

State of California  
AIR RESOURCES BOARD

Resolution 02-33

December 12, 2002

Agenda Item No.: 02-9-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the Board by law;

WHEREAS, on August 27, 1998, the Board identified diesel exhaust particulate matter as a toxic air contaminant pursuant to article 3 (commencing with section 39650), chapter 3.5, part 2, division 26 of the Health and Safety Code;

WHEREAS, in identifying diesel exhaust particulate matter as a toxic air contaminant, the Board determined that there is not sufficient scientific evidence to support identification of a threshold level below which no significant adverse health effects are anticipated (as codified in title 17, California Code of Regulations, section 93000);

WHEREAS, pursuant to article 3 (commencing with section 39650), chapter 3.5, part 2, division 26 of the Health and Safety Code, the Board also identified other toxic air contaminants associated with heavy-duty motor vehicle exhaust, including: benzene on January 25, 1985; dioxins and dibenzofurans on July 24, 1986; formaldehyde on March 12, 1992; 1,3-butadiene on July 9, 1992; and acetaldehyde, acrolein, and benzo[a]pyrene on April 8, 1993 (hereinafter designated as "other toxic air contaminants");

WHEREAS, pursuant to section 39665 of the Health and Safety Code, the Air Resources Board staff prepared, and, on September 28, 2000, the Board approved, a comprehensive risk reduction plan to significantly reduce diesel exhaust particulate matter emissions from diesel-fueled engines and vehicles;

WHEREAS, the Office of Environmental Health Hazard Assessment listed under section 39669.5(a) of the Health and Safety Code diesel exhaust particulate matter, acrolein, benzo[a]pyrene, and dioxins and dibenzofurans as possibly causing infants and children to be especially susceptible to illness;

WHEREAS, sections 39658 and 39667 of the Health and Safety Code authorize the Board to establish airborne toxic control measures (ATCM) for substances identified as toxic air contaminants in accordance with specified criteria;

WHEREAS, in fulfilling the requirements of section 39667 of the Health and Safety Code, the Board is required to consider adoption of an airborne toxic control measure for vehicular sources to achieve the maximum possible reduction in public exposure based on its prior determination not to specify a threshold exposure level for diesel exhaust particulate matter under section 39662 of the Health and Safety Code;

WHEREAS, an airborne toxic control measure for existing motor vehicles developed pursuant to section 39667 of the Health and Safety Code is required to be based on the utilization of best available control technologies or more effective control methods, unless the Board determines, based on an assessment of risk, that an alternative level of emission reduction is adequate or necessary to prevent an endangerment of public health;

WHEREAS, the diesel exhaust particulate matter risk reduction plan identified diesel-fueled heavy-duty motor vehicles, including school buses, as a source of diesel exhaust particulate matter;

WHEREAS, with the exception of electric-powered buses or vehicles, all heavy-duty buses and vehicles emit diesel exhaust particulate matter or other toxic air contaminants;

WHEREAS, children are disproportionately exposed to diesel exhaust particulate matter and other toxic air contaminants from school transportation buses or vehicles (i.e., school buses, school pupil activity buses, youth buses, or general public paratransit vehicles) and are also exposed to such emissions from transit buses and heavy-duty vehicles (other than buses) operating at or near schools;

WHEREAS, Air Resources Board staff determined that there are no current State laws and few written policies that specifically limit unnecessary idling of school transportation buses or vehicles or transit buses or heavy-duty vehicles (other than buses) operating at or near schools;

WHEREAS, modeling analyses show that potential cancer risk increases as the number of diesel-fueled school buses and idling time increases;

WHEREAS, to reduce emissions, exposure, and associated potential cancer risk, the diesel exhaust particulate matter risk reduction plan recommended idling restrictions to limit the amount of time heavy-duty vehicles are allowed to operate while not performing useful work such as moving a vehicle or operating essential equipment;

WHEREAS, to augment the general information and recommendations provided in the diesel exhaust particulate matter risk reduction plan, the Air Resources Board staff worked with affected private industry, State and local public agencies, school districts, and the public to prepare a report, entitled the Initial Statement of Reasons for Proposed Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools (Initial Statement of Reasons);

WHEREAS, the Initial Statement of Reasons further identified the need for, and appropriate degree of, control of diesel exhaust particulate matter and other toxic air contaminants associated with exhaust from the unnecessary idling of school transportation buses or vehicles and transit buses and heavy-duty vehicles (other than buses) operating at or near schools, as earlier addressed in the diesel exhaust particulate matter risk reduction plan required by Health and Safety Code section 39665(a);

WHEREAS, the Initial Statement of Reasons further discusses, to the extent data could reasonably be made available, the factors specified in Health and Safety Code section 39665(b), including: estimates of emissions, exposure, and potential cancer risk due to the idling of school transportation buses or vehicles and transit buses and heavy-duty vehicles (other than buses) operating at or near schools, feasible control options, potential environmental impacts and cost impacts for the motor carriers of affected buses and vehicles and for State and local public agencies for the implementation of, and compliance with, the proposed ATCM;

WHEREAS, concepts and a draft of the proposed ATCM were discussed at a public consultation meeting on July 23, 2002 and at public workshops on September 10, 2002 and September 12, 2002;

WHEREAS, in accordance with Health and Safety Code section 39667, staff evaluated various control options, including automatic vehicle shut-off and particulate matter trapping devices;

WHEREAS, in accordance with Health and Safety Code section 39667, staff concluded that a no-idling requirement for heavy-duty vehicles at schools coupled with additional limitations for such vehicles elsewhere would eliminate unnecessary diesel exhaust particulate matter and other toxic air contaminant emissions on school grounds, significantly reduce such emissions near schools and at locations such as school transportation parking or maintenance facilities, bus stops, and sites of school or other youth activities, and more effectively and safely control emissions, reduce exposure, and protect health than any available control technology;

WHEREAS, the cost of complying with the proposed ATCM is expected to be minimal (two dollars or less per affected driver per year) because no new or add-on control technology would be required and because required training and recordkeeping are expected to be incorporated into existing procedures and programs;

WHEREAS, the costs associated with implementation and enforcement of the proposed ATCM are expected to be absorbed into existing Air Resources Board and other State agency budgets and additional staffing is not expected to be required;

WHEREAS, the elimination of unnecessary idling of school transportation buses and vehicles and transit buses and heavy-duty vehicles (other than buses) operating at or near schools, is an easily-implemented, pollution prevention measure that would reduce children's, drivers', parents', teachers', and near-by residents' exposure to, and associated cancer and other adverse health effects risk from, diesel exhaust particulate matter and other toxic air contaminants;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, in furtherance of the notice of requirements for adopting the diesel exhaust risk reduction plan under Health and Safety Code section 39665(c), the Initial Statement of Reasons was made available for public review and comment 45 days prior to the public hearing to consider the proposed ATCM;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, in consideration of the Initial Statement of Reasons, written comments, and public testimony it has received, the Board finds that:

Unnecessary idling of school transportation buses and vehicles and transit buses and heavy-duty vehicles (other than buses) operating at or near schools may cause potentially harmful concentrations of diesel exhaust particulate matter and other toxic air contaminants to be entrained in the air and these toxic air contaminants may pose a significant health risk to children and other exposed members of the public;

Existing federal, State, and local regulations do not sufficiently protect the public health, particularly children's health, from diesel exhaust particulate matter and other toxic air contaminant emissions associated with unnecessary idling of school transportation buses and vehicles and transit buses and heavy-duty vehicles (other than buses) operating at or near schools;

The proposed ATCM's no-idling requirement for heavy-duty vehicles at schools, coupled with additional idling limitations for such vehicles elsewhere, would eliminate unnecessary diesel exhaust particulate matter and other toxic air contaminant emissions on and above school grounds, significantly reduce such emissions near schools and at locations such as school transportation parking or maintenance facilities, bus stops, and sites of school or other youth activities, and more effectively and safely control emissions, reduce exposure, and protect health than any available control technology in accordance with Health and Safety Code section 39667;

The proposed ATCM would reduce exposure to potential diesel exhaust particulate matter and other toxic air contaminants and associated cancer and other adverse health effects in all communities in which unnecessary idling of heavy-duty school transportation buses or vehicles and transit buses and heavy-duty vehicles (other than buses) operating at or near schools now occurs;

The economic impacts of the proposed ATCM have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the Initial Statement of Reasons;

The benefits of the proposed ATCM to children's and public health and the environment justify the minimal costs of compliance, implementation, and enforcement; and

No alternatives considered or that have otherwise been identified and brought to the attention of the Air Resources Board would be more effective at carrying out the purpose for which the ATCM is proposed, or would be as effective and less burdensome to the affected private businesses and public agencies than the proposed ATCM;

WHEREAS, the Board further finds, in accordance with the Health and Safety Code section 39650(e), that:

While absolute and undisputed scientific evidence may not be available to determine the exact risk from diesel exhaust particulate matter or other toxic air contaminant emissions from unnecessary idling of school transportation buses and vehicles and transit buses and heavy-duty vehicles (other than buses) operating at or near schools, it is necessary to take action to protect children's and public health; and

WHEREAS, pursuant to the requirements of the California Environmental Quality Act and the Board's regulation, the Board further finds that:

Based on its independent judgement and analysis of the whole record before it, composed of all materials in the rulemaking record that is available at the Board's offices, the proposed ATCM will not have a significant effect on the environment; and

The proposed ATCM is necessary in order to protect children's and public health by eliminating diesel exhaust particulate matter and other toxic air contaminant emissions from unnecessary idling of heavy-duty buses and vehicles at schools, and by significantly reducing such emissions near schools and elsewhere;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves adoption of chapter 10 (Mobile Source Operational Controls), article 1 (Motor Vehicles), section 2480, title 13, California Code of Regulations, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to incorporate into the approved regulations the modifications set forth in Attachment B, with such other conforming modifications as may be appropriate, and then to adopt the amendments and new regulation, after making the modified regulatory language available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board directs the Air Resources Board staff to:

Coordinate the education of affected drivers, motor carriers, school districts, and the public with the participation of other agencies and interested parties, including, but not limited to, the California Department of Education and the California Highway Patrol;

Assist the California Highway Patrol in revising division 2, chapter 6.5 (Motor Carrier Safety), or other appropriate location within title 13, California Code of Regulations, to clearly indicate that agency's enforcement authority by specifically referencing chapter 10 (Mobile Source Operational Controls), article 1 (Motor Vehicles), section 2480, title 13, California Code of Regulations, as set forth in Attachment A and as modified by Attachment B;

As primary enforcement agency, coordinate enforcement with other State and local agencies, such as the California Highway Patrol, local peace officers, and air quality management and air pollution control districts;

Expediently explore, and return to the Board with, one or more regulatory proposals to restrict idling from: A) vehicles regulated by, but at locations beyond those regulated by, the ATCM approved herein; B) other vehicles, commonly referred to as "commercial vehicles," at all California locations; and

Report back to the Board in 2004 regarding implementation of the ATCM approved herein, including specifically: A) the effect of exempting idling periods during which defrosters, heaters, air conditioners, or other equipment are operating for the health or safety of drivers or passengers; and B) the results of the preceding paragraph, if those results were not previously either reported to the Board or proposed to the Board as part of one or more regulatory items.

I hereby certify that the above is a true and correct copy of Resolution 02-33, as adopted by the Air Resources Board.

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Stacey Dorais, Clerk of the Board

Resolution 02-33

December 12, 2002

Identification of Attachments to the Board Resolution

**Attachment A:** Proposed Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools (chapter 10, article 1, section 2480, title 13, California Code of Regulations) as set forth in Appendix A to the Initial Statement of Reasons, released October 25, 2002.

**Attachment B:** Staff's Suggested Modifications to the Original Proposal (distributed at the Board hearing on December 12, 2002).



## ATTACHMENT A

### PROPOSED REGULATION ORDER: AIRBORNE TOXIC CONTROL MEASURE TO LIMIT SCHOOL BUS IDLING AND IDLING AT SCHOOLS

Adopt Chapter 10 – Mobile Source Operational Controls, Article 1 – Motor Vehicles, section 2480, title 13, California Code of Regulations (CCR) to read as follows:

Section 2480. Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools.

(a) **Purpose.** This airborne toxic control measure seeks to reduce public exposure, especially school age children's exposure, to diesel exhaust particulate matter and other toxic air contaminants by limiting unnecessary idling of specified vehicular sources.

(b) **Applicability.** This section applies to the operation of every school bus, transit bus, school pupil activity bus, youth bus, general public paratransit vehicle, and other heavy-duty vehicle except as provided in subsection (d).

(c) **Idling Control Measure.**

- (1) A driver of a school bus, school pupil activity bus, youth bus, or general public paratransit vehicle:
  - (A) must turn off the bus or vehicle engine upon stopping at a school or within 100 feet of a school, and must not turn the bus or vehicle engine on more than 30 seconds before beginning to depart from a school or from within 100 feet of a school; and
  - (B) must not cause or allow a bus or vehicle to idle at any location greater than 100 feet from a school for:
    - (i) more than five consecutive minutes; or
    - (ii) a period or periods aggregating more than five minutes in any one hour.
- (2) A driver of a transit bus or of a heavy-duty vehicle not identified in (c)(1):
  - (A) must turn off the bus or vehicle engine upon stopping at a school and must not turn the bus or vehicle engine on more than 30 seconds before beginning to depart from a school; and
  - (B) must not cause or allow a bus or vehicle to idle at any location within 100 feet of, but not at, a school for:
    - (i) more than five consecutive minutes; or

- (ii) a period or periods aggregating more than five minutes in any one hour.
- (3) A motor carrier of a school bus, school pupil activity bus, youth bus, or general public paratransit vehicle must ensure that:
  - (A) the bus or vehicle driver, upon employment and at least once per year thereafter, is informed of the requirements in (c)(1), and of the consequences, under this section and the motor carrier's terms of employment, of not complying with those requirements;
  - (B) all complaints of non-compliance with, and enforcement actions related to, the requirements of (c)(1) are reviewed and remedial action is taken as necessary; and
  - (C) records of (3) (A) and (B) are kept for at least three years and made available or accessible to enforcement personnel within three business days of their request.
- (4) A motor carrier of a transit bus or of a heavy-duty vehicle not identified in (c)(1) must ensure that:
  - (A) the bus or vehicle driver, upon employment and at least once per year thereafter, is informed of the requirements in (c)(2), and of the consequences, under this section and the motor carrier's terms of employment, of not complying with those requirements;
  - (B) all complaints of non-compliance with, and enforcement actions related to, the requirements of (c)(2) are reviewed and remedial action is taken as necessary; and
  - (C) records of (4) (A) and (B) are kept for at least three years and made available or accessible to enforcement personnel within three business days of their request.

(d) **Exemptions**

This section 2480 does not apply for the period or periods during which:

- (1) idling is necessary while stopped:
  - (A) for an official traffic control device;
  - (B) for an official traffic control signal;
  - (C) for traffic conditions over which the driver has no control, including, but not limited to: stopped in a line of traffic; or
  - (D) at the direction of a peace officer;
- (2) idling is necessary to ascertain that the school bus, transit bus, school pupil activity bus, youth bus, general public paratransit vehicle, or other heavy-duty vehicle is in safe operating condition and equipped as required by all provisions of law, and all

equipment is in good working order, either as part of the daily vehicle inspection, or as otherwise needed;

- (3) idling is necessary for testing, servicing, repairing, or diagnostic purposes;
- (4) idling is necessary, for a period not to exceed three to five minutes (as per the recommendation of the manufacturer), to cool down a turbo-charged diesel engine before turning the engine off;
- (5) idling is necessary to accomplish work for which the vehicle was designed, other than transporting passengers, for example: controlling cargo temperature or operating a lift, crane, pump, drill, hoist, mixer, or other auxiliary equipment other than a heater or air conditioner;
- (6) idling is necessary to operate:
  - (A) a lift or other piece of equipment designed to ensure safe loading, unloading, or transport of persons with one or more disabilities; or
  - (B) a heater or an air conditioner of a bus or vehicle that has, or will have, one or more children with exceptional needs aboard;
- (7) idling is necessary to operate defrosters, heaters, air conditioners, or other equipment:
  - (A) to prevent a safety or health emergency ; and
  - (B) not solely for the comfort of the driver or passengers; or
- (8) idling is necessary solely to recharge a battery or other energy storage unit of a hybrid electric bus or vehicle.

(e) **Relationship to Other Law**

Nothing in this section 2480 allows idling in excess of other applicable law, including, but not limited to:

- (1) title 13 California Code of Regulations section 1226;
- (2) Vehicle Code section 22515; or
- (3) any local ordinance or requirement as stringent as, or more stringent than, this section 2480.

(f) **Penalties**

- (1) For each violation of subsection (c)(1), a driver of a school bus, school pupil activity bus, youth bus, or general public paratransit vehicle is subject to a minimum civil penalty of 100 dollars and to criminal penalties to the maximum extent provided by law.
- (2) For each violation of subsection (c)(2), a driver of a transit bus or other heavy duty vehicle is subject to a minimum civil penalty of 100 dollars and to criminal penalties to the maximum extent provided by law.
- (3) For each violation of subsection (c)(3), a motor carrier of a school bus, school pupil activity bus, youth bus, or general public paratransit vehicle is subject to a minimum civil penalty of 100 dollars and to criminal penalties to the maximum extent provided by law.
- (4) For each violation of subsection (c)(4), a motor carrier of a transit bus or other heavy duty vehicle is subject to a minimum civil penalty of 100 dollars and to criminal penalties to the maximum extent provided by law.

(g) **Enforcement.** This section 2480 may be enforced by the Air Resources Board, the California Highway Patrol, peace officers, and air pollution control or air quality management districts.

(h) **Definitions**

- (1) Children With Exceptional Needs. "Children with exceptional needs" means children meeting eligibility criteria described in Education Code section 56026.
- (2) Driver. "Driver" means any person who drives or is in actual physical control of a vehicle.
- (3) Emergency. "Emergency" means:
  - (A) a sudden, urgent, usually unforeseen, occurrence; or
  - (B) a foreseeable occurrence relative to a passenger's pre-disclosed medical or physiological condition.
- (4) General Public Paratransit Vehicle. "General public paratransit vehicle" means any motor vehicle defined in Vehicle Code section 336, other than a zero emission general public paratransit vehicle, that is transporting school pupils at or below the 12th grade

level to or from public or private schools or public or private school activities.

- (5) Gross Vehicle Weight Rating. "Gross vehicle weight rating" means the weight specified by the manufacturer as the loaded weight of a single vehicle.
- (6) Heavy-Duty Vehicle. "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, excluding a passenger car designed to carry 10 or fewer persons including the driver.
- (7) Hybrid Electric Bus or Vehicle. "Hybrid electric bus or vehicle" means any school bus, transit bus, school pupil activity bus, youth bus, general public paratransit vehicle, or other heavy-duty vehicle equipped with at least the following two sources of motive energy on board:
  - (A) an electric drive motor that must be used to partially or fully drive the bus or vehicle wheels; and
  - (B) one of the following:
    - (i) an internal combustion engine;
    - (ii) a turbine; or
    - (iii) a fuel cell.
- (8) Idling. "Idling" means the engine is running while the bus or vehicle is stationary.
- (9) Motor Carrier. "Motor carrier" means the registered owner, lessee, licensee, school district superintendent, or bailee of any school bus, transit bus, school pupil activity bus, youth bus, general public paratransit vehicle, or other heavy-duty vehicle who operates or directs the operation of any such bus or vehicle on either a for-hire or not-for-hire basis.
- (10) Official Traffic Control Device. "Official traffic control device" means any sign, signal, marking or device, consistent with Section 21400 of the Vehicle Code, placed or erected by authority of a public body or official having jurisdiction, for the purpose of regulating, warning, or guiding traffic, but does not include islands, curbs, traffic barriers, speed humps, speed bumps, or other roadway design features.
- (11) Official Traffic Control Signal. "Official traffic control signal" means any device, whether manually, electrically, or mechanically operated, by which traffic is alternately directed to stop and proceed and which is erected by authority of a public body or official having jurisdiction.

- (12) School. "School" means any public or private school used for the purposes of education and instruction of more than 12 school pupils at or below the 12<sup>th</sup> grade level, but does not include any private school in which education and instruction is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of school property. The term excludes unimproved school property.
- (13) School Bus. "School bus" means any school bus defined in Vehicle Code section 545, except a zero emission school bus.
- (14) School Pupil Activity Bus. "School pupil activity bus" means any bus defined in Section 546 of the Vehicle Code, except a zero emission school pupil activity bus.
- (15) Transit Bus. "Transit bus" means any bus defined in Vehicle Code section 642, except a zero emission transit bus.
- (16) Youth Bus. "Youth bus" means any bus defined in Vehicle Code section 680, except a zero emission youth bus.
- (17) Zero Emission School Bus, Transit Bus, School Pupil Activity Bus, Youth Bus, General Public Paratransit Vehicle, or Other Heavy-Duty Vehicle. A "zero emission school bus, transit bus, school pupil activity bus, youth bus, general public paratransit vehicle, or other heavy-duty vehicle" means any bus or vehicle certified to zero-emission standards.

Authority Cited: sections 39600, 39601, 39658, 39667, 39674, Health and Safety Code; *Western Oil & Gas Assn. v. Orange County Air Pollution Control Dist.* (1975) [14 Cal.3d.411].

Reference: sections 39002, 39003, 39027, 39500, 39600, 39650, 39655, 39656, 39657, 39658, 39659, 39662, 39665, 39674, 39675, 42403.5, Health and Safety Code; sections 305, 336, 350, 440, 445, 545, 546, 642, 680, 21400, 22452, 22515, 27153, Vehicle Code; sections 1201, 1900, 1962, title 13 California Code of Regulations; and section 56026, Education Code.