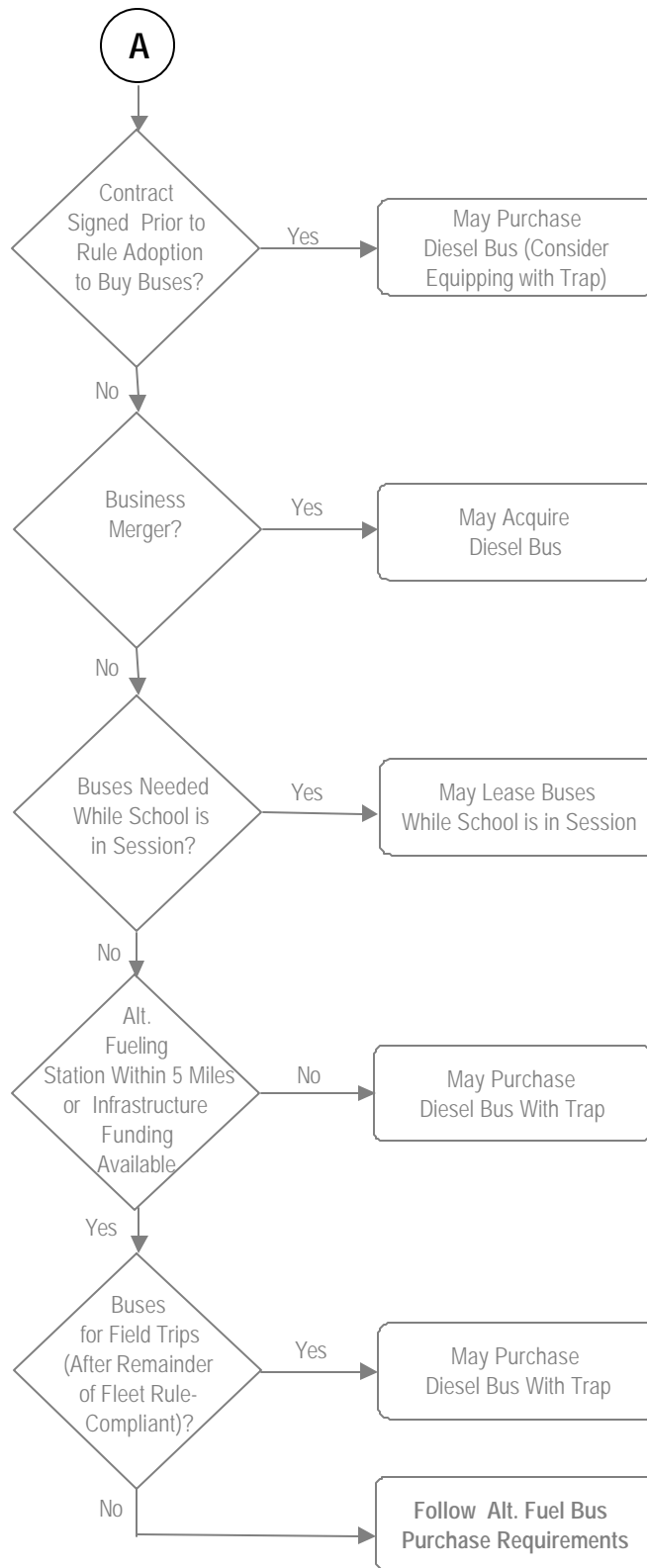


FIGURE 3. Continued.



APPENDIX A

Compliance Auditing and Enforcement

- **Required School Bus Fleet Information for Each Vehicle**

Rule 1195 requires vehicle specific records to be kept by the fleet operators for a minimum of one year, to be made immediately available upon request of AQMD staff. (Note, the term “vehicle” may include, if applicable, the cab/chassis manufacturer, engine manufacturer, and body manufacturer.) These records shall include the following:

1. Official Department of Motor Vehicle (DMV) Registration;
2. Principal Location of Vehicle;
3. Manufacturer Name;
4. Model;
5. Model Year; and
6. Fuel Type(s).

- **Exemption Records**

School bus fleet operators that claim exemption(s) must complete a Rule 1195 Exemption Request Form (Attachment 3) and retain records for one year that verify reason(s) for the exemption. These records must include sufficient information to document eligibility for the requested exemption and may include, as appropriate:

1. Copies of application(s) for external funding sources;
2. Written correspondence from engine/chassis/body manufactures indicating that there is no commercially available specific bus size;
3. Records verifying the scrapping of old school buses and the age of the pre-owned diesel school bus;
4. Written correspondence stating unforeseen circumstances, with explanations;
5. Copies of merger agreements and subsequent transfer of ownership of school buses;
6. Copies of contract agreements signed prior to July 19, 2001;
7. Written correspondence stating the nearest or closest alternative refueling station; and
8. The total number of school buses currently operating and the number of exempt school buses used for the purpose of field trips outside the jurisdiction of the District.

APPENDIX B

Enforcement Guideline

I. Purpose and Applicability

A. Purpose

This enforcement guideline establishes a penalty policy of general application to fleet vehicle operators. It does not prevent the exercise of prosecutorial discretion in unusual cases that may warrant a lesser or greater penalty.

B. Applicability

Rule 1195 – Clean On-Road School Buses.

II. Emission Source Background

Rule 1195 provides for the reduction of nitrogen oxides and particulate emissions from school buses to reduce public exposure to motor vehicle pollution, including toxics, particulate, and ozone precursor emissions. It is intended that these benefits be surplus to existing state and federal regulations governing emission levels from on-road motor vehicles.

A. Rule Requirements

Rule 1195 applies to operators of fleets consisting of 15 or more school buses. These operators are required to purchase alternative-fuel school buses if external funding is available to offset the differential cost of an alternative-fueled school bus or to offset the potential additional costs associated with building an alternative-fuel refueling infrastructure, when adding or replacing vehicles to their fleet.

B. Compliance Strategy

The AQMD will audit fleet purchases by requesting purchase records and other records identifying the type of vehicles in the fleet and by inspecting facilities and vehicles. The fleet operators must provide “any files and/or records created to comply” with the applicable fleet rule.

III. Evidence

A. Inspection and Documentation

Beginning July 20, 2001, any addition or replacement of school buses in the fleet through the purchase or lease of new school buses must be CARB-certified as ULEV or cleaner if the bus is a medium-duty school bus or be an alternative-fueled school bus if the bus is a heavy-duty school bus, unless exempt. Purchase records, supplier records, budget materials, and any fleet-specific information will be relied upon to demonstrate compliance or noncompliance.

B. Exemptions Based on Unavailable External Funding

Any fleet operator seeking an exemption under Section (e) of the rule must supply proof to support the claim of exemption through the submittal of an “Exemption Request and Fund Availability Form” (Attachment 3).

C. Mitigation Factors

Rule 1195 imposes new requirements on fleet operators not previously regulated by the AQMD. In the initial years of implementation, knowledge of these requirements by individuals responsible for maintaining the fleets may be an issue. A related issue will be the effort put forth by the fleet operators to inform or train their managers concerning these requirements.

IV. Penalty Assessment

For the first three years of the program, the penalty for violating these requirements will stress compliance and equity (i.e., “level playing field”) over the payment of civil penalties. To the extent that external funding is available to carry out the remedies as set forth below, the fleet operator shall apply for such funding. If funding is not available, the fleet operator shall work with AQMD staff to develop an appropriate plan of action such that the action does not cause additional financial burden on a school district’s budget.

1. First Time Violators

No civil penalty will be sought from a first time violator during the first three years of the program, provided the first-time violator mitigates the violation. The mitigation actions will be determined on an individual case basis working with AQMD staff.

2. Repeat Violators

The penalty for repeat violators will, at a minimum, include the penalty provisions for first time violators, plus a monetary penalty in an amount authorized by law.

V. Implementation

A. Effective Date

This Enforcement Guideline shall take effect July 20, 2001.

APPENDIX C

TRAINING AVAILABILITY AND RESOURCES

Background

In the spring of 2001, AQMD adopted Rule 1195 – Clean On-Road School Buses, which requires school bus fleet operators to purchase alternative fuel vehicles when naturally acquiring fleet vehicles. This document was prepared to assist in the implementation of this rule by the fleet operators, by:

- Describing the type of training necessary to maintain and repair alternative fuel heavy-duty vehicle technologies, and
- Describing the current availability of alternative fuel engine and vehicle training.

The AQMD staff believes that mechanic training is an important aspect to the overall implementation of the Clean Fleet Vehicle Rules. While not required to operate an alternative-fueled vehicle in the short-term, mechanics and other personnel working with alternative-fueled vehicles need to have a basic understanding of the alternative-fuel technology. Many of the state-of-technology engine diagnostics are performed through the use of electronic meters and other electronic devices that are not found in older, existing vehicles. (This is true also for newer diesel vehicles that have electronic controls, etc.) Mechanics trained in the maintenance of older diesel technologies would need to have an understanding of the electronic systems that are integral to the operation of newer on-road engines. In addition, mechanics and other personnel operating alternative-fueled vehicles should have basic knowledge of the safety aspects of alternative-fuels. Mechanics and other key personnel should undergo further certified-training and be certified to maintain or operate alternative-fueled vehicles, as the fleet becomes rule-compliant. To this end, much of the discussion in this section focuses on immediate training needs with the recognition that mechanics and other key personnel may have to receive further training.

As is customary, heavy-duty engines including alternative fuel engines are warranted by the manufacturer, and service is available at local dealers or distributorships. However, all local dealers/distributors may not offer service for alternative fuel engines. As an independent business, the local dealer or distributor must make the decision whether to send technicians to manufacturer training, and to purchase specific diagnostic and repair equipment. Technician training is available through the community college system as part of the automotive technician curriculum, or through special classes. However, only certain colleges offer heavy-duty engine training, and a limited number of schools offer training for alternative fuel heavy-duty engines.

Existing Training Programs

Advanced Transportation Technologies Initiative is part of the California Community College Economic Development Network (ED>Net). ED>Net was established in 1988 with the overall purpose of advancing California's economic growth and global competitiveness through quality education and services focusing on continuous workforce improvement, technology deployment and business development. The Advanced Transportation Technologies Initiative (ATTI) has established programs within the California Community College system to meet training needs. A list of campuses participating in the ATTI is provided in Table 1.

TABLE 1.
California Community Colleges Participating in the
Advanced Transportation Technologies Initiative

<p><u>Cerritos Community College, Norwalk, CA</u> <i>Center for Advanced Transportation Technology</i> 11110 Alondra Blvd Norwalk CA 90650 Fax: (562) 467-5080 Email: peebles@cerritos.edu</p>	<p>Randy Peebles Kevin Taylor (562) 860-2451 Ext 2485</p>
<p>Bay Area Advanced Transportation Consortium (BAATTC), City College of San Francisco, College of Alameda & Skyline College <i>Center for Advanced Transportation Technology</i> 1400 Evans Ave San Francisco CA 94124 Fax: (415) 550-4400 Email: skorey@ccsf.cc.ca.us</p>	<p>Suzanne Korey Rich Canino (415) 550-4437</p>
<p>College of the Desert, Palm Desert, CA <i>Energy Technology Center</i> 43-500 Monterey Ave Palm Desert CA 92260 Fax: (760) 776-0128 Email: Stroublefield@dccd.cc.ca.us</p>	<p>Susie Troublefield (760) 773-2596</p>
<p>Cypress College, Cypress, CA <i>Center for Advanced Transportation Technology</i> 9200 Valley View Rd Cypress CA 90630 Fax: (714) 527-1077 Email: bettendorf_r@msn.com</p>	<p>Dick Bettendorf (714) 484-7234</p>
<p>Fresno City College, Training Institute, Fresno, CA <i>Advanced Transportation Technology Center</i> 390 W. Fir Ave., Building B Clovis, CA 93611 Fax: (559) 323-4811 Email: kenm@fccti.cc.ca.us</p>	<p>Ken Machoian (559) 323-4688 Ext 6489</p>

<p><u>Long Beach Community College, Long Beach, CA</u> <i>Center for Advanced Transportation Technology</i> 1305 E Pacific Coast Hwy Long Beach CA 90806 Fax: (562) 938-3161 Email: calmacy@lbcc.cc.ca.us</p>	<p>Farley Herzek Cal Macy (562) 938-3067</p>
<p><u>Rio Hondo College, Whittier, CA</u> <i>Center for Advanced Transportation Technology</i> 3600 Workman Mill Rd Whittier CA 90601 Fax: (562) 908-3408 Email: leddington@rh.cc.ca.us</p>	<p>Lyla Eddington Jim Hughes (562) 908-3425</p>
<p><u>Sacramento City College, Sacramento, CA</u> <i>Center for Advanced Transportation Technology</i> 3835 Freeport Blvd Sacramento CA 95822 Fax: (916) 441-4142 Email: cypretp@mail.scc.losrios.cc.ca.us</p>	<p>Phil Cypret (916) 558-2491</p>
<p><u>San Diego Miramar, San Diego, CA</u> <i>Center for Advanced Transportation Technology</i> 10440 Black Mountain Rd San Diego CA 92126 Fax: (619) 536-7352 Email: outrchpd@adnc.com</p>	<p>Vacant (619) 536-7812</p>
<p><u>West Valley Mission CCD, Campbell, CA</u> <i>Center for Advanced Transportation Technology</i> One West Campbell Ave., Suite J-70 Campbell CA 95008 Fax: (408) 378-2034 Email: svattc@wvmccd.cc.ca.us</p>	<p>David Esmaili (408) 871-4393</p>
<p>AFFILIATE CENTERS</p>	
<p><u>Cuyamaca College, El Cajon, CA</u> <i>Center for Advanced Transportation Technology</i> 900 Rancho San Diego Pkwy El Cajon CA 92019 Fax: (619) 660-4389 Email: jcusteau@michele.gcccd.cc.ca.us</p>	<p>Jim Custeau (619) 660-4227</p>

The typical community college automotive technician certificate program includes a curriculum of 62 units. Courses on alternative fuel engines are part of the standard mechanic/technician curriculum. Each school in the ATTI specializes in certain aspects of alternative fuel engine and vehicle repair and maintenance. Some focus on light-duty vehicles and others have specific training available for maintenance and repair of heavy-duty engines. According to Peter Davis, statewide Director of the ATTI program, and Richard Bettendorf, Cypress College, students in these programs are very much in demand and usually are offered jobs after completion of the first semester of training. The difficulty is attracting students to this curriculum. Potential students are unaware of the job opportunities in this field, nor are they aware of the opportunities for technology development in this area. Many high schools no longer offer automotive classes, which in the past have provided students with an opportunity to pursue this vocation at the

community college level. The ATTI member colleges and other training institutions, such as the Transportation Foundation of Los Angeles and the Los Angeles Trade-Technical College, are pursuing the availability of training for high school students and through local school district adult education programs. The College of the Desert has received a National Science Foundation Grant to design a training curriculum that will begin in high school and continue through the community college level.

In addition to the courses offered as part of the standard certificate curriculum, colleges participating in the ATTI offer programs tailored to a specific user and/or application. ATTI program staff are capable of designing one class or an entire curriculum that can be taught on the user's site. The ATTI, through Cypress College, operates a mobile training lab, using a tractor-trailer donated by the Orange County Transportation Authority and refurbished by Cypress College. The Advanced Transportation Technologies Center at Cypress College is currently working with the OCTA to design and conduct training for personnel involved with OCTA's fleet of LNG buses. This training will be conducted at OCTA's facilities by ATTI staff.

The *National Alternative Fuels Training Consortium* (NAFTC), managed by West Virginia University, is a federally funded training program. The NAFTC includes educational institutions, fuel providers, equipment and parts manufacturers, federal and state agencies, and professional educational and training associations. The NAFTC operates through a network of National Training Centers in 19 states. Currently, the only NAFTC member in California is College of the Desert, in Palm Desert. However, NAFTC staff proposes to expand to other community colleges through the auspices of the ATTI at College of the Desert. The centers provide training courses for natural gas, propane and electric vehicles. The following are standard courses, potentially relevant to Rule 1195 affected fleets, offered through NAFTC member campuses:

- NGV System Integration and Service
- Transient Emissions Training
- AFV Electronics and Diagnostics
- Alternate Fuel Seminars
- CN Systems Theory and Design
- Cylinder Inspection Certification
- NGV System Integration and Electronics Training

The NAFTC program has been dominated by compressed natural gas in light-duty vehicles, although other programs may be offered at different campuses. For instance, York Technical in North Carolina focuses on electric and hybrid technologies. The consortium has recognized the need to expand its efforts into the heavy-duty engine and vehicle category and to provide materials on both compressed and liquefied natural gas.

Individual engine manufacturers have programs to facilitate the use of their alternative fuel engine at the customer location. Most of these programs occur after the sale to the customer and are usually part of the engine warranty agreement. This training only supports work on the engine, and does not usually include the fuel delivery system. The following engine companies provide specific engine training:

- Cummins
- Detroit Diesel
- Power Systems (Caterpillar)
- Mack
- John Deere

No heavy-duty chassis manufacturers have a program at this time, although truck manufacturer PACCAR, Inc. is considering such a program and Freightliner has begun to formulate an alternative fuel vehicle program. NGV Ecotrans, a company involved in the manufacture of heavy-duty alternative vehicles headquartered in the Los Angeles area, has its own maintenance staff to serve customer needs. Finally, Southern California Gas Company has provided training, especially in CNG and LNG fuel use and storage. Contact Mr. Mike Bolin, NGV Account Executive (213) 244-5115 in El Monte.

The following is a listing of contacts/resources that may be useful to Rule 1195 affected fleets in facilitating alternative fuel engine mechanic training.

Training Resource Links through Clean Cities (sponsored by the U.S. Department of Energy)

Northwest Riverside County Clean Cities Coalition Contact Mike McCoy, (909) 787-7985.

Long Beach Clean Cities Contact Elizabeth Wright, (562) 570-2060.

Coachella Valley Clean Cities Contact Bert Kronmiller, through SunLine Transit, (760) 343-3456 in Thousand Palms.

Other Training Resources (Trade Associations, after-market suppliers, consultants, misc.)

Inland Empire Disposal Association Contact Paul Ryan, Executive Director, (909) 735-5987.

Economic Development, associated with California Community Colleges
Contact Peter Davis at (619) 473-0090.

Certification of Higher-learning in an Alternative Motorfuels Program (CHAMP)
works with industry to establish trainer certification programs. Contact Bob Rodriguez at NATEF (see below) at (703) 713-0100.

National Automotive Technician Education Foundation (NATEF)

Gladstein and Associates Cliff Gladstein and staff, consultants to California's Clean Cities, Contact Eric Neandross, (310) 314-1934

Westport Innovations Inc of Vancouver BC partners with Cummins on heavy-duty.
Contact Alan Bayless, (604) 718-2016

Gas Technology Institute Contact Susan Robertson, (847) 768-0783

Identifying Training Needs

Proliferation of alternative fuel engine and vehicle technologies will depend on the ability to adequately maintain and repair these technologies. For heavy-duty engines, manufacturer training for dealerships, distributors, and fleets is available, although the depth of that training varies. Some training is available through the community colleges and other resources.

The use of liquefied natural gas (LNG) is expected to be a major contributor to the offset of diesel fuel use in future heavy-duty vehicle applications. Most of the courses offered through the National Alternative Fuel Technology Consortium and the Advanced Transportation Technology Initiative are directed to the use of compressed natural gas in light-duty vehicles. Training specific to cryogenic systems, methane detection and LNG on-board fuel systems is very limited. However, as stated previously, the consortium has recognized the need to expand its offerings.

In addition to training to maintain engines, diagnose problems and making appropriate repairs, successful rule implementation will require understanding of the fundamentals of the design and operation of fueling facilities for alternative fuel vehicles. In general, fleets must master the parameters of natural gas fueling facility design and operation, including code requirements, appropriate station sizing, and safety considerations. Fleets also need to become informed regarding necessary facility modifications that may be necessary to service alternative fuel vehicles and engines. Through the Interstate Clean Transportation Corridor project, Gladstein & Associates has sponsored a number of meetings for specific fleets that are planning to implement fueling stations. The NGV Institute, in Las Vegas, Nevada, is a nonprofit organization that offers courses on natural gas fueling facility design and operation. The institute has a standard curriculum, and is capable of tailoring a curriculum to meet the user's needs.

The need for trained personnel will become more critical in the future as both diesel and alternative fuel technologies become increasingly complex.

ATTACHMENTS

1. List of Public School Districts, Private Schools, and School Transportation Contractors Operating Within the South Coast Air Quality Management District.
2. Rule 1195 – Clean On-Road School Buses
3. Exemption Request and Fund Availability Form for Rule 1195.
4. Area maps and listing of current alternative refueling stations.
5. Listing of commercially available rule compliant alternative-fueled school buses and intermediate diesel engines for school buses approved by CARB for the Statewide Lower Emission School Bus Program
6. Listing of web industry/government resources and contact information.

ATTACHMENT 1

**LIST OF PUBLIC SCHOOL DISTRICTS, PRIVATE SCHOOLS, AND
SCHOOL TRANSPORTATION CONTRACTORS
OPERATING WITHIN THE SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT**

Public School Districts

Los Angeles County

ABC
Alhambra City
Arcadia
Azusa
Baldwin Park
Bassett
Bell Flower
Bonita
Castaic
Compton
Covina-Valley
Culver City
Downy
El Monte
Gorman
Hacienda La Puente
Hughes-Elizabeth
Inglewood
Long Beach
Los Angeles
Lynwood
Monrovia
Montebello
Mountain View
Norwalk-La Mirada
Pomona Unified
Pupil Transportation
Rowland
Santa Monica-Malibu
Saugus
Sulphur Springs
Torrance
Walnut Valley
West Covina
Williams S. Hart U.H.S.D

Orange County

Anaheim
Anaheim City School Dist.
Brea Olinda
Buena Park
Capistrano
Centralia
Cypress
Fountain Valley
Fullerton
Fullerton Joint
Garden Grove
Huntington Beach
Irvine
La Habra
Laguna Beach
Los Alamitos
Magnolia
Newport-Mesa
Ocean View
Orange
Placentia Yorba Linda
Saddleback Valley
Savanna
Westminister

Riverside County

Banning
Beaumont
Coachella Valley Unified
Desert center
Desert Sands
Hemet
Jurupa
Lake Elsinore
Menifee Union
Moreno Valley
Murietta Valley
San Jacinto
Temecula Valley

San Bernardino County

Alta Loma
Bear Valley
Chaffy Joint
Chino Valley
Colton Joint
Etiwanda
Fontana
Ontario-Montclair
Mt Baldy School District
Redlands
Rialto
Rim of the World
Upland

School Transportation Contractors

A & B Transportation
Atlantic Express
Cardinal Transportation
Certified
Durham
Embree
First Student Services
Four Winds
Kesser
Kids on the Move
Laidlaw
R & D Transportation
STA
Tumbleweed Transportation
Yucaipa Bus Service

Private Schools with School Buses

Almansor Education Center
Ambassadors for Chris.
Arrowhead Christian Acad.
Barbara Dawson School
Bellflower Christian School
Bethel Christian Center
Bloomington Christian
Brethren Elementary/J
Bright Beginnings Preschol
Buddha's Light HIS LAI S
C.A.N.O. Headstart
Cal. Dept. of Develop.
Cal. Touch of Class
Cal. School for the Deaf
Calmount School
Calvary Baptist La Verne
Calvary Chapel of Costa M.
Calvary Cross Chapel
Cathedral High School
Charles Drew Postgraduate
Child Education Center
Child Help-USA-Headstart
Children Discovery Center
Children Academic Lrn.Cntr
Children Discovery Center
Chinese Zion Baptist Ch.
Christian Chapel School
CHS Pasadena Headstart
City of Carson
City of Commerce
City of Downey Senior
City of La Mirada
City of South El Monte
Cornerstone Academy
Corona Christian Church
Coutin School
Crescent Ave. Church of
Crossroads School
Damien High School
Darrell E. Grangaard
David S Yee
Delphi Academy
Dubnoff Center Child
East Gate Christian School
East Hills Baptist Church
Eko Center
El Segundo Church of
Eras Center
Evangelical Release Time
Fairmont Private School
Faith Baptist Church of Can
Faith Comm Church of Naz
Faith Lutheran High Sch
First Baptist Christian Sch
First Baptist Sch of Monteb
First Presbyterian Church
First Southern Baptist
Fontana Christian School
Foothill Christian School
Foundation For Early Child
Funseekers
Gless Ranch Inc.
Grace Lutheran Church
Greater Long Beach
Halsey Schools Inc.
Harold L. Kent
Harvard Place Day School
Harvard-Westlake Schlool
Hebrew Academy
Heschel Day School
Hollywood-Los Feliz Jewish
Immanuel Baptist Church
Independence Christian Sc
Jewish Community Center
Jewish Community Long
Kare Youth League

Kids Klub of Pasadena
Kidsville USA
Kinder Care Riverside
Kindercare
Kindercare Highland
Kindercare learning center
Kindercare Moreno Valley
Kindercare Rancho
Kindercare Redlands
Kings Schools
Kirkwood Educational Cent
La Gina Easley-A6581599
La Tijera United Methodist
Life Changing Ministries
Linden Center
Linfield School
Living Stream Christian Sch
Loma Linda Academy
Los Angeles Lutheran High
Los Angeles Sightseeing
Los Angeles Union SDA
Maranatha High School
Marta – Big Bear
Maywood Pilgrim Christian
Mesa Grande Junior Acad
Miracle Missionary Baptist
Morengo Band of Mission
New Harvest Community
Noli Indian School
North Valley Jewish Comm
Oakridge Private School
Oakwood School
Ofman Learning Center
Ontario Christian School
Orange Christian Assembly
Pacific Christian High Sch
Parkhill School
Pasadena Christian School
Pincrest Schools Inc.
Protrav Services Inc.
Redlands Harvest

Redlands Jr. Academy
Riverside Christian Schl
Riverside County Christian
Rossier Educational Asses
Ryder/Ate Inc.
San Fernando Valley Acad
San Fernando Valley Com
San Pedro Academy
Sandoval Poultry
Santa Monica Montessori
Sierra Canyon Day School
South Pasadena Senior
St. Andrews Presbyterian
St Margarets School
St. Pauls Lutheran Church
Stoneybrooke Christian Sch
Straight Way School-Islam
Sunrise Child Development
Sunshine Day Camp
Temple Christian Church S
The Oriental Mission Chr
Tobinworld
Together We Grow
Toibb Pacific Hebrew Acad
Tom Sawyer Camps Inc.
TSI
Tutor Time Child Care
Twin Pines Ranch
University Children's Center
Upland Church of Nazarene
Valley Cities Jewish Comm
Valley School of Ind. Train
Vantastic
Victor Valley Christian Sch
Victory Baptist Church OR
Villa Park Orchards Assoc
Village Christian Schools
Wasburn & Sons
Western Christian Schools
Westview School
Whittier Christian High Sch

Whittier Village Children's
Windward School Inc.
Woodcrest Schools Inc.
Yucaipia Christian School
Zion Lutheran Schools

ATTACHMENT 2

RULE 1195 – CLEAN ON-ROAD SCHOOL BUSES

Rule 1195. Clean On-Road School Buses

(a) Purpose

For public and private fleets of school buses operating in the South Coast Air Quality Management (District), this rule requires, that when adding or replacing school buses in their fleet, public and private school bus fleet operators acquire alternative-fueled school buses when procuring or leasing new school buses or to retrofit used or existing school buses with a California Air Resources Board (CARB) approved control device(s) to reduce air toxic and criteria pollutant emissions.

(b) Applicability

This rule applies to those school bus fleets with 15 or more school buses, operating in the District by public and private entities. This rule shall not apply to vehicles or services pursuant to subdivision (e) or to school bus fleets located outside of the District that transport passengers that reside outside of the District into the District for purposes of field trips or other student-related events.

(c) Definitions

For purposes of this rule, the following definitions shall apply:

- (1) ALTERNATIVE-FUELED ENGINE OR SCHOOL BUS means any engine or school bus that uses compressed or liquefied natural gas, propane, methanol, electricity, fuel cells, or other advanced technologies that do not rely on diesel fuel, and has been certified by the CARB.
- (2) APPROVED CONTROL DEVICE(S) is an exhaust control device(s) that is verified or certified by CARB to reduce particulate matter and possibly other precursor emissions. For the purposes of this rule, a new school bus equipped with approved control devices means that the engine family has been certified by CARB. A pre-owned school bus equipped with approved control devices means that the device has been verified or certified by CARB. To be considered fitted with an approved control device(s), all diesel exhaust from the vehicle must be vented through such a device(s) that has been fitted at the time of vehicle purchase or fitted by a certified device installer at the time the device is delivered to the

operator. The vehicle equipped with such a control device must use diesel fuel with a sulfur content no greater than 15 ppm by weight.

- (3) **HEAVY-DUTY VEHICLE** means any vehicle having a gross vehicle weight of at least 14,000 pounds.
- (4) **LOW-EMISSION VEHICLE (LEV)** means any vehicle certified to low-emission standards set forth in the “California Exhaust Emission Standards and Test Procedures for 1988-2000 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles” and “California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” as incorporated by reference in Sections 1960.1(k) and 1961(d), Title 13, California Code of Regulations.
- (5) **MEDIUM-DUTY VEHICLE** means any vehicle having a gross vehicle weight of more than 6,000 pounds and less than 14,000 pounds.
- (6) **PUBLIC OR PRIVATE SCHOOL BUS FLEET OPERATOR** is a person who owns, leases, or operates substantially school buses in the District. A person is any public or private entity responsible for administering and managing school bus transportation services.
- (7) **REPOWERED SCHOOL BUS** means an existing, pre-owned school bus that has been converted to run on an alternative fuel or repowered with a new alternative-fueled engine.
- (8) **SCHOOL BUS** means any vehicle used for the express purpose of transporting students through Grade 12 from home to school as defined in California Vehicle Code Section 545. For the purposes of this rule, a school bus can be a Type A (A-I or A-II), B, C, or D school bus. A Type A or B school bus typically runs on either gasoline or diesel fuel and is considered a medium-duty vehicle. A Type A school bus is a conversion or body constructed upon a van-type or cutaway front-section vehicle with a left side driver’s door with a gross vehicle weight rating of more than 10,000 pounds (Type A-I) or a gross vehicle weight rating less than 10,000 pounds (Type A-II). A Type A school bus is capable of transporting 10 to 24 passengers. A Type B school bus is a conversion or body constructed upon a van or front-section vehicle chassis, or stripped chassis, with a gross vehicle weight rating of more than 10,000 pounds. A Type C school bus is a heavy-duty vehicle with a front mounted engine and is capable of transporting 42 to 72 passengers. A Type D school bus

is a heavy-duty vehicle and is capable of transporting 66 or more passengers.

- (9) **ULTRA-LOW-EMISSION VEHICLE (ULEV)** means any vehicle certified to ultra-low-emission standards set forth in the “California Exhaust Emission Standards and Test Procedures for 1988-2000 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles” and “California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” as incorporated by reference in Sections 1960.1(k) and 1961(d), Title 13, California Code of Regulations.
- (10) **VEHICLE** means any self-propelled, motorized device that is permitted to operate on public roads through Department of Motor Vehicle registration.

(d) **Fleet Requirements**

Beginning 90 days after adoption of this rule,

- (1) For public or private school bus fleet operators with 15 or more school buses, additions or replacement of school buses to an existing fleet, or formation of a new fleet, by a public or private school bus fleet operator shall be by purchase or lease of:
 - (A) For newly manufactured Type A or B school buses that are considered medium-duty vehicles, certified by CARB as equivalent ULEV or cleaner non-diesel powered school buses, when adding or replacing vehicles to their vehicle fleet.
 - (B) For newly manufactured Type B, C or D school buses that are considered heavy-duty vehicles, alternative-fueled school buses, when adding or replacing school buses to their vehicle fleet.
 - (C) For existing, pre-owned Type A or B school buses that are considered medium-duty vehicles, certified by CARB as equivalent LEV or cleaner non-diesel powered school buses, when adding or replacing vehicles to their vehicle fleet.
 - (D) For existing, pre-owned Types B, C or D school buses that are considered heavy-duty vehicles, repowered school buses or alternative-fueled school bus, when adding or replacing school buses to their vehicle fleet.

(2) Public or private school bus fleet operators with 15 or more but less than 50 school buses may begin compliance with the provisions of Paragraph (d)(1):

(A) Beginning July 1, 2002 if the operator equips 25 percent of the school buses in the existing fleet with approved control devices no later than March 1, 2002. The diesel-powered school bus must be equipped with an approved control device if the school bus relies on diesel fuel. The school bus fleet operator may apply for external funding if available, to cover the cost to equip the school bus.

(B) Beginning July 1, 2003 if the operator equips an additional 25 percent of the school buses in the existing fleet with approved control devices no later than January 1, 2003. The diesel-powered school bus must be equipped with an approved control device if the school bus relies on diesel fuel. The school bus fleet operator may apply for external funding if available, to cover the cost to equip the school bus.

(e) Exemptions

The provisions of this rule shall not apply to the following:

(1) A public or private school bus fleet operator may purchase a Type A or B school bus that is not certified by CARB as ULEV or cleaner; or a Type C or D school bus that is not an alternative-fueled school bus as required under subdivision (d) of this rule, if sufficient grant funding or external sources of funding beyond that of the school bus fleet operator's fiscal budget is not available to fully offset the differential purchase cost (including costs of warranties comparable to base warranties provided with a comparable diesel purchase) of an alternative-fueled school bus that complies with subdivision (d) compared to the cost of a new [or, pre-existing if the purchase is considered under subparagraphs (d)(1)(C) or (d)(1)(D)] diesel-powered school bus equipped with an approved control device. The operator shall purchase an "intermediate diesel school bus" as defined in the latest version of the Statewide Lower-Emission School Bus Program (adopted by CARB December 2000) if funding is available for such a purchase. The intermediate diesel school bus must be certified by CARB as part of the Statewide Lower-Emission School Bus Program. If

funding is not available, the operator shall consider the viability of a gasoline-powered school bus and demonstrate to the Executive Officer by submitting supporting documentation as to the reasons for the need to purchase a diesel-powered school bus if the diesel-powered school bus is the final choice. A demonstration of need may be based upon safety of fuel usage, additional cost to deploy a gasoline refueling infrastructure, commercial unavailability, or other similar reasons. The diesel-powered school bus must be equipped with an approved control device if external funding beyond the school bus fleet operator's financial budget is made available. In addition, to the extent external funding is available to equip existing diesel-powered school buses with approved control device, the operator shall equip at a minimum 15 percent of the existing diesel school buses with approved control devices on a yearly basis until the entire fleet of existing diesel-powered school buses that are capable of operating with approved control devices are equipped with such devices.

- (2) Notwithstanding subparagraph (e)(1) and prior to January 1, 2004, if a public or private school bus fleet operator does not receive external funding (beyond the school bus fleet operator's financial budget) of at least \$13,000 until April 1, 2003, and then \$8,000 per alternative-fuel school bus purchased to build a new alternative-fuel refueling station and to upgrade an existing maintenance facility to required standards to handle alternative-fueled school buses, the school bus fleet operator may purchase a diesel-powered school bus. For the purpose of this provision, any external funding other than funds to cover the incremental cost of the purchase of the alternative-fueled school bus offered by a publicly-funded incentives program, shall be considered to be available to cover the cost of a new alternative-fuel refueling station. If the school bus is diesel powered, the school bus shall be equipped with an approved control device if external funding beyond the school bus fleet operator's financial budget is made available. In addition, to the extent external funding is available to equip existing diesel-powered school buses with approved control device, the operator shall equip at a minimum 15 percent of the existing diesel school buses with approved control devices on a yearly basis until the entire fleet of existing diesel-powered school buses that are capable of operating with approved control devices are equipped with such devices.

- (3) Upon demonstration to the Executive Officer that an alternative-fueled or gasoline-powered engine/chassis/body configuration is not commercially available in a specific bus size or could be used on a specific fixed bus route, a diesel-powered school bus equipped with an approved control device may be purchased in that specific bus size or as needed for the specific fixed bus route.
- (4) A public or private school bus fleet operator may purchase a pre-owned school bus that does not meet the requirements of subdivision (d) if the oldest school bus in the operator's existing school bus fleet is scrapped or otherwise removed permanently from operation. The pre-owned school bus must be less than six (6) years old at the date of purchase. The pre-owned school bus shall be equipped with an approved control device at the expense of the school bus fleet operator. However, the school bus fleet operator may apply for external funding to offset any additional costs if such funding is available.
- (5) If during the year that school is in session, a public or private school bus fleet operator needs additional school buses due to unforeseen circumstances to operate during that school year, the operator may lease the needed quantity of school buses that do not comply with the provisions of subdivision (d) for the months necessary to purchase or lease school buses compliant to subdivision (d), not to exceed the remaining portion of the school year, if a demonstration is made that the rule-compliant school bus cannot be deployed by the school bus fleet operator within one month from the date of order.
- (6) For purposes of this rule, a private school bus fleet operator is not deemed to have purchased, leased, added to, or formed a new fleet if the private school bus fleet operator, as part of a purchase or merger with another private school bus fleet operator that provides contracted school bus transportation services, transfers ownership of school buses that are already operating in the District at the time of the purchase or merger.
- (7) Contract agreements signed prior to the date of adoption of this rule for the purchase or lease of school buses. The operator should consider equipping the diesel-powered school buses purchased under this provision with approved control devices to the extent that external funding is available for the approved control device. This provision shall not apply

to unsigned options to be executed at a future date under the contract agreement.

- (8) Prior to January 1, 2003 and upon demonstration to the Executive Officer that an alternative-fuel refueling station for alternative-fueled school buses is not available within five miles of the vehicle storage or maintenance yards and the public or private school bus fleet operator has not received external funding (beyond the school bus fleet operator's fiscal budget) of at least \$13,000 per alternative-fueled school bus purchased to build a new alternative-fuel refueling station, a public or private school bus fleet operator may purchase or lease school buses that are not alternative-fueled school buses as required under subdivision (d) of this rule. The operator shall purchase an "intermediate diesel school bus" as defined in the latest version of the Statewide Lower-Emission School Bus Program (adopted by CARB December 2000) if funding is available for such a purchase. The intermediate diesel school bus must be certified by CARB as part of the Statewide Lower-Emission School Bus Program. If funding is not available, the operator shall consider the viability of a gasoline-powered school bus and demonstrate to the Executive Officer by submitting supporting documentation as to the reasons for the need to purchase a diesel-powered school bus if the diesel-powered school bus is the final choice. A demonstration of need may be based upon safety of fuel usage, additional cost to deploy a gasoline refueling infrastructure, commercial unavailability, or other similar reasons. The diesel-powered school bus must be equipped with an approved control device if the school bus relies on diesel fuel.
- (9) For the purpose of transporting passengers on field trips outside of the jurisdiction of the District and when the remainder of the fleet consists of school buses that meet the requirements of subdivision (d), no more than 10 percent of the school buses for school bus fleets of 100 or more, or five (5) school buses for school bus fleets with 50 or less school buses or ten (10) school buses for school bus fleets with between 51 and 100 school buses, that do not meet the requirements of Subdivision (d) of this rule may be part of the fleet at any given time. Such vehicles shall be equipped with approved control devices if the vehicles are diesel-powered and external funding is available.

(f) Compliance Auditing and Enforcement

- (1) The fleet operator shall provide at the request of the District any files and/or records created to comply with subdivision (d) including fleet-specific information, such as a list of official Department of Motor Vehicles registrations, principal vehicle location, and manufacturer, model-year, model, and fuel type of each fleet vehicle. This provision shall not apply for records that have been in existence for more than one (1) year.
- (2) Any fleet operator seeking an exemption under subdivision (e) shall supply proof that their vehicle or fleet is exempted from this rule when requested by the District.
- (3) Any fleet operator seeking an exemption under those portions of subdivision (e) that pertain to external funding availability shall apply for external funding or to external funding sources, identified annually by and with the assistance of the Executive Officer and demonstrate that funding is not available prior to the purchase or lease of school buses as allowed under subdivision (e).
- (4) Circumvention of this rule is prohibited, including artificially creating fleets under common ownership of smaller than 15 vehicles, without sufficient business justification.

(g) Severability

If any provision of this rule is held by judicial order to be invalid, or invalid or inapplicable to any person or circumstance, such order shall not affect the validity of the remainder of this rule, or the validity or applicability of such provision to other persons or circumstances. In the event any of the exceptions to this rule is held by judicial order to be invalid, the persons or circumstances covered by the exception shall instead be required to comply with the remainder of this rule.

ATTACHMENT 3

EXEMPTION REQUEST AND FUND AVAILABILITY FORM



South Coast Air Quality Management District
 21865 East Copley Drive
 Diamond Bar, CA 91765
 (909) 396-2000

RULE 1195 EXEMPTION REQUEST AND FUND APPLICABILITY FORM

For Questions Regarding Exemption Form Application, Please Call Fleet Rules Implementation Unit at (909) 396-3044

Check the applicable box and complete the information below. Documentation must be maintained at the worksite indicated below for verification of the applicable exemption.

Section I - General Information (Name and Address of Organization)

Company or School District Name: _____

Mailing Address: _____

Contact Person: _____
 (Include Title and Telephone Number)

Alternate Contact Person: _____
 (Include Title and Telephone Number)

Section II – External Funding Availability – Applies to Sections (e)(1), (e)(2) and (e)(8) of Rule

A. Date of School Bus Purchase Order to Be Submitted to Vendor: _____
 (Date of Purchase Order Should be Within One Month From Date of Exemption Request)

B. Reason for Funding Exemption Request:

- No Funding Program Application Available (If Checked, Proceed to Section IV to Sign)
- Applied for Funding, but Funding Denied (If Checked, Provide Copy of Denial Notice)
- Applied for Funding, However, Award Decision Date To Follow Purchase Order Date Listed in Part A

Section III – Other Exemption Requests

- No Alternative Fuel Engine/Chassis/Body [Section (e)(3)] – Provide List of Requested Vehicles on Back of this Form.
- Alternative-Fuel School Bus Cannot Be Used on Specific Bus Route [Section (e)(3)] – Provide List of Requested Vehicles on Back of this Form.
- No Refueling Station Located Within Five Miles [Section (e)(8)] – Location of Where School Buses are Garaged:

- Unforeseen Circumstances [Section (e)(5)] – Provide Explanation on the Back of this Form.
- Contract Signed Prior to April 20, 2001 [Section (e)(7)] – Provide Copy of Signed Contract
- Scrapping of Oldest School Buses [Section (e)(4)] – Provide List of Buses to be Scrapped on the Back of this Form.
- Business Mergers [Section (e)(6)] – Provide Information on Merger
- School Buses for Field Trips [Section (e)(9)] – Provide List of Buses to be Purchased on the Back of this Form.

Section IV– Official Declaration

I HEREBY CERTIFY, UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA, THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS FORM IS TRUE AND CORRECT.

SIGNATURE OF RESPONSIBLE OFFICIAL: _____ DATE: ____/____/____

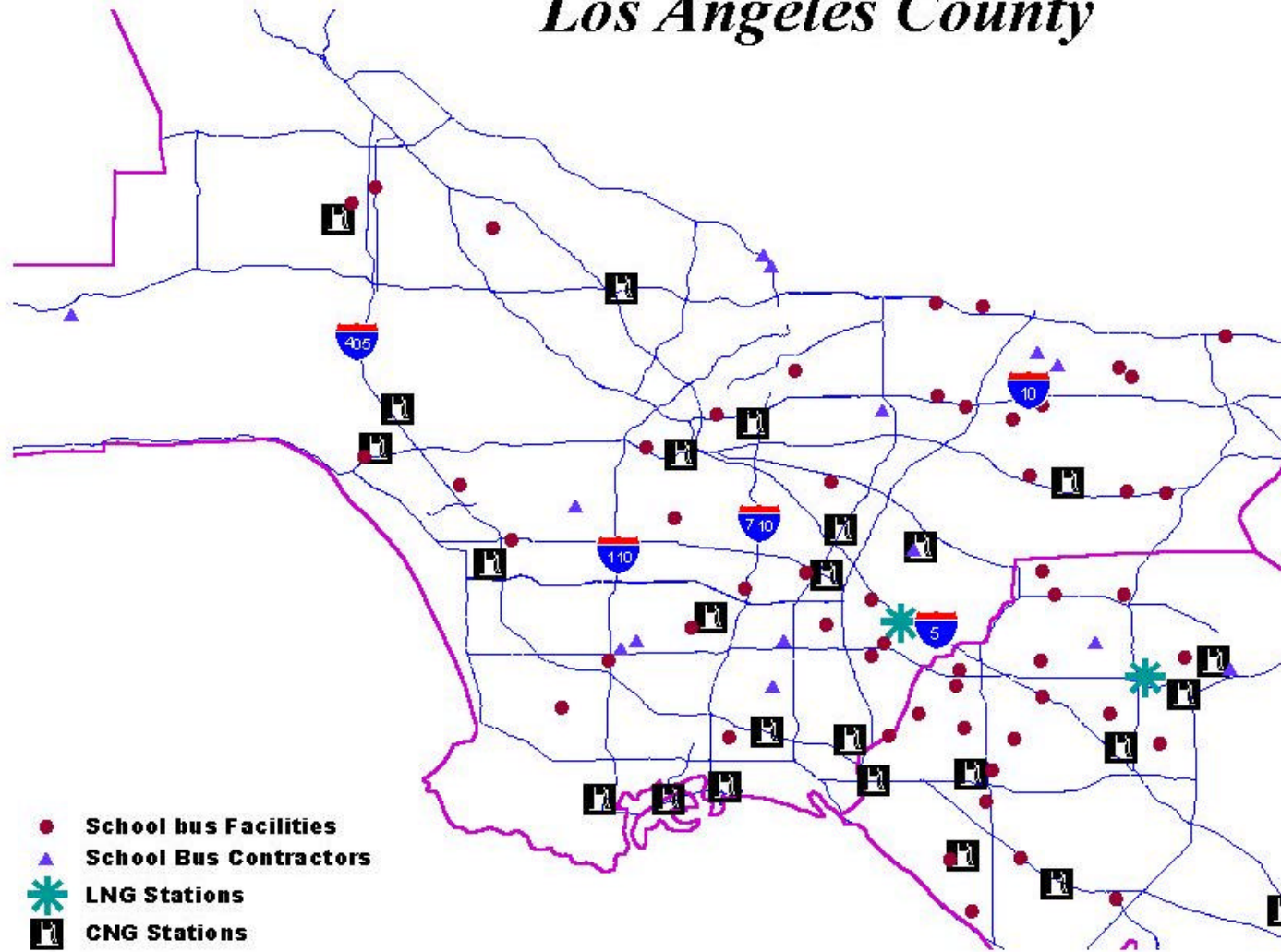
PRINT NAME: _____ TITLE: _____ PHONE # _____

THIS FORM MUST BE SIGNED BY THE PERSON AUTHORIZED TO PURCHASE SCHOOL BUSES.

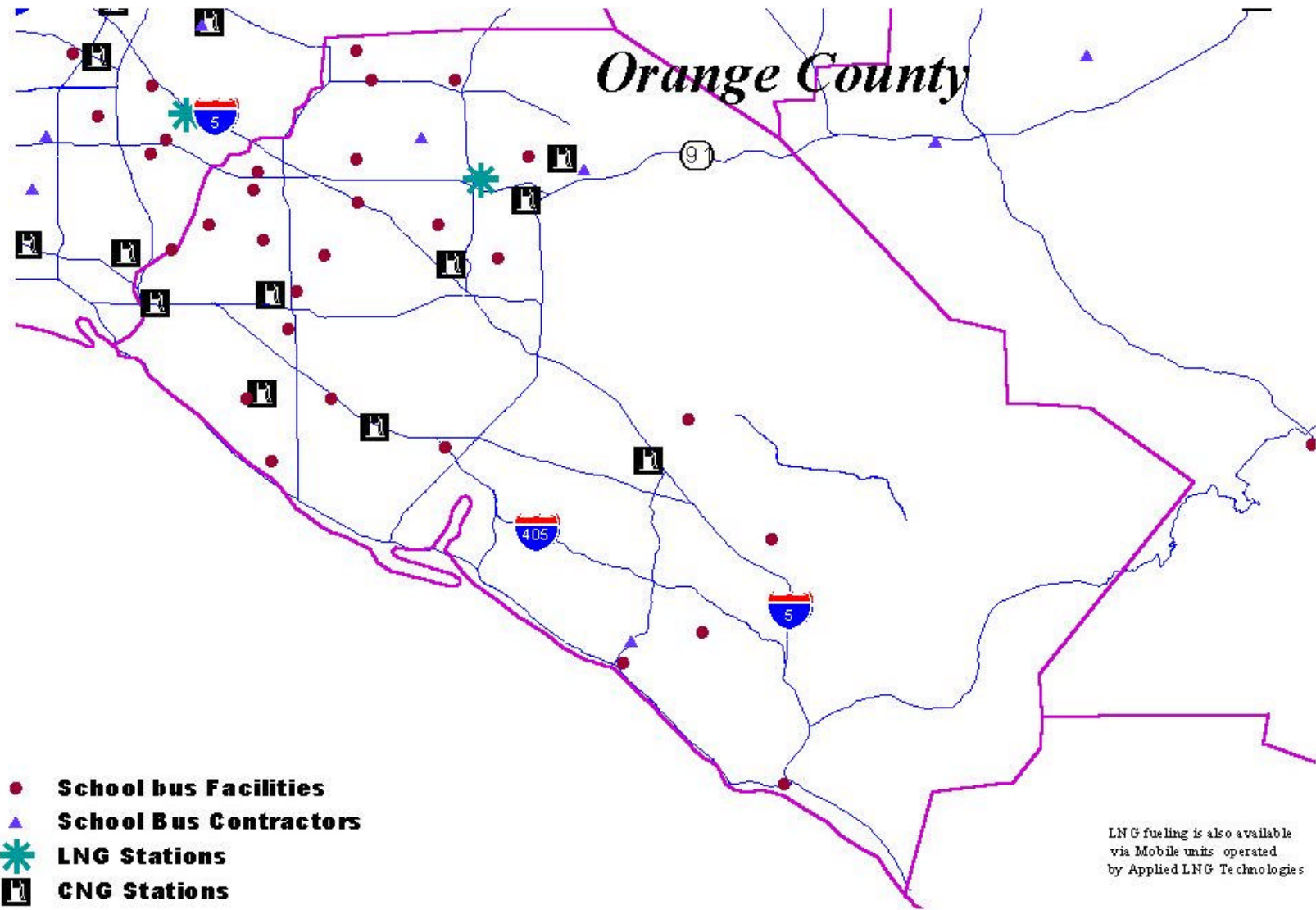
ATTACHMENT 4

**AREA MAPS AND LISTING OF CURRENT
NATURAL GAS REFUELING STATIONS**

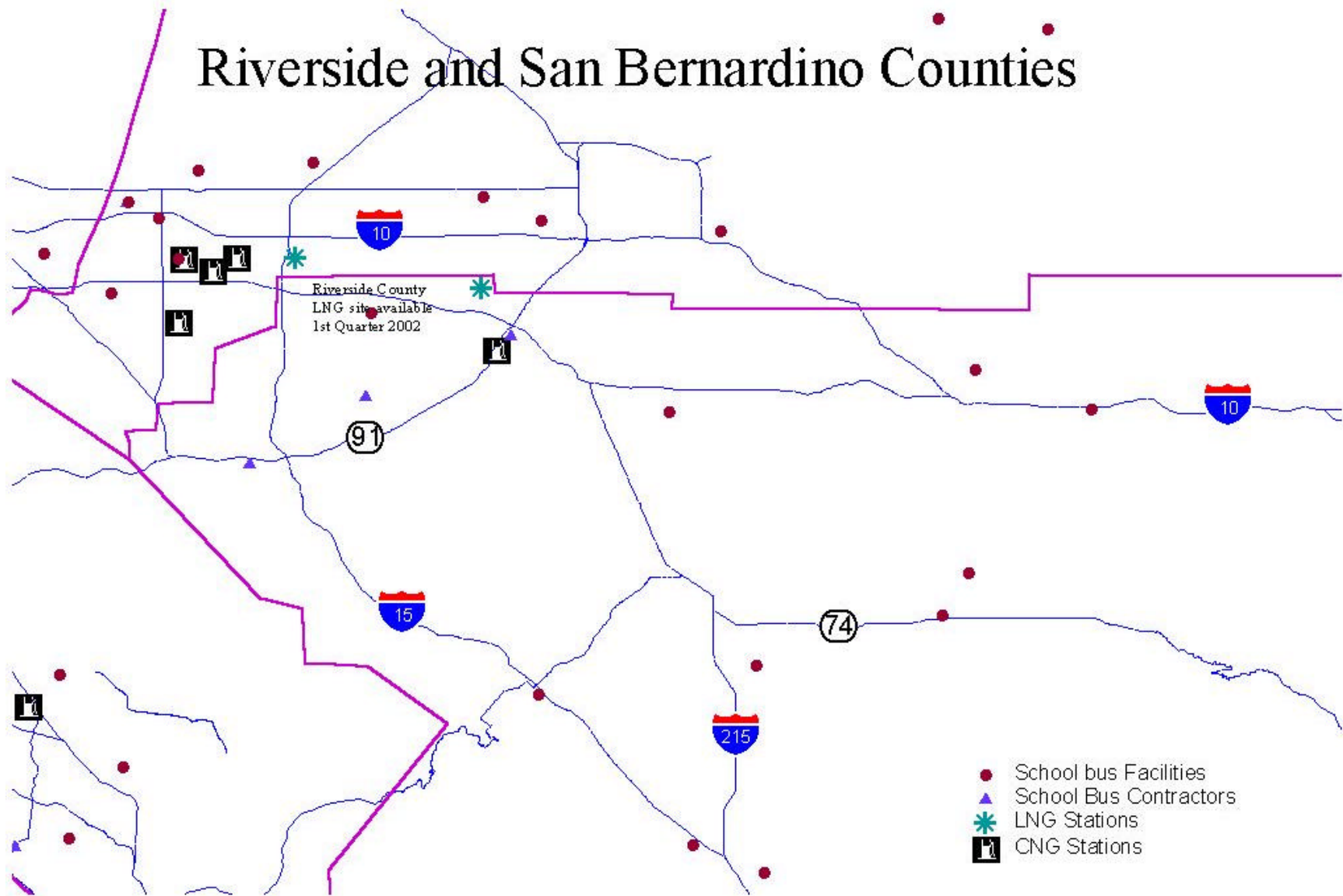
Los Angeles County



LNG fueling is also available via Mobile units operated by Applied LNG Technologies



Riverside and San Bernardino Counties



NATURAL GAS FUELING STATIONS

In addition to the fueling sites listed below, Natural Gas is also available by truck delivery, operated by:
 APPLIED TECHNOLOGIES -- contact Patrick Hutson at 602-504-1682

LNG (Liquefied Natrual Gas)

Site Name	Address	City	ZIP	Contact	Telephone
Santa Fe Springs: Vons	12801 Excelsior Dr	Santa Fe Springs	90670	Don Ruchenbecker	562-802-6365
Anaheim: Taeormina	1231 N Blue Gum St	Anaheim	92815	Pam Diaz	714-630-3811
Ontario: Airport (LNG & CNG)	(operated by ALT)	Ontario		Patrick Hutson	602-504-1682
*Riverside County Transfer Station	1850 Agua Mansa Rd	Riverside	92509	Bob Nelson	909-955-1399

*Operation planned for 2002 Q1

CNG (Compressed Natrual Gas)

Telephone	Site Name	Address	City	ZIP	Operation hours	Payment Type
Public with Limited Access						
213-244-5215	City of Ontario City Yard	14235 S. Bon View Ave.	Ontario	91761	M-F 8:00 am - 5:	Pay card required
213-244-5215	SoCal Gas - Pico Rivera	8101 S. Rosemead Blvd.	Pico Rivera	90660-510	M-F 8:00 am - 5:	Card key at all times
Public with No Restrictions						
562-570-2060	Headquarters - LBGD #1	2400 E. Spring St.	Long Beach	90806-228	24 hrs. daily	Card key after hours
281-874-3827	Mac Chevron Shell Oil Company	4807 Las Virgenes Rd. 3125 E Orangethorpe Av	Calabasas Anaheim	91302 92806-111	24 hrs. daily	Card key after hours
213-244-5215	Shell Oil Olympic	1520 S. Santa Fe Ave.	Los Angeles	90021-251	24 hrs. daily	No restrictions
213-244-5215	SoCalGas - Energy Resource Ctr	9420 E. Firestone Blvd.	Downey	90241-550	24 hrs. daily	Card key after hours

NATURAL GAS FUELING STATIONS

CNG (Compressed Natural Gas)

Telephone	Site Name	Address	City	ZIP	Operation hours	Payment Type
Public with Restrictions						
888-732-6487	76/PFC	948 S. Azusa Ave.	Industry	91748-100	24 hrs. daily	Card key at all times
562-570-2060	City Hall - LBGD # 3 (Police De	400 W. Broadway	Long Beach	90802-440	24 hrs. daily	Card key at all times
858-654-1105	City of El Centro	970 N. 4th St.	El Centro	92243-151	24 hrs. daily	Card key at all times
888-732-6487	City of Irvine/PFC	15029 Sand Canyon Av	Irvine	92618-210	24 hrs. daily	Card key at all times
909-947-1931	City of Ontario	1440 S. Cucamonga Av	Ontario	91761-450	24 hrs. daily	Card key at all times
760-241-6365	City of Victorville Transit Ctr	16690 D St.	Victorville	92392	24 hrs. daily	Card key at all times
562-570-2060	El Dorado Park	2750 Studebaker Rd.	Long Beach	90815-169	M-F 7:00 am - 4: 24 hrs. daily	Pay card required Card key at all times
888-732-6487	L.A. County/PFC	1100 N. Eastern Ave.	Los Angeles	90063-329		
888-732-6487	Los Angeles Airport/PFC	10400 Aviation Blvd.	Los Angeles	90045-590	24 hrs. daily	Card key at all times
888-732-6487	Orange County Sanitation Dist	10844 Ellis Ave.	Fountain Valley	92708-701	24 hrs. daily	Card key at all times
888-732-6487	Palm Springs Airport/SunLine/PF	3400 E Tahquitz Cyn Wy	Palm Springs	92262-696	24 hrs. daily	Card key at all times
888-732-6487	Seal Beach/PFC	3101 Beverly Manor Dr.	Seal Beach	90740-252	24 hrs. daily	Card key at all times
562-570-2060	SERRF - LBGD #2	120 Henry Ford Ave.	Long Beach	90802-103	24 hrs. daily	Card key at all times
213-244-5215	SoCal Gas - Anaheim Base	1919 S State College Blvd	Anaheim	92806-611	24 hrs. daily	Card key at all times
213-244-5215	SoCal Gas - Compton	701 N. Bullis Rd. (Access Elm)	Compton	90221-225	24 hrs. daily	Card key at all times

NATURAL GAS FUELING STATIONS

CNG (Compressed Natural Gas)

Telephone	Site Name	Address	City	ZIP	Operation hours	Payment Type
213-244-5215	SoCal Gas - Garden Grove Base	12631 Monarch St. (Access Ind	Garden Grove	92841-391	24 hrs. daily	Card key at all times
213-244-5215	SoCal Gas - Riverside Base	4495 Howard Ave.	Riverside	92507-553	24 hrs. daily	Card key at all times
213-244-5215	SoCal Gas - Santa Monica Base	1701 Stewart St.	Santa Monica	90404-402	24 hrs. daily	Card key at all times
213-244-5215	SoCal Gas - Saticoy Base	16645 Saticoy St.	Van Nuys	91406-283	24 hrs. daily	Card key at all times
213-244-5215	Southern California Gas Co. San	755 W. Capitol Dr.	San Pedro	90731-122	24 hrs. daily	Card key at all times
213-244-5215	Southern California Gas Company	5610 San Fernando Rd.	Glendale	91202-210	24 hrs. daily	Card key at all times
888-732-6487	Sunline Indio/PFC	83244 Hwy. 111	Indio	92201-564	24 hrs. daily	Card key at all times
888-732-6487	Sunline Transit Agency/PFC	32505 Harry Oliver Trail	Thousand Palms	92276-350	24 hrs. daily	Card key at all times
888-732-6487	U.S. Postal Service/PFC	414 W. Grand Blvd. (station o	Corona	91720-999	24 hrs. daily	Card key at all times
213-244-5215	UCLA	741 Charles Young Dr. S. (in	Los Angeles	90095-834	24 hrs. daily	Card key at all times
888-732-6487	United States Post Office/PFC	6771 Warner Ave. (Fueling at	Huntington Beach	92647-999	24 hrs. daily	Card key at all times
888-732-6487	Waste Management of the Desert	41575 Eclectic St.	Palm Desert	92260-196	24 hrs. daily	Card key at all times
213-244-5215	Whittier School District	13200 Mulberry Dr.	Whittier	90602-ND	24 hrs. daily	Card key at all times

ATTACHMENT 5

**LISTING OF COMMERCIALY AVAILABLE RULE COMPLIANT
ALTERNATIVE-FUELED SCHOOL BUSES AND
INTERMEDIATE DIESEL ENGINES FOR SCHOOL BUSES APPROVED
BY THE CALIFORNIA AIR RESOURCES BOARD FOR THE
STATEWIDE LOWER EMISSION SCHOOL BUS PROGRAM**

RULE 1195 COMPLIANT HEAVY-DUTY SCHOOL BUSES

Original Equipment Manufacturer	Engine	Horsepower	Max. Torque (ft-lb)	Incremental Cost	Length	Passengers
Bluebird	John Deere 8.1L	250	800	30,000	40	84
Bluebird	John Deere 6.8L	225	640	27,000	27 - 35	54 - 78
Bluebird	Cummins 5.9L	230	500	25,000 to 30,000	27 - 37	54 - 72
ThomasBuilt	John Deere 8.1L	250	800	35,000	40	84
ThomasBuilt	Cummins 8.3L	250	750	40,000	40	84
ThomasBuilt	John Deere 8.1L	250	800	35,000	36	72 - 78
ThomasBuilt	John Deere 8.1L	250	800	35,000	32	54 - 66

RULE 1195 COMPLIANT MEDIUM-DUTY SCHOOL BUSES

Original Equipment Manufacturer	Engine	Fuel Type	Incremental Cost	Maximum Passengers
U.S. Bus	GM 5.7L	CNG	17,900	22
Bluebird	Ford 5.4L	CNG	15,000	20
ThomasBuilt	Ford 5.4L	CNG	15,000	20
Collins	Ford 5.4L	Gasoline	(4,000)	18

INTERMEDIATE-DIESEL ENGINES APPROVED BY CARB FOR THE STATEWIDE LOWER EMISSION SCHOOL BUS PROGRAM

Manufacturer	Engine Family	Displacement
Caterpillar Inc.	2CPXH0442H3K	7.2L
International Truck and Engine	1NVXH0530ATA (DT530)	8.7L

ATTACHMENT 6

**LISTING OF WEB INDUSTRY/GOVERNMENT RESOURCES AND
CONTACT INFORMATION**

Alternative Fuel Vehicle Technologies

Web Links of Interest*

AFV/EV Sources	
American Gas Association (Gas Industry Online)	www.aga.org
Alternative Fuels Data Center	www.afdc.doe.gov
Argonne National Laboratory	www.transportation.anl.org
Gas Research Institute	www.gri.org
National Propane Gas Association	www.npga.org
National Renewable Energy Laboratory (NREL)	www.nrel.org
Natural Gas Vehicle Coalition	www.ngvc.org
Natural Gas Vehicle Forum	www.ngv.org
U.S. Department of Energy Clean Cities Program	www.cities.doe.gov
WestStart.CALSTART: Advances Transportation Website	www.calstart.org
Clean Car Maps	www.cleancarmaps.com
U.S. Department of Energy Office of Transportation Technologies	www.ott.doe.org

Vehicle/Chassis/Engine Manufacturers & Technologies	
Baytech Corporation	www.baytech.com
Caterpillar, Inc.	www.cat.com
Caterpillar Engines – Power Systems	www.catpower.com
Cummins Alternate Fuel Engines	www.cummins.com/na/pagesleu/products/bus
Detroit Diesel Corporation	www.detroitdiesel.com
Freightliner	www.freightliner.com
Manufacturers of Alternative Fuel Technology	www.afdc.doe.gov/afvehicles.html
IMPCO Technologies	www.impcow.com
John Deere	www.deere.com/deerecom/_enginesandtomponenets/engines/cng+engines/default.htm
Kenworth	www.kenworth.com
Mack Trucks	www.macktrucks.com
Navistar/International	www.navistar.com
Westport Innovations Inc.	www.westport.com
NGV Ecotrans	ngvecotrans.com
Peterbilt	www.peterbilt.com
Volvo International	www.volvo.com

*Listing of commercial internet sites does not constitute endorsement by the South Coast Air Quality Management District.

Alternative Fuel Vehicle Technologies

Web Links of Interest*

Fuel & Infrastructure	
Applied LNG Technologies	www.altlngusa.com
Chart Applied Technologies	www.mve-inc.com/applied/index.html
FuelMaker	www.fuelmaker.com
Pickens Fuel Corporation	www.pickensfuels.com
Pinnacle CNG	www.pinnaclecng.com
San Diego Gas and Electric	www.sdge.com
Southern California Gas Company	www.socalgas.com
Trillium USA	trilliumusa.com

Public Agencies	
California Air Resources Board	www.arb.ca.gov
California Energy Commission	www.energy.ca.gov
Mobile Sources Air Pollution Reduction Review Committee	www.msarc-cleanair.org
South Coast Air Quality Management District	www.aqmd.gov
U.S. Department of Energy	www.energy.gov
U.S. Department of Energy – Alternative Fuels Data Center	www.afdc.doe.gov
U.S. Department of Energy – Office of Transportation Technologies	www.ott.doe.gov
U.S. Department of Transportation	www.dot.gov
U.S. Environmental Protection Agency, Region IX	www.epa.gov/regiona09/regiona9.html

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