

State of California
AIR RESOURCES BOARD

Resolution 82-64

December 2, 1982

Agenda Item No.: 82-24-3

WHEREAS, the Board is authorized, pursuant to the authority set forth in Health and Safety Code Sections 39600, 39601, 43013, and 43101, to adopt regulations governing the composition of motor vehicle fuels as they affect motor vehicle emissions; and such regulations are necessary in order to implement, interpret, or make specific Health and Safety Code Sections 39000, 39001, 39002, 39006, 43000, 43013, and 43101, and Western Oil and Gas Ass'n v. Orange County APCD, 14 Cal.3d 411 (1975);

WHEREAS, the Air Resources Board (the "Board") adopted in 1970 and affirmed in 1976 a state ambient air quality standard for lead of 1.5 ug/m³, computed on a 30-day average;

WHEREAS, in 1976 the Board adopted Section 2253 of Title 13, California Administrative Code, limiting the maximum average lead content of all gasoline (leaded and unleaded) produced in a calendar quarter by a refiner for sale in California;

WHEREAS, on July 22, 1982, the Board directed staff to evaluate whether the current state ambient standard for lead adequately protects the public health;

WHEREAS, on July 22, 1982, the Board appointed a committee of two of its members, L. S. Caretto and Gary Patton, to conduct a public hearing to consider proposed changes to the Board's regulation of the lead content of gasoline;

WHEREAS, on November 10 and 11, 1982, the committee of the Board conducted a duly-noticed public hearing regarding amendments proposed by staff and has heard and considered the comments of the Board staff and the public;

WHEREAS, the committee of the Board presented its recommendations to the full Board at a public hearing on December 1, 1982;

WHEREAS, the Board has received and reviewed the substantial body of comments and testimony from its staff, representatives of affected industry and environmental groups, and other interested persons;

WHEREAS, on October 27, 1982, the United States Environmental Protection Agency (EPA) issued amendments to its regulations governing the lead content of gasoline, establishing a maximum average lead content standard for all leaded gasoline produced by a refiner or sold by an importer in a calendar quarter;

WHEREAS, the California Environmental Quality Act and Board regulations require that action not be taken as proposed if feasible mitigation measures or alternatives exist which would substantially reduce any significant adverse environmental effects of the proposed action; and

WHEREAS, the Board finds with respect to issues raised in hearings on the regulations:

A. Health Issues

Studies completed since the state's ambient air quality standard for lead was adopted and affirmed have correlated adverse health effects of lead, including deficits in intelligence and abnormal brain-wave patterns, with lower blood lead levels than were believed to be the case when the standard was adopted and affirmed and appear to indicate that there is no threshold level below which these effects are not found;

The effects of lead are most damaging to children because they absorb more lead and retain more lead in the bloodstream than do adults;

Recent studies establish a correlation between a decrease in gasoline lead usage and a decrease in body lead levels;

It is necessary to reduce the concentration of lead permitted in motor vehicle gasoline as rapidly as feasible by an amount sufficient to assure that the state ambient standard is attained and maintained in all areas of the state and to assure that the public health is adequately protected from adverse effects of exposure to lead;

B. Need for Further Reduction

Although ambient lead concentrations have decreased significantly since the Board's gasoline lead content regulation was adopted, the state ambient standard for lead continues to be exceeded;

Further reduction in the amount of lead emissions is needed to achieve and maintain the air quality standard in all areas of the state;

Approximately 90 percent of all airborne lead in California comes from the combustion of motor vehicle gasoline which contains lead;

The anticipated decline in lead use under the existing regulation is not likely to result in attainment of the state ambient standard for lead until sometime after 1990;

Based on the 30-day average concentration of 3.44 ug/m^3 recorded at Lennox in December 1980, a 56 percent reduction from the volume of lead used in the fourth quarter of 1980 in the production of gasoline is necessary to achieve the state ambient standard for lead;

C. Misfueling Issues

Misfueling of motor vehicles is currently a small problem but one which could become significant even at present levels as more stringent standards for hydrocarbons and carbon monoxide come into effect;

A limitation of the lead and phosphorus content of unleaded gasoline by the Board is necessary and appropriate to help assure that vehicle exhaust emissions do not increase because of catalyst poisoning;

The prohibition of adding non-gasoline products containing lead to gasoline after the gasoline is sold at retail, and selling products advertised for such use, is necessary and appropriate to help assure that the state ambient standard for lead is achieved and maintained, and that vehicle exhaust emissions do not increase because of catalyst poisoning;

A total ban on lead in gasoline would provide maximum protection to the public health and would eliminate vehicle misfueling, but such a ban is currently not feasible because of economic considerations and the need of numerous vehicles for leaded fuel;

D. Form of Regulation

A single gasoline lead content standard applicable to all producers of gasoline is equitable because it is less likely to provide an unfair economic advantage to any class of producers;

If a single gasoline lead content standard is applied to all producers of gasoline, then a standard that applies to the leaded gasoline pool only is the least costly, particularly to small producers;

Data in the record do not demonstrate that the incidence of misfueling is dependent upon the choice of either a leaded pool average or a total pool average lead content standard;

A leaded pool gasoline lead content standard is parallel to the current EPA regulations and is favored by the majority of the regulated community;

E. Specific Regulatory Provisions

The regulations set forth in Attachment A will likely result by 1985 in the 56 percent reduction in lead emissions from the fourth quarter 1980 level necessary to assure expeditious attainment of the state ambient standard for lead and will provide protection to the public from the severe adverse health effects of lead in 1985 and thereafter;

A gasoline lead content regulation applying standards in the summer months or in various regions of the state less stringent than those contained in Attachment A would not adequately protect public health;

The variance procedures and the modified effective date for the lead content standards for leaded gasoline set forth in Attachment A adequately accommodate the special economic needs of small producers;

F. Enforcement Issues

The provisions of Section 2253.2(c) set forth in Attachment A are necessary and appropriate to enhance enforcement of the gasoline lead content standards by permitting detection of potential violators by sampling of gasoline sold or to be sold;

Specific procedures regarding Section 2253.2(c) should be developed with regard to circumstances of individual refiners;

The provisions of Section 2253.2(e) set forth in Attachment A are necessary and appropriate to assure that statutory remedies are applicable to the gasoline lead content standards in a manner which will adequately deter violation of the standards;

The reporting provisions contained in Attachment A are necessary and appropriate to enhance identification of persons violating the gasoline lead content standards and to permit accurate monitoring of gasoline and lead usage trends;

G. Benefits and Costs

The regulatory action set forth in Attachment A will achieve a reduction in lead emissions from the 1980 baseline levels of over 3200 tons per year statewide and of over 1200 tons per year in the South Coast Air Basin in 1985;

The regulatory action set forth in Attachment A will have an annual cost of about 70 million dollars to the oil industry in California in 1985, and will result in an industry-wide average cost of approximately 0.7 cents per gallon of gasoline produced or imported for consumption in California;

The regulatory action is necessary and technologically and economically feasible to fulfill the purposes of Division 26 of the Health and Safety Code;

The economic costs associated with the regulatory action set forth in Attachment A are fully justified by the substantial health benefits which will result from the regulations; and

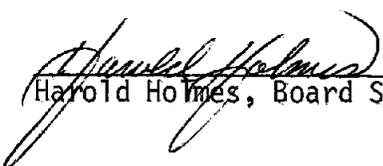
No significant adverse environmental impacts are likely to result from the adoption and implementation of the proposed regulations.

NOW, THEREFORE, BE IT RESOLVED that the Board approves the amendment to Title 13, California Administrative Code, Chapter 3, Subchapter 5, Section 2253 and adoption of Section 2253.2, as set forth in Attachment A, and directs the Executive Officer to adopt the proposed regulations, with such technical changes as he may deem necessary, after assuring that the regulations have been available to the public for at least 15 days.

BE IT FURTHER RESOLVED that the Board recognizes the need for eliminating lead from gasoline. The Board directs the Executive Officer to now begin development of a regulation which eliminates lead from gasoline as expeditiously as feasible.

BE IT FURTHER RESOLVED that the staff is directed to consult with gasoline producers to develop the most appropriate procedures for compliance with Section 2253.2(c).

I hereby certify that the above
is a true and correct copy of
Resolution 82-64, as adopted
by the Air Resources Board.


Harold Holmes, Board Secretary

Attachment A

State of California
AIR RESOURCES BOARD

PROPOSED AMENDMENTS TO TITLE 13,
CALIFORNIA ADMINISTRATIVE CODE

Lead in Gasoline

November 24, 1982

The attached document contains modifications to the originally noticed staff proposal. Section 2253 includes, in double underline and strike-out form, changes from the original proposal noticed on September 17, 1982. Section 2253.2 includes, in underline and strike-out form, changes from the original proposal.

PROPOSED AMENDMENTS TO TITLE 13,
CALIFORNIA ADMINISTRATIVE CODE

Amend Section 2253 of Title 13, California Administrative Code, by amending the title and adding subdivision (j) to read as follows:

2253. Average Lead Content of Gasoline Manufactured Before April July 1, 1983.

...

(j) This section shall not apply to gasoline manufactured after the first second three-month period (January-March April-June) of 1983.

Add Section 2253.2 of Title 13, California Administrative Code, to read as follows:

2253.2. Lead in Gasoline. (a) For the purpose of this section, the following definitions shall apply:

(21) "Calendar quarter" means each of the following three-month periods: January-March, April-June, July-September, and October-December.

(32) "California gasoline" means gasoline sold or intended for sale as a motor vehicle fuel in California.

(43) "California gasoline production facility" means a facility in California at which gasoline is produced, including a facility at which any combination of gasoline, blending stock, and/or lead additives are blended to produce gasoline. "California gasoline production facility" does not include a facility whose sole operation is to transfer gasoline or to blend non-lead additives, including alcohol, into purchased gasoline.

(54) "Gasoline" means any fuel which is commonly or commercially known or sold as gasoline, or which is a mixture of any fuel, commonly or commercially known or sold as gasoline, and alcohol.

(15) "Gasoline Blending stock" means any liquid compound which is blended, with other liquid compounds or with lead additives, to produce gasoline.

(6) "Importer" means any person who first accepts delivery in California of California gasoline or gasoline blending stocks imported from a foreign country or another state.

(7) "Lead additive" means any substance containing lead or lead compounds.

(8) "Leaded gasoline" means gasoline which is produced with the use of any lead additive or which contains more than 0.05 gram of lead per gallon, or more than 0.005 gram of phosphorus per gallon.

(9) "Leaded high octane gasoline" means leaded gasoline having and represented as having an Antiknock Index of at least ninety-two. The Antiknock Index is the sum of the research octane number, as determined by American Society for Testing and Materials (ASTM) Test Method D2699-81, plus the motor octane number, as determined by ASTM Test Method D2700-81, divided by two.

(10) "Produce" means to manufacture gasoline at a California gasoline production facility.

(11) "Producer" means any person who owns, leases, operates, controls, or supervises a California gasoline production facility.

(12) "Unleaded gasoline" means gasoline to which lead has not been purposefully added and which contains not more than 0.05 gram of lead per gallon, and not more than 0.005 gram of phosphorus per gallon.

(13) "Wholesale purchaser-consumer" means an organization that is an ultimate consumer of gasoline and which purchases or obtains gasoline from a non-retail supplier for use in motor vehicles.

(45) "Gasoline Blending stock" means any liquid compound which is blended, with other liquid compounds or with lead additives, to produce gasoline.

(6) "Importer" means any person who first accepts delivery in California of California gasoline or gasoline blending stocks imported from a foreign country or another state.

(7) "Lead additive" means any substance containing lead or lead compounds.

(8) "Leaded gasoline" means gasoline which is produced with the use of any lead additive or which contains more than 0.05 gram of lead per gallon, or more than 0.005 gram of phosphorus per gallon.

(9) "Leaded high octane gasoline" means leaded gasoline having and represented as having an Antiknock Index of at least ninety-two. The Antiknock Index is the sum of the research octane number, as determined by American Society for Testing and Materials (ASTM) Test Method D2699-81, plus the motor octane number, as determined by ASTM Test Method D2700-81, divided by two.

(10) "Produce" means to manufacture gasoline at a California gasoline production facility.

(11) "Producer" means any person who owns, leases, operates, controls, or supervises a California gasoline production facility.

(12) "Unleaded gasoline" means gasoline to which lead has not been purposefully added and which contains not more than 0.05 gram of lead per gallon, and not more than 0.005 gram of phosphorus per gallon.

(13) "Wholesale purchaser-consumer" means an organization that is an ultimate consumer of gasoline and which purchases or obtains gasoline from a non-retail supplier for use in motor vehicles.

(b) No person shall sell, offer for sale, or deliver for sale any California gasoline represented as unleaded unless such gasoline meets the definition of unleaded gasoline set forth in paragraph (a)(12).

(c) No person shall sell, offer for sale, or deliver for sale any California leaded gasoline which exceeds the lead content per gallon specified below:

<u>Effective Date of Limitation</u>	<u>Maximum Lead Content (grams per gallon)</u>	
	<u>Leaded Gasoline Other than Leaded High Octane Gasoline</u>	<u>Leaded High Octane Gasoline</u>
April <u>July 1, 1983 through September 30, 1984</u>	1.6 <u>1.1</u>	2.1 <u>1.4</u>
<u>After September 30, 1984</u>	1.2 <u>0.8</u>	1.6 <u>1.0</u>

However, a person may sell, offer for sale, or deliver for sale California leaded gasoline which exceeds the lead content specified above if the following conditions are satisfied, and the lead content of the gasoline does not exceed the lead content reported pursuant to the following conditions:

(1) A producer or importer shall notify the executive officer or his or her designee of the estimated or actual volume (in gallons) of the gasoline, the estimated or actual lead content (in grams per gallon) of the gasoline, and whether the gasoline to be sold is leaded high octane gasoline or leaded gasoline other than leaded high octane gasoline. This notification shall be received at least 24 hours prior to the start of physical transfer of the gasoline from the California gasoline production facility. If actual values are later determined to be different from the estimated values reported,

follow-up notification of the actual values shall occur within 24 hours after the start of physical transfer of the gasoline from the California gasoline production facility.

(2) Within 90 days of the notification pursuant to paragraph (1) above, the producer or importer shall sell California leaded gasoline in sufficient quantity and at a lead content below the applicable maximum lead content limit set forth in the table in paragraph (c) to offset the total grams of lead reported in excess of the maximum limit. The producer or importer shall notify the executive officer or his or her designee of the estimated or actual volume (in gallons) of the gasoline, the estimated or actual lead content (in grams per gallon) of the gasoline, and whether the gasoline to be sold is leaded high octane gasoline or leaded gasoline other than leaded high octane gasoline. This notification shall be received at least 48 hours prior to the start of physical transfer of the gasoline from the California gasoline production facility. If actual values are later determined to be different from the estimated values reported, follow-up notification of the actual values shall occur within 24 hours after the start of physical transfer of the gasoline from the California gasoline production facility.

(d) No producer shall sell, offer for sale, or deliver for sale California leaded gasoline which the producer has produced during any calendar quarter and which exceeds the average lead content, for that calendar quarter, specified in the table below. No importer shall ~~first~~ sell, offer for sale, or deliver for sale, California leaded gasoline which has been imported into California, which the importer first sells or transfers during a calendar quarter, and which exceeds ~~during-any-calendar-quarter~~ the average lead content, for that calendar quarter, specified in the table below.

follow-up notification of the actual values shall occur within 24 hours after the start of physical transfer of the gasoline from the California gasoline production facility.

(2) Within 90 days of the notification pursuant to paragraph (1) above, the producer or importer shall sell California leaded gasoline in sufficient quantity and at a lead content below the applicable maximum lead content limit set forth in the table in paragraph (c) to offset the total grams of lead reported in excess of the maximum limit. The producer or importer shall notify the executive officer or his or her designee of the estimated or actual volume (in gallons) of the gasoline, the estimated or actual lead content (in grams per gallon) of the gasoline, and whether the gasoline to be sold is leaded high octane gasoline or leaded gasoline other than leaded high octane gasoline. This notification shall be received at least 48 hours prior to the start of physical transfer of the gasoline from the California gasoline production facility. If actual values are later determined to be different from the estimated values reported, follow-up notification of the actual values shall occur within 24 hours after the start of physical transfer of the gasoline from the California gasoline production facility.

(d) No producer shall sell, offer for sale, or deliver for sale California leaded gasoline which the producer has produced during any calendar quarter and which exceeds the average lead content, for ~~that~~ that calendar quarter, specified in the table below. No importer shall ~~first~~ sell, offer for sale, or deliver for sale, California leaded gasoline which has been imported into California, which the importer first sells or transfers during a calendar quarter, and which exceeds ~~during-any-calendar-quarter~~ the average lead content, for that calendar quarter, specified in the table below.

<u>Effective Date of Limitation</u>	<u>Maximum Lead Content (grams per gallon)</u>
April <u>July 1, 1983 through September 30, 1984</u>	1.1
After September 30, 1984	0.8

(e) (1) For the purposes of paragraphs (c) and (d), each sale at retail for use in a motor vehicle, and each delivery to an individual motor vehicle by a wholesale purchaser-consumer, shall be deemed a sale by the producer or importer required under paragraph (h) to include the gasoline in its average lead content computation for a calendar quarter.

(2) Where the California leaded gasoline produced by a producer during a calendar quarter, or the imported California leaded gasoline first sold or transferred by an importer during a calendar quarter, exceeds the maximum average lead content specified in paragraph (d), each sale, offer for sale or delivery for sale of such California leaded gasoline shall be a violation of paragraph (d) regardless of the lead content of the gasoline involved in any individual sale, offer or delivery.

(ef) No person shall add a product, other than gasoline, containing lead additive to California gasoline after the gasoline has been sold at retail or purchased by a wholesale purchaser-consumer.

(fg) No person shall sell or offer for sale a product containing lead additive which is advertised for use as an additive to California gasoline at or after the time the gasoline is sold at retail or purchased by a wholesale purchaser-consumer.

(gh) The average lead content of California leaded gasoline attributable to a producer and/or importer in a calendar quarter under paragraph (d) shall be determined by the methods set forth below. For persons who are both

producers and importers, all of the California leaded gasoline attributable under paragraph (d) to such person in a calendar quarter as a producer and an importer shall be combined and the average lead content shall be computed as the weighted (by volume) average lead content ~~(by volume)~~ of all such gasoline.

(1) The producer or importer who first produces or imports a volume of California leaded gasoline meeting the definition set forth in paragraph (a)(54) shall include the volume of California leaded gasoline and lead contained in such gasoline in its computation of average lead content, unless that producer or importer agrees in writing with another producer who subsequently processes the gasoline that the subsequent producer will count the volume attributable to the gasoline and lead contained in the gasoline as part of the subsequent producer's computation of average lead content, and the lead contained in the gasoline is included in the average lead content ~~report~~ computation of such subsequent producer, as reflected in a report filed pursuant to paragraph (i).

(2) The average lead content of all California leaded gasoline produced in a calendar quarter shall be determined by dividing the total grams of lead used by a producer in the production of California leaded gasoline by the total gallons of California leaded gasoline produced.

(A) The total grams of lead used by a producer includes [i] the lead in lead additives used by the producer in the production of California leaded gasoline, and [ii] the lead in gasoline blending stocks received by the producer from another person and used by the producer in the production of California leaded gasoline, and [iii] the lead in unless-such gasoline received from another person and further processed by the producer, unless such gasoline blending-stock-constitutes-gasoline-as-defined-in-paragraph-(a)(5)-and

producers and importers, all of the California leaded gasoline attributable under paragraph (d) to such person in a calendar quarter as a producer and an importer shall be combined and the average lead content shall be computed as the weighted (by volume) average lead content ~~(by volume)~~ of all such gasoline.

(1) The producer or importer who first produces or imports a volume of California leaded gasoline meeting the definition set forth in paragraph (a)(~~54~~) shall include the volume of California leaded gasoline and lead contained in such gasoline in its computation of average lead content, unless that producer or importer agrees in writing with another producer who subsequently processes the gasoline that the subsequent producer will count the volume attributable to the gasoline and lead contained in the gasoline as part of the subsequent producer's computation of average lead content, and the lead contained in the gasoline is included in the average lead content ~~report~~ computation of such subsequent producer, as reflected in a report filed pursuant to paragraph (i).

(2) The average lead content of all California leaded gasoline produced in a calendar quarter shall be determined by dividing the total grams of lead used by a producer in the production of California leaded gasoline by the total gallons of California leaded gasoline produced.

(A) The total grams of lead used by a producer includes [i] the lead in lead additives used by the producer in the production of California leaded gasoline, and [ii] the lead in gasoline blending stocks received by the producer from another person and used by the producer in the production of California leaded gasoline, and [iii] the lead in unless-such gasoline received from another person and further processed by the producer, unless such gasoline blending-stock-constitutes-gasoline-as-defined-in-paragraph-(a)(5)-and

is included in the average lead content ~~report~~ computation of another producer or of an importer, as reflected in a report filed pursuant to paragraph (i). The lead in gasoline and gasoline blending stocks received by a producer from another person shall be determined by performance by the producer of ~~the~~ an applicable test method set forth in paragraph (m) Appendix-B-of-40-Code-of Federal-Regulations-Part-80,-as-it-existed-on-July-1,-1982, upon a representative sample of each shipment of gasoline or gasoline blending stocks which the producer knows or reasonably should know contains lead, and multiplying the lead content of each shipment by the total gallons of the shipment.

(B) The total gallons of California leaded gasoline produced shall not include the volume of any California leaded gasoline, as defined in paragraphs (a)(4) and (a)(8), ~~attributable-to-gasoline-blending-stock~~ received by a producer from another person, unless such ~~gasoline-blending-stock~~ ~~constitutes-gasoline-as-defined-in-paragraph-(a)(5),~~ and volume has not been and will not be included in the average lead content ~~report~~ computation of another producer or of an importer, as reflected in a report filed pursuant to paragraph (i). In any instance in which production of a volume of gasoline is reported by more than one producer and importer, the volume shall be deemed excluded from the production of the subsequent producer in determining compliance with paragraph (d).

(3) The average lead content of California leaded gasoline first sold, or transferred ~~offered-for-sale,-or-delivered-for-sale~~ during a calendar quarter, which has been imported into California, shall be determined by calculating:

(A) the lead content of each shipment of imported California leaded gasoline any portion of which is first sold, or transferred offered-for-sale or delivered-for-sale by the importer during the calendar quarter, determined by performance by the importer of the an applicable test method set forth in paragraph (m) Appendix-B-of-40,-Code-of-Federal-Regulations-Part-80,-as-it existed-on-July-1,-1982, upon a representative sample of gasoline in the shipment;

(B) the total gallons of California leaded gasoline in each such shipment;

(C) for each such shipment, the total gallons of California leaded gasoline which are first sold or transferred during the calendar quarter;

(BD) the total grams of lead contained in the volume of California leaded gasoline identified in paragraph (h)(3)(C), each such shipment, computed by multiplying the lead content of the shipment, as determined pursuant to paragraph (gh)(3)(A), by the total gallons of leaded gasoline identified in paragraph (h)(3)(C); in-the-shipment-which-is-first-sold,-offered-for-sale-or delivered-for-sale-during-the-calendar-quarter;

(GE) the total grams of lead contained in the volume of all such shipments first sold, or transferred offered-for-sale-or-delivered-for-sale during the calendar quarter;

(DF) the total gallons of leaded gasoline in all such shipments first sold, or transferred offered-for-sale-or-delivered-for-sale by the importer during the calendar quarter; and

(EG) the average lead content of all imported leaded gasoline first sold, or transferred offered-for-sale-or-delivered-for-sale by the importer during the calendar quarter, determined by dividing the total in paragraph (gh)(3)(GE) by the total in paragraph (gh)(3)(DF).

(A) the lead content of each shipment of imported California leaded gasoline any portion of which is first sold, or transferred offered-for-sale or-delivered-for-sale by the importer during the calendar quarter, determined by performance by the importer of the an applicable test method set forth in paragraph (m) Appendix-B-of-40, Code-of-Federal-Regulations-Part-80, -as-it existed-on-July-1, -1982, upon a representative sample of gasoline in the shipment;

(B) the total gallons of California leaded gasoline in each such shipment;

(C) for each such shipment, the total gallons of California leaded gasoline which are first sold or transferred during the calendar quarter;

(BD) the total grams of lead contained in the volume of California leaded gasoline identified in paragraph (h)(3)(C), each-such-shipment, computed by multiplying the lead content of the shipment, as determined pursuant to paragraph (gh)(3)(A), by the total gallons of leaded gasoline identified in paragraph (h)(3)(C); in-the-shipment-which-is-first-sold, -offered-for-sale-or-delivered-for-sale-during-the-calendar-quarter;

(BE) the total grams of lead contained in the volume of all such shipments first sold, or transferred offered-for-sale-or-delivered-for-sale during the calendar quarter;

(BF) the total gallons of leaded gasoline in all such shipments first sold, or transferred offered-for-sale-or-delivered-for-sale by the importer during the calendar quarter; and

(EG) the average lead content of all imported leaded gasoline first sold, or transferred offered-for-sale-or-delivered-for-sale by the importer during the calendar quarter, determined by dividing the total in paragraph (gh)(3)(BE) by the total in paragraph (gh)(3)(BF).

(hi) For each calendar quarter commencing with the quarter from ~~April~~ July 1, 1983 through ~~June~~ September 30, 1983, each producer who has produced leaded gasoline, and each importer who has first sold, or transferred ~~offered for-sale-or-delivered-for-sale~~ leaded gasoline or gasoline blending stocks which has been imported into California, shall, within ~~45~~ 30 days after the close of the reporting period, submit to the executive officer a report on forms supplied by the executive officer upon request. The report shall be executed in California under penalty of perjury, and shall contain the following information:

(1) For each California gasoline production facility, and for the total of all California gasoline production facilities of a producer:

(A) the total grams of lead in lead additive inventory on the first day of the calendar quarter;

(B) the total grams of lead in lead additives received during the calendar quarter, the name and address of each person from whom the lead additive was received, and the total grams of lead received from each person;

(C) the total grams of lead shipped from the lead additive inventory to other persons during the calendar quarter, the name and address of each person to whom the lead additive was shipped and the total grams of lead shipped to each person;

(D) the total grams of lead in lead additive inventory on the last day of the calendar quarter;

(E) for each shipment of gasoline and gasoline blending stocks, received by the producer from another person, any portion of which is used by the producer in the production of leaded gasoline during the calendar quarter, which contains lead that must be included in the determination of average lead

content of the producer's leaded gasoline under paragraph (g)(2)(A)[ii] or [iii], and which the producer knows or reasonably should know contains lead:

[i] the lead content of each shipment, as determined by performance of an applicable test method set forth in paragraph (m) on a representative sample of gasoline or gasoline blending stocks in the shipment; the method set forth in paragraph (g)(2)(A);

[ii] the total gallons received in each shipment;

[iii] the total gallons of from each shipment used by the producer in the production of leaded gasoline during the calendar quarter;

[iv] the total grams of lead contained in the volume identified pursuant to paragraph (i)(1)(E)[iii];

[iiiv] the total grams of lead in the volume of all such shipments used by the producer in the production of leaded gasoline during the calendar quarter;

[ivvi] the name and address of the person from whom such shipment was received; and

[vii] documentation clearly showing that the volume and lead content of the any gasoline blending stock has not been and will not be included in another producer's or an importer's average lead content report computation, as reflected in a report filed pursuant to this paragraph (i);

(F) the total grams of lead used in the production of California leaded gasoline during the calendar quarter, except for the lead in any California leaded gasoline not required by paragraph (h)(1) to be included in the producer's computation of lead content;

content of the producer's leaded gasoline under paragraph (g)(2)(A)[ii] or [iii], and which the producer knows or reasonably should know contains lead:

[i] the lead content of each shipment, as determined by performance of an applicable test method set forth in paragraph (m) on a representative sample of gasoline or gasoline blending stocks in the shipment; the method set forth in paragraph (g)(2)(A);

[ii] the total gallons received in each shipment;

[iii] the total gallons ~~of~~ from each shipment used by the producer in the production of leaded gasoline during the calendar quarter;

[iv] the total grams of lead contained in the volume identified pursuant to paragraph (i)(1)(E)[iii];

[~~iii~~iv] the total grams of lead in the volume of all such shipments used by the producer in the production of leaded gasoline during the calendar quarter;

[~~iv~~vi] the name and address of the person from whom such shipment was received; and

[~~v~~vii] documentation clearly showing that the volume and lead content of the any gasoline blending stock has not been and will not be included in another producer's or an importer's average lead content report computation, as reflected in a report filed pursuant to this paragraph (i);

(F) the total grams of lead used in the production of California leaded gasoline during the calendar quarter, except for the lead in any California leaded gasoline not required by paragraph (h)(1) to be included in the producer's computation of lead content;

(G) the total gallons of California leaded gasoline produced during the calendar quarter, except for the gallons of any California leaded gasoline not required by paragraph (h)(1) to be included in the producer's computation of lead content;

(H) the average lead content of each gallon of California leaded gasoline produced during the calendar quarter, determined by dividing the total in paragraph (i)(1)(F) by the total in paragraph (i)(1)(G);

(I) the total gallons of California leaded high octane gasoline produced during the calendar quarter;

(J) the total gallons of California unleaded gasoline produced during the calendar quarter;

(K) the total grams of lead used in the production during the calendar quarter of products other than California gasoline, including gasoline which is not California gasoline, by type of product;

(L) the total gallons of products described in paragraph (k)(1)(K) in which lead was used that were produced during the calendar quarter, by type of product;

(M) if any of the products listed in paragraph (i)(1)(K) was sold or otherwise transferred, directly, or indirectly, to another California gasoline production facility during the calendar quarter:

[i] the total gallons and lead content of each transfer, identified by type of product;

[ii] the name and address of the California gasoline production facility to which each transfer was made; and

[iii] the date of each transfer.

(MN) for each shipment of California leaded gasoline produced in the calendar quarter which ~~or-gasoline-blending-stocks-containing-lead~~ the producer delivers to another person, and which ~~gasoline-or-stocks~~ the producer knows or reasonably should know will be processed or further processed by another producer to produce California leaded gasoline:

[i] the total gallons and lead content of each delivery;

[ii] the name and address of the person first accepting delivery;

[iii] the date of initial delivery;

[iv] The name and address of the producer subsequently processing such gasoline or blending stocks to produce gasoline; and

[v] whether the producer making the shipment is including the volume and lead content of the shipment in its ~~determination~~ computation of the average lead content of California leaded gasoline it produces during the calendar quarter.

(NO) such other information as may be required by the executive officer to ascertain the average lead content of California leaded gasoline.

(2) For each importer:

(A) the information described in paragraphs (g)(3)(A) through (EG);

(B) the lead content of each shipment of imported gasoline blending stocks any portion of which is first sold or transferred by the importer during the calendar quarter, determined by performance by the importer of an applicable test method set forth in paragraph (m) upon a representative sample of gasoline blending stocks in the shipment;

(C) the total gallons of gasoline blending stocks in each such shipment;

[iii] the date of each transfer.

(MN) for each shipment of California leaded gasoline produced in the calendar quarter which ~~or-gasoline-blending-stock-containing-lead~~ the producer delivers to another person, and which ~~gasoline-or-stock~~ the producer knows or reasonably should know will be processed or further processed by another producer to produce California leaded gasoline:

[i] the total gallons and lead content of each delivery;

[ii] the name and address of the person first accepting delivery;

[iii] the date of initial delivery;

[iv] The name and address of the producer subsequently processing such gasoline or blending stocks to produce gasoline; and

[v] whether the producer making the shipment is including the volume and lead content of the shipment in its ~~determination~~ computation of the average lead content of California leaded gasoline it produces during the calendar quarter.

(NO) such other information as may be required by the executive officer to ascertain the average lead content of California leaded gasoline.

(2) For each importer:

(A) the information described in paragraphs (gh)(3)(A) through (EG);

(B) the lead content of each shipment of imported gasoline blending stocks any portion of which is first sold or transferred by the importer during the calendar quarter, determined by performance by the importer of an applicable test method set forth in paragraph (m) upon a representative sample of gasoline blending stocks in the shipment;

(C) the total gallons of gasoline blending stocks in each such shipment;

(D) the total grams of lead in each such shipment, determined by multiplying the lead content of the shipment by the total gallons of gasoline blending stocks in the shipment;

(BE) for each shipment of imported California leaded gasoline or gasoline blending stocks sold received by the importer during the calendar quarter reporting-period: the name and address of the importer person from whom the gasoline or gasoline blending stocks was received; the name and address of any consignee; the date of entry; the vessel or carrier or other means of importation; the port or point of entry; the entry number (where applicable); and the total gallons of leaded gasoline in the shipment.

(EF) for any shipment of imported leaded gasoline or gasoline blending stocks containing lead the importer delivers to another person during the calendar quarter, which gasoline or gasoline blending stocks the importer knows or reasonably should know will be processed by a producer to produce California leaded gasoline:

[i] the total gallons and lead content of each delivery, identified by type of product;

[ii] the name and address of the person first accepting delivery;

[iii] the date of initial delivery;

[iv] The name and address of the producer subsequently processing such gasoline or gasoline blending stocks to produce gasoline; and

[iv] for any such delivery of gasoline, whether the importer making the shipment is including the volume of the shipment in its determination of the average lead content of imported California leaded gasoline it sells, offers for sale or delivers for sale.

(G) Such other information as may be required by the executive officer to ascertain the average lead content of California leaded gasoline.

(ij) For each calendar quarter commencing with ~~April~~ July 1 through ~~June~~ September 30, 1983, each lead additive manufacturer shall submit to the executive officer a report showing the total grams of lead shipped to each California gasoline production facility by such lead additive manufacturer during the calendar quarter. Reports shall be certified under penalty of perjury and submitted within ~~15~~ 30 days after the close of the reporting period, on forms supplied by the executive officer upon request.

(jk)(1) Any producer who cannot comply with the requirements set forth in paragraphs (c) or (d) because of extraordinary reasons beyond the reasonable control of the producer may apply to the executive officer for a variance. The application shall set forth:

(A) The specific grounds upon which the variance is sought;

(B) The proposed date(s) by which compliance with the lead content limitations in paragraphs (c) and (d) will be achieved; and

(C) A plan reasonably detailing the method by which compliance will be achieved.

(2) Upon receipt of an application for a variance containing the information required in paragraph (jk)(1), the executive officer shall hold a hearing to determine whether, and under what conditions and to what extent, a variance from the requirements established by paragraphs (c) or (d) is necessary and will be permitted. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 20 days prior to the hearing. Notice of the hearing shall also be submitted for publication in the California Administrative Notice Register and ~~shall be~~ sent to every

(G) Such other information as may be required by the executive officer to ascertain the average lead content of California leaded gasoline.

(~~i~~j) For each calendar quarter commencing with ~~April~~ July 1 through ~~June~~ September 30, 1983, each lead additive manufacturer shall submit to the executive officer a report showing the total grams of lead shipped to each California gasoline production facility by such lead additive manufacturer during the calendar quarter. Reports shall be certified under penalty of perjury and submitted within ~~15~~ 30 days after the close of the reporting period, on forms supplied by the executive officer upon request.

(~~j~~k)(1) Any producer who cannot comply with the requirements set forth in paragraphs (c) or (d) because of extraordinary reasons beyond the reasonable control of the producer may apply to the executive officer for a variance. The application shall set forth:

- (A) The specific grounds upon which the variance is sought;
- (B) The proposed date(s) by which compliance with the lead content limitations in paragraphs (c) and (d) will be achieved; and
- (C) A plan reasonably detailing the method by which compliance will be achieved.

(2) Upon receipt of an application for a variance containing the information required in paragraph (~~j~~k)(1), the executive officer shall hold a hearing to determine whether, and under what conditions and to what extent, a variance from the requirements established by paragraphs (c) or (d) is necessary and will be permitted. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 20 days prior to the hearing. Notice of the hearing shall also be submitted for publication in the California Administrative Notice Register and ~~shall be~~ sent to every

person who requests such notice, not less than 20 days prior to the hearing.

(3) At least 20 days prior to the hearing, the application for the variance shall be made available to the public for inspection. Interested members of the public shall be allowed a reasonable opportunity to testify at the hearing and their testimony shall be considered.

(4) No variance shall be granted unless all of the following findings are made:

(A) that, because of reasons beyond the reasonable control of the applicant, requiring compliance with paragraphs (c) and (d) would [i] result in an extraordinary economic hardship, or [ii] result, for an applicant meeting the definition of small refiner established by the United States Environmental Protection Agency in Title 40, Code of Federal Regulations, Section 80.2(p), as it existed on December 1, 1982, in operation of the applicant's California gasoline production facility at a financial loss for the twelve-month period following the beginning date of the variance sought by the applicant;

(B) that the granting of a variance will not result in substantial increases in ambient concentrations of lead; and

(C) that the compliance plan proposed by the applicant can reasonably be implemented and will achieve compliance as expeditiously as possible.

(5) Any variance order shall specify a final compliance date by which the lead content limitations in paragraphs (c) and (d) will be achieved. Any variance order shall also contain a condition that specified increments of progress necessary to assure timely compliance be achieved, and such other conditions, including limitations on the lead content of California leaded gasoline, that the executive officer, as a result of the testimony received at

the hearing, finds necessary to carry out the purposes of Division 26 of the Health and Safety Code.

(6) The executive officer shall require, as a condition of granting a variance, that a cash bond, or a bond executed by two or more good and sufficient sureties or by a corporate surety, be posted by the party to whom the variance was granted to assure performance of any construction, alteration, repair, or other work required by the terms and conditions of the variance. Such bond may provide that, if the party granted the variance fails to perform such work by the agreed date, the cash bond shall be forfeited to the state board, or the corporate surety or sureties shall have the option of promptly remedying the variance default or paying to the state board an amount, up to the amount specified in the bond, that is necessary to accomplish the work specified as a condition of the variance.

(7) No variance based on a plan for compliance which includes the installation of major additional equipment shall have a duration of more than three years or shall have a final compliance date later than December 31, 1987.

(8) No variance which is issued due to conditions of breakdown, repair, or malfunction of equipment shall have a duration, including extensions, of more than six months.

(9) Each variance order shall provide that the producer may not produce California gasoline exceeding the applicable lead content standards established by the United States Environmental Protection Agency in Title 40, Code of Federal Regulations, Part 80.

(10) The executive officer may, after holding a hearing without complying with the provisions of paragraphs (j)(2) and (3), issue an emergency variance to a producer from the requirements of paragraphs (c) or (d) upon a showing of

the hearing, finds necessary to carry out the purposes of Division 26 of the Health and Safety Code.

(6) The executive officer shall require, as a condition of granting a variance, that a cash bond, or a bond executed by two or more good and sufficient sureties or by a corporate surety, be posted by the party to whom the variance was granted to assure performance of any construction, alteration, repair, or other work required by the terms and conditions of the variance. Such bond may provide that, if the party granted the variance fails to perform such work by the agreed date, the cash bond shall be forfeited to the state board, or the corporate surety or sureties shall have the option of promptly remedying the variance default or paying to the state board an amount, up to the amount specified in the bond, that is necessary to accomplish the work specified as a condition of the variance.

(7) No variance based on a plan for compliance which includes the installation of major additional equipment shall have a duration of more than three years or shall have a final compliance date later than December 31, 1987.

(8) No variance which is issued due to conditions of breakdown, repair, or malfunction of equipment shall have a duration, including extensions, of more than six months.

(9) Each variance order shall provide that the producer may not produce California gasoline exceeding the applicable lead content standards established by the United States Environmental Protection Agency in Title 40, Code of Federal Regulations, Part 80.

(10) The executive officer may, after holding a hearing without complying with the provisions of paragraphs (j)(2) and (3), issue an emergency variance to a producer from the requirements of paragraphs (c) or (d) upon a showing of

reasonably unforeseeable extraordinary hardship and good cause that a variance is necessary. In connection with the issuance of an emergency variance, the executive officer may waive the requirements of paragraph (k)(6). No emergency variance may extend for a period of more than 45 days. If the applicant for an emergency variance does not demonstrate that he or she can comply with the provisions of paragraphs (c) or (d) within such 45-day period, an emergency variance shall not be granted unless the applicant makes a prima facie demonstration that the findings set forth in paragraph (4) should be made. The executive officer shall maintain a list of persons who have informed the executive officer in writing of their desire to be notified by telephone in advance of any hearing held pursuant to this paragraph (jk)(10), and shall provide advance telephone notice to any such person.

(11) A variance shall cease to be effective upon failure of the party to whom the variance was granted substantially to comply with any condition.

(12) Upon the application of any person, the executive officer may review and for good cause modify or revoke a variance from the requirements of paragraphs (c) and (d) after holding a hearing in accordance with the provisions of paragraphs (jk)(2) and (3).

(k1)(1) The executive officer may grant a producer, for a calendar quarter, or any remaining portion thereof, a waiver of the requirements of paragraphs (c) or (d) if:

(A) A state of emergency in gasoline supply for the State or any portion thereof has been declared by the Governor, and

(B) The executive officer determines that the granting of waivers to all producers who would be eligible for such waivers would not interfere with the attainment and maintenance of the State or National Ambient Air Quality Standards for lead for the period of the waiver.

(2) Prior to taking action pursuant to paragraph (k1)(1), the executive officer shall consult with the Department of Health Services regarding the ambient concentrations of lead which the executive officer predicts will occur as a result of such action.

(3) The executive officer may require conditions on a waiver to enable the executive officer to determine the effect of the granting of the waiver and to minimize the adverse effects of the use of higher lead content gasoline.

(4) If a waiver is granted from the requirements of paragraph (d) for a portion of a calendar quarter, the average lead content standard in paragraph (d) shall apply to the entire portion of the quarter not covered by the waiver.

(4m) The lead content of gasoline and gasoline blending stocks shall be determined in accordance with the test methods set forth in Appendix B ("Tests for Lead in Gasoline by Atomic Absorption Spectrometry") of Title 40, Code of Federal Regulations, Part 80, as it existed on July 1, 1982. The phosphorus content of gasoline shall be determined in accordance with ~~American Society for Testing and Materials~~ ASTM Test Method D3231-73. An equivalent test method for determining lead or phosphorus content of gasoline may be used after the executive officer reasonably determines that such test method provides equivalent results to the test method designated in this paragraph.

(4n) Whenever a numerical limit is set forth in this section for the lead content, or average lead content, of leaded gasoline, the Absolute Method as set forth in ASTM Standard Recommended Practice E 29-67 shall be used in determining the specified limit.

(4o) Each paragraph of this section shall be deemed severable, and in the event that any paragraph of this section is held to be invalid, the remainder of the section shall continue in full force and effect.

(2) Prior to taking action pursuant to paragraph (k₁)(1), the executive officer shall consult with the Department of Health Services regarding the ambient concentrations of lead which the executive officer predicts will occur as a result of such action.

(3) The executive officer may require conditions on a waiver to enable the executive officer to determine the effect of the granting of the waiver and to minimize the adverse effects of the use of higher lead content gasoline.

(4) If a waiver is granted from the requirements of paragraph (d) for a portion of a calendar quarter, the average lead content standard in paragraph (d) shall apply to the entire portion of the quarter not covered by the waiver.

(~~l~~m) The lead content of gasoline and gasoline blending stocks shall be determined in accordance with the test methods set forth in Appendix B ("Tests for Lead in Gasoline by Atomic Absorption Spectrometry") of Title 40, Code of Federal Regulations, Part 80, as it existed on July 1, 1982. The phosphorus content of gasoline shall be determined in accordance with ~~American-Society-for Testing-and-Materials~~ ASTM Test Method D3231-73. An equivalent test method for determining lead or phosphorus content of gasoline may be used after the executive officer reasonably determines that such test method provides equivalent results to the test method designated in this paragraph.

(~~n~~n) Whenever a numerical limit is set forth in this section for the lead content, or average lead content, of leaded gasoline, the Absolute Method as set forth in ASTM Standard Recommended Practice E 29-67 shall be used in determining the specified limit.

(~~o~~o) Each paragraph of this section shall be deemed severable, and in the event that any paragraph of this section is held to be invalid, the remainder of the section shall continue in full force and effect.

TOTAL LEAD EMISSIONS TRIGGER

Re-number §2253.2(d)(2) and (d)(3) as (d)(3) and (d)(4), respectively, and add a new section 2253.2(d)(2) which reads as follows:

(2) If, during any calendar year from 1985 to 1990, the reports required by subparagraph (h) indicate that the total grams of lead contained in all California leaded gasoline exceed the amounts shown in the table below, the limitation in subparagraph (d)(1) shall be reduced by the percent of excess lead. The revised limitation shall be calculated and rounded to the same number of significant figures as the original limitation, and shall become effective October 1 of the year following the year in which the excess was observed.

<u>Calendar Year</u>	<u>Total Lead (10^3 Kilograms)</u>
1985	2,367
1986	2,035
1987	1,704
1988	1,467
1989	1,227
1990	991

Note: Values in the above table are based on the assumption that the leaded gasoline standard is 0.8 grams per gallon. Adjustments are required if the standard adopted by the Board is different from 0.8.

State of California
AIR RESOURCES BOARD

Executive Order G-160

WHEREAS, on October 27 and 28, 1982, the Air Resources Board (the "Board") conducted a public hearing to consider the adoption of regulations regarding toxic air contaminants;

WHEREAS, at the close of the hearing, the Board adopted Resolution 82-52, in which the Board approved Subchapter 7, "Toxic Air Contaminants", for incorporation into Chapter 1, Part III of Title 17, California Administrative Code, commencing with Section 93000; directed the Executive Officer to make the regulations available for at least 15 days prior to adoption and to accept and consider further written comment; and delegated to the Executive Officer the authority to adopt the regulations with nonsubstantive changes;

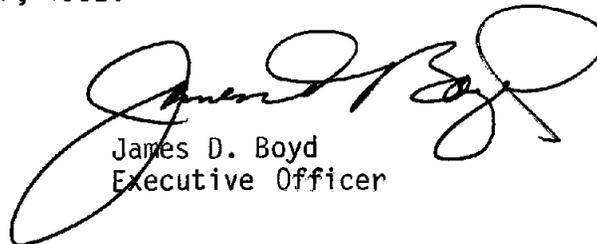
WHEREAS, following the public hearing, the approved regulations were made available to the public for a period exceeding 15 days, with the changes to the originally proposed text clearly indicated; and

WHEREAS, the Board at a further hearing held December 1, 1982, affirmed its directive to the Executive Officer to adopt the regulations.

NOW, THEREFORE, IT IS HEREBY ORDERED that the recitals and findings contained in Resolution 82-52 are incorporated herein.

IT IS FURTHER ORDERED that Subchapter 7, "Toxic Air Contaminants", Chapter 1, Part III of Title 17, California Administrative Code, commencing with Section 93000, is adopted, as set forth in Attachment A.

Executed this 1st day of December, 1982.



James D. Boyd
Executive Officer

State of California
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Amendments to Section 2253 and Adoption of Section 2253.2 of Title 13, California Administrative Code, Regarding Lead in Gasoline

Agenda Item No.: 82-24-3

Public Hearing Dates: November 10 and 11, 1982 and December 1, 1982

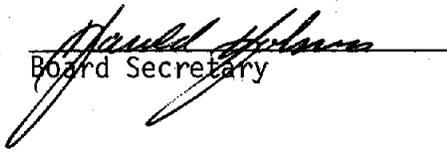
Response Date: December 1, 1982

Issuing Authority: Air Resources Board

Comment: Tosco Corporation asserted that a leaded pool average gasoline lead content standard would cause a greater incidence of misfueling of unleaded only motor vehicles than a total pool standard.

Response: The Board has determined that data in the record do not demonstrate that such a result is likely to occur,

CERTIFIED:


Board Secretary

Date:

12/2/82

Memorandum

To : Gordon Van Vleck
Secretary
Resources Agency

Date : January 7, 1983

Subject: Filing of Notice of
Decisions of the Air
Resources Board

From : Air Resources Board

Pursuant to Title 17, Section 60007 (b), and in compliance with Air Resources Board certification under section 21080.5 of the Public Resources Code, the Air Resources Board hereby forwards for posting the attached notice of decision and response to environmental comments raised during the comment period.

Harold Holmes
Harold Holmes
Board Secretary

attachments
Resolution 82-52/Executive Order
~~Resolution 82-64/Executive Order~~