

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
December 12, 2002

Location
California Air Resources Board
Central Valley Auditorium, Second Floor
1001 I Street
Sacramento, California 95814

MEMBERS PRESENT: Hons. Alan C. Lloyd, Ph.D., Chairman
Joseph C. Calhoun, P.E.
Doreen D'Adamo
Mark DeSaulnier
C. Hugh Friedman
Mathew R. McKinnon
Barbara Patrick
Barbara Riordan

AGENDA ITEM #

02-9-1 Public Meeting to Consider a Health Update

SUMMARY OF AGENDA ITEM:

Staff updated the Board on recent health findings on the cardiovascular health effects resulting from exposure to airborne fine particulate matter (PM 2.5) and to ultrafine particulate matter (PM < 0.1 μ m diameter). To date, very little information has been published on the effects of ultrafine PM related to cardiovascular health, and this study represents one of the first in this area.

The research discussed was based on assessing electrocardiogram (ECG) patterns in cardiac patients for a specific abnormality called "ST-segment depression." This abnormal pattern may indicate a high probability of a lack of oxygen to the heart muscle (medically referred to as ischemia), that in turn could result in a higher risk of heart damage and heart attack. The investigators reported that there was an association between fine, as well as ultrafine, PM exposure and the risk of exercise-induced ST-segment depression. Further, the authors reported that the association of ultrafine PM was independent of fine PM. There was

no consistent association for coarse particles. These results suggest the possibility that fine and ultrafine PM may cause a higher risk of cardiac ischemia, a serious health effect.

The presentation was well received by the Board, and the importance of studying airborne PM, especially fine and ultrafine PM exposure and cardiovascular health effects was emphasized. Although verification of this type of study is needed, these results may help focus future research and air quality standard-setting efforts, and imply that meeting clean air quality standards can result in significant improvement in cardiovascular health. Board member Hugh Friedman encouraged ARB staff to fund similar ultrafine studies in the future.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: None

02-9-2

**Public Hearing to Consider the Proposed
Airborne Toxic Control Measure to Limit School Bus Idling and
Idling at Schools**

SUMMARY OF AGENDA ITEM:

Staff presented the Proposed Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools to the Board as the first step in carrying out the Air Resources Board's diesel exhaust particulate matter (diesel PM) risk reduction plan.

The measure is designed to reduce exposure and associated adverse health effects due to diesel PM and other toxic air contaminants by eliminating unnecessary idling of school buses and of transit buses and other commercial heavy-duty vehicles at or near schools.

The measure requires drivers of school buses (and other buses and vehicles involved in school transport) not to idle at a school or within 100 feet of a school. Additionally, the measure requires such drivers to idle no more than five minutes each time they stop outside the flow of traffic. Drivers of transit buses and other commercial heavy-duty vehicles are required not to idle at a school and to idle no more than five minutes each time they stop within 100 feet of a school. The measure includes exemptions for idling necessary for safety or operational purposes. Motor carriers for the

affected buses and vehicles are required to ensure that drivers are trained, track complaints or enforcement actions, and keep records of these activities.

As a result of comments received, the staff presented several modifications to the original proposal released on October 25, 2002. The modifications clarified that:

- The measure does not apply to heavy-duty vehicles used solely as private passenger vehicles;
- The exemption for idling to operate equipment is to ensure safety or health, or as otherwise required by federal motor carrier safety regulations;
- California Highway Patrol officers are a subset of peace officers and that there are designees of peace officers who are authorized to enforce certain laws as peace officers; and
- Refuse pick-up is an additional example of an exemption for idling necessary to accomplish work for which a vehicle was designed.

ORAL TESTIMONY:

Paul Wuebben	South Coast Air Quality Management District
Richard Hibbs	Golden Gate Transit
Sean Edgar	California Refuse Removal Council
Gene Walker	California Transit Association
Adam Cuevas	California Highway Patrol
Diane Bailey	Natural Resources Defense Council

FORMAL BOARD ACTION:

The Board unanimously approved Resolution 02-9-2 adopting the Proposed Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools with staff's proposed modifications. In addition, the Board directed staff to report in 2004 on the implementation of, and compliance with, the measure.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes

02-9-3

Public Hearing to Consider Proposed Amendments to the California Phase 3 Reformulated Gasoline Regulations

SUMMARY OF AGENDA ITEM:

Staff presented an update of progress towards implementation of the California Phase 3 Reformulated Gasoline (CaRFG3) regulations, followed by proposed amendments to the CaRFG3 regulations.

Staff reported that five major refiners, representing about 55 percent of the state's gasoline production, have announced that they will eliminate the use of Methyl Tertiary Butyl Ether (MTBE) in California gasoline before the mandated deadline of December 31, 2003. The remaining refineries are expected to comply with the deadline. The infrastructure for the transport of ethanol and gasoline in the state has either been completed or is on track for the December 2003 deadline.

Staff also provided an update on projected fuel quality and driveability index of CaRFG3, and on efforts to evaluate permeation emissions.

Staff proposed amendments to the regulation that (1) revise the prohibitions of gasoline produced with the use of MTBE or other prohibited oxygenates; (2) revise the schedule for implementation of allowable residual MTBE levels in California gasoline; (3) establish allowable residual levels for total weight percent oxygen supplied by oxygenates other than MTBE and ethanol; and (4) add provisions for documentation of the presence or absence of ethanol in CaRFG delivered to retail outlets.

Also included in the staff's proposal were two amendments that will make minor changes to the CaRFG3 regulations. One amendment will sunset the requirement for documentation of the presence of MTBE in the gasoline delivered to retail outlets after December 30, 2003. The other amendment will replace the recently added provision regarding oxygenates in early opt-in CaRFG3 with a requirement that early opt-in CaRFG3 meet limits of 0.60 vol.% for MTBE and 0.10 wt.% oxygen collectively from the specified oxygenates other than MTBE or ethanol when it is supplied from the production or import facility.

In addition to the proposed amendments, staff also proposed the following modifications to the proposal:

- Specify that the American Society of Testing and Materials (ASTM) test method D 4815-99 is to be used in determining the

oxygen from the 11 prohibited oxygenates other than MTBE. This is the same test method that has previously been identified as the method for determining the MTBE and ethanol content of gasoline.

- Add language to the proposed new requirement for documentation of the presence or absence of ethanol in gasoline delivered to a retail outlet to make clear that if neither the outlet operator nor a responsible employee is at the outlet at the time of delivery, the documentation may be left at a reasonably secure location at the outlet.

The written testimony was generally supportive of the proposed amendments. Mr. Jay McKeeman of the California Independent Oil Marketers Association (CIOMA) requested that the staff amend the proposed new documentation requirement to allow for situations where retail outlets are unattended at the time of the gasoline delivery. As indicated above, staff proposed modifications to address this issue. CIOMA also testified that members are concerned about the potential for disruptions of gasoline supply to unbranded independent retailers during the transition from MTBE gasoline to gasoline containing ethanol. To address their concerns the ARB staff will continue to work with CIOMA and the California Energy Commission to identify and confirm the supply situation and the need for relief for the gasoline distributors.

The Board approved the proposed amendments to the CaRFG3 regulations with the modifications proposed by staff. The modifications presented by the ARB staff at the hearing will be made available for public review and comment for a 15-day period in a Notice of Public Availability of Modified text.

ORAL TESTIMONY:

Jay McKeeman California Independent Oil Marketers
Association

FORMAL BOARD ACTION:

The Board approved Resolution 02-34 by a unanimous vote.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes (148 pages)

02-9-4

Public Hearing to Consider the Incorporation of Federal Exhaust Emission Standards for 2008 and Later Model-Year Heavy-Duty Gasoline Engines and the Adoption of Amendments to the Low-Emission Vehicle II (LEV II) Regulations

SUMMARY OF AGENDA ITEM:

The staff recommended adoption of amendments to the California Code of Regulations (CCR), title 13, sections 1956.1, 1956.8, 1961, 1965 and 1978, and to the emission standards and test procedures incorporated by reference in those sections. The proposed amendments to California's exhaust emission standards for heavy-duty Otto-cycle (gasoline) engines align these standards with the recently adopted more stringent federal standards for the 2008 and subsequent model years and allow participation in the federal averaging, banking, and trading program. The proposed amendments also change the Low-Emission Vehicle II (LEV II) regulations. These amendments include a requirement that fuel-fired heaters used in conventional vehicles meet the same requirements as those used on zero-emission vehicle applications, alignment of the first allowable maintenance schedule for passenger cars and light-duty trucks with the 120,000-mile "full useful life" requirements of the LEV II program, and a number of non-substantive modifications that update the LEV II regulations for light- and medium-duty vehicles and heavy-duty Otto-cycle and heavy-duty diesel requirements.

Fifteen-day changes proposed by staff at the Board hearing included additional regulatory language to specify that fuel-fired heaters used in conventional vehicles not be allowed to operate above 40°F and to raise the high-mileage testing point for vehicles certifying to the optional 150,000-mile emission standards to 112,500 miles.

ORAL TESTIMONY: None.

FORMAL BOARD ACTION:

Approved Resolution 02-31 by a 10-0 vote.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: Yes

02-9-5

Public Meeting to Consider Research Proposals

SUMMARY OF AGENDA ITEM:

Staff of the Research Division provided the Board with recommendations for the funding of the second phase of the Fresno Asthmatic Children's Environment Study (FACES). FACES was originally designed as a 66-month project. In 1999, the Board funded the first phase of the project, with funding for the second phase contingent on satisfactory progress during the first phase. The FACES project has made good progress over the first two years of the project and the investigators have provided ARB with an interim report that states their progress to this point. The Research Screening Committee reviewed and recommended this proposal for funding in early October. An update on the progress of FACES was presented at the October Board meeting. At that time, the Board requested that the FACES External Advisory Panel (EAP) be convened to discuss issues related to the decrease in sample size and the implications this would have on the success of the study.

At a November teleconference, the EAP, a panel of leading health and exposure scientists, determined that despite the problems with recruitment and the smaller number of children being followed, the longitudinal component of the study is still feasible and the investigators should have adequate power to detect long-term health-outcomes. The EAP unanimously recommended full funding for Phase II of the proposal and provided ARB with a written statement of their conclusions.

Based on the comments received during the peer review process staff recommended funding of Phase II of the proposal for \$2,396,389. In addition, staff recommended that the following conditions be met:

1. Annual meetings will be held of the Faces External Advisory Panel, with the next meeting anticipated in September of 2003.
2. A workshop will be held by the Summer of 2003 between the coordinators of the Supersites in both Los Angeles and Fresno to exchange information.
3. Quarterly meetings will be held between the Fresno Supersite, ARB, and the FACES aerometric data managers to facilitate coordination and usage of aerometric data. The first meeting was held December 10, 2002.
4. University of California Berkeley will continue to enroll children to accommodate additional enrollment from Kaiser facilitated by Board Member Matthew McKinnon.
5. The FACES investigators are strongly encouraged to apply for National Institute of Health funding.

6. Finally, staff will report back to the Board in February 2004 on the progress of the study including the subject retention and compliance rates.

ORAL TESTIMONY: None

FORMAL BOARD ACTION:

The Research Resolution (02-32) was unanimously passed by the Board.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: None

02-9-6 Public Hearing to Consider the Enhanced Vapor Recovery Technology Review and Proposed Amendment of Vapor Recovery System Certification and Test Procedures for Gasoline Marketing Operations at Service Stations

SUMMARY OF AGENDA ITEM:

Staff presented the Enhanced Vapor Recovery Technology Review and recommended adoption of amendments to the vapor recovery certification and test procedures. Modifications to the vapor recovery certification procedure and ten revised and five new vapor recovery test procedures were approved to improve system certification and provide better tools for contractors and district inspectors.

In March of 2000, the Board approved the Enhanced Vapor Recovery (EVR) regulations. The regulations establish new standards for vapor recovery systems to reduce emissions during storage and transfer of gasoline at gasoline dispensing facilities (service stations). Because several of the EVR standards were viewed to be technology-forcing, the Board directed staff to conduct a technology review for standards with future effective dates. Four workshops were held to solicit input and discuss findings of the technology review. The amendments to the vapor recovery regulations are based on the findings of the EVR Technology Review report and other information developed during implementation of the EVR program.

All but one of the EVR standards is considered technologically feasible or is likely to be technologically feasible. The "dripless nozzle" standard that allows only one drop per refueling cannot yet be achieved based on information from nozzle manufacturers. The number of allowable drops has been increased to an average of

three drops per refueling, which has been demonstrated to be achievable in nozzle field tests.

The EVR cost analysis was updated as part of the technology review. Several input costs in the economic analysis increased based on more recent information, including equipment cost data from equipment manufacturers and installation costs from end users of vapor recovery equipment. Also, corrections were made to the original calculations for cost-effectiveness. The EVR program continues to remain cost-effective. The overall cost-effectiveness changed from \$1.80/lb to \$5.24/lb.

Because EVR is aimed at reducing ozone precursor emissions, an exemption from some of the EVR requirements was approved for existing facilities in districts that are in attainment with the state ozone standard. Modifications to some systems will still be needed to prevent excess emissions due to fueling vehicles equipped with on-board refueling vapor recovery in order to minimize benzene exposure.

Changes to the EVR implementation schedule to allow more time to certify EVR Phase II and in-station diagnostics system were also approved. Staff was directed to conduct two follow-up actions on EVR implementation. At the request of the Western States Petroleum Association, staff will assess the adequacy of lead time after an EVR Phase II system is certified to minimize the necessity for existing stations to upgrade twice to meet the ORVR compatibility standard in 2005 and the remaining Phase II standards by 2007. For the second action, ARB staff will reassess, 18 months after certification of the first in-station diagnostics (ISD) system, the capital cost impacts of ISD on lower-throughput service stations, to determine if the ISD exemption level should be modified.

ORAL TESTIMONY:

Doug Quetin, President	California Air Pollution Control Officers Association
Barry Wallerstein	South Coast Air Quality Management District
Barbara Lee	Northern Sonoma County Air Pollution Control District
Sandra Duval	California Independent Oil Marketers Association
Steven Arita	Western States Petroleum Association
Prentiss Searles	American Petroleum Institute

FORMAL BOARD ACTION:

The Board voted unanimously to approve the proposed amendments to the vapor recovery and test procedures, subject to a 15-day comment period.

RESPONSIBLE DIVISION: Monitoring and Laboratory Division

STAFF REPORT: Yes

02-9-7

Public Hearing to Consider Amendments to Administrative Hearing Procedures in Sections 60065 and 60075 of Title 17 of the California Code of Regulations

SUMMARY OF AGENDA ITEM:

Staff recommended approval of modifications to ARB's existing Administrative Hearing Procedures in order to comply with the relevant provisions of Senate Bill 527 (SB 527). SB 527 allows ARB to pursue penalties of less significant violations through an administrative hearing process as an alternative to pursuing civil penalties through the court system.

SB 527 enacted sections 42410 and 43023 of the Health and Safety Code (HSC) which provide ARB an alternate means to enforce specific provisions of the HSC and ARB rules and regulations. The intent of the legislation is to allow ARB the flexibility to pursue administrative penalties and adjudication for those violations that are less severe and complex and that involve smaller penalty amounts.

SB 527 limits the amount that the ARB may assess as an administrative penalty to \$10,000 per violation per day, with a maximum assessment not to exceed \$100,000. Also, in any case, the administrative penalties for a violation may not exceed the judicial civil penalty that could be assessed under the HSC for that violation.

Staff has broadened the existing administrative penalty assessment and hearing process to allow for the issuance of administrative citations and complaints for all violations covered by SB 527.

Historically, most enforcement actions brought by the ARB have been resolved through mutual settlement negotiations where a source is brought into compliance as quickly as possible and pays a monetary settlement in lieu of court ordered civil penalties. In rare cases where ARB is unable to reach an acceptable settlement

with a violator, the case is pursued through the courts via the Attorney General's Office of a local district or city attorney. The judicial process, while necessary, is costly, burdensome and very time intensive.

In 1990, the Legislature authorized the ARB to adopt an administrative hearing process to adjudicate violations of the Heavy-Duty Vehicle Inspection Program and assessment of administrative civil penalties (SB 1874, HSC section 44011.6). That authority was expanded in 1995, with the enactment of SB 163, whereunder the ARB was provided the authority to establish, among other things, administrative procedures to assess and adjudicate civil penalties for violations of ARB fuel-related regulations (HSC 43023 and 43028). Prior to the enactment of SB 527, all other provisions of the HSC within the ARB's purview could only be enforced judicially.

In initially adopting administrative hearing procedures, the ARB established a three-tiered enforcement process. The most serious and complex cases would continue to be referred to judicial courts for enforcement if mutual settlement is unsuccessful. For other violations, administrative penalties could be pursued. The administrative process provides that complaints may be issued for the more serious and complex of these remaining violations and citations issued for the least serious, clear-cut violations. Mutual settlement will still be pursued and, if unsuccessful, these cases will be adjudicated through the Office of Administrative Hearings as required by SB 527.

The existing administrative penalty provisions that provide for the issuance of citations and fuel-related complaints remains unchanged. Because of the different maximum penalties that may be assessed for fuel-related violations and those violations covered under SB 527, the amendments separately set forth the ARB's authority to assess penalties for violations covered by SB 527.

In response to other directives of SB 527, the staff made the following modifications to our existing Administrative Hearing Procedures:

Modifications to clarify that an administrative civil penalty would be issued as an alternative to a judicial civil penalty and not be cumulative;

Make clear that ARB's administrative penalty authority only extends to those categories of violations for which it maintains authority to impose judicial civil penalties;

Clarify that an administrative law judge appointed by the Department of General Services, State Office of Administrative Hearings would conduct all hearings authorized by SB 527;

Amend both hearing procedure regulations to add civil penalty limits in accordance with SB 527;

Amend the existing criteria used for assessing penalties for fuels violations to also apply to assessments for violations covered under HSC section 43023 as directed by statute; and

Add a new provision establishing penalty assessment criteria for violations covered under HSC section 42410. The new criteria that SB 527 specifies ARB to use to assess penalties for stationary sources includes all relevant circumstances, including but not limited to, the factors of HSC section 42403.

Staff also modified the existing procedures to include the penalties or range of penalties set forth in the underlying rule or regulation as an additional criterion for assessment.

ARB has found that administrative assessment and adjudication for less complex and serious violations affords a more efficient and expeditious process for all parties, and allows the ARB to better utilize its enforcement resources. It follows that improved enforcement will result in greater compliance with air quality laws. These hearings assure due process and a full and fair hearing to all parties.

A report to the Legislature and the Governor is due on January 1, 2005 summarizing the administrative penalties imposed by the ARB under this new program.

ORAL TESTIMONY: None

FORMAL BOARD ACTION:

The Board voted unanimously to approve the amendments.

RESPONSIBLE DIVISION: Enforcement Division

STAFF REPORT: Yes